Extraction and referential constructions in Movima

Katharina Haude
CNRS, SEDYL UMR 8202
katharina.haude@cnrs.fr
khaude@uni-koeln.de
The language

General
• South-Western Amazon (Bolivia)
• genetically unclassified
• less than 1000 speakers
• all fluent speakers are older than 60, all bilingual (Movima/Spanish)

The data
• Annotated spontaneous discourse corpus of >130,000 words (30h) produced by ~50 m/f speakers

Some morphosyntactic characteristics
• largely configurational: **predicate initial**
• direct-inverse alternation in transitive clauses
• split ergativity: direct = ergative, inverse = accusative
• **weak noun-verb distinction**
Overview

1. Verb-initial clauses and “extraction”

2. Syntactic properties of the verb in non-initial position
   antipassive
   negation with *loy*

3. The non-initial position as a subordinated position?
   fronted pronoun
   headed relative
   “verbal DP”

4. Conclusion:
   The non-initial position is a referential environment, typically occupied by a noun
Verb-initial clauses

Transitive direct

*Vel-na=sne kis / is dichi:ye.*

watch-DIRECT=3f 3PL.OBV ART.PL child

‘She watched them / (the) children.’

Intransitive

*Kuyna:nak is / is dichi:ye.*

play 3PL ART.PL child

‘They/(The) children played.’
Verb-initial clauses

Less than 20% of the world’s languages have basically verb-initial (or V1) syntax (see Clemens and Polinsky 2015)

Languages with verb-initial syntax are particularly susceptible to pragmatically conditioned word-order changes (Payne 1995)

In Movima, verb-initial clauses are the default: verb-initial clauses are pragmatically unmarked, and in spontaneous discourse, over 90% of all verbal clauses are verb-initial. Therefore, Movima can be considered a verb-initial language.

We will look at one type of word-order change in Movima, by which the verb is preceded by a referential expression.

“Extraction”: the pronominal clause (PC)

<table>
<thead>
<tr>
<th>Basic clause</th>
<th>Vel-na=sne kis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(transitive direct)</td>
<td>watch-DIRECT=3F 3PL</td>
</tr>
<tr>
<td></td>
<td>‘She watched them.’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pronominal clause</th>
<th>Isko vel-na=sne.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PRO.3PL watch-DIRECT=3F</td>
</tr>
<tr>
<td></td>
<td>‘Them she watched.’</td>
</tr>
</tbody>
</table>

The verb in the pronominal clause has different syntactic properties than the verb in initial position.
“Extraction”: the pronominal clause (PC)

Basic clause
Vel-na=sne
(kis.

(transitive direct)

watch-DIRECT=3F 3PL

‘She watched them.’

Pronominal clause
Isko vel-na=sne.

PRO.3PL watch-DIRECT=3F

‘Them she watched.’

The verb in the pronominal clause has different syntactic properties than the verb in initial position.
Syntactic properties of the verb in the pronominal clause: Antipassive

Basic clause

\[ \text{Vel-na=} \text{sne} \ kis. \]
\[ \text{(transitive direct)} \]
\[ \text{watch-DIRECT=} 3F \quad 3 \text{PL} \]
\[ \text{‘She watched them.’} \]

Antipassive PC

\[ \text{isne} \quad \text{kaw} \quad \text{vel-na} \quad (n-isko) \]
\[ \text{PRO.F} \quad \text{ANTIP} \quad \text{watch-DIRECT} \quad \text{OBL-PRO.3PL} \]
\[ \text{‘SHE watched (them).’} \]

The antipassive is not possible in a basic clause:

\[ *\text{Kaw} \quad \text{vel-na} \quad \text{sne} \quad (n-isko). \]
\[ \text{ANTIP} \quad \text{watch-DIRECT} \quad 3F \quad \text{OBL-PRO.3PL} \]
\[ \text{‘She watched (them).’} \]
Syntactic properties of the verb in the pronominal clause:

**Negation**

### Pronominal clause

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Isko</em></td>
<td><em>vel-na</em>sne</td>
<td></td>
</tr>
<tr>
<td>PRO.3PL</td>
<td>watch-DIRECT=3F</td>
<td></td>
</tr>
</tbody>
</table>

‘Them she watched.’

### Negated verb in PC

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Isko</em></td>
<td><em>loy</em></td>
<td><em>vel-na</em>sne</td>
</tr>
<tr>
<td>PRO.3PL</td>
<td>NEG.SUB</td>
<td>watch-DIRECT=3F</td>
</tr>
</tbody>
</table>

‘Them she did not watch.’

### Cf. negation of basic clause:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ka=s</em></td>
<td><em>vel-na-wa</em>sne</td>
<td><em>kis</em></td>
</tr>
<tr>
<td>COP.NEG=DET</td>
<td>watch-DIRECT-NMZ=3F</td>
<td>3PL.OBV</td>
</tr>
</tbody>
</table>

‘She did not watch them.’
Syntactic properties of the verb in the pronominal clause

What does it mean that the verb has special properties when preceded by a pronoun?

Myhill (1985: 181):
“It is characteristic of verb-initial languages that ... Verb Forms in non-initial position are presuppositional, backgrounded and either nominal or otherwise dependent” (emphasis mine).

→ The Movima “extraction” may have a subordinating effect. However, is there independent evidence for this?

Perhaps by analogy, since
1. the same properties also show up in headed relative clauses.
2. the same properties also show up in verbs inside a “verbal DP”.

The verb in a headed relative clause

Basic clause  
*Vel-na=kinos kwe:ya is dichi:ye.*  
watch-DIRECT=ART.F woman ART.PL child  
‘The woman watched (the) children.’

Headed RC  
*is dichi:ye di’ vel-na=kinos kwe:ya*  
ART.PL child REL watch-DIRECT=ART.F woman  
‘the children whom the woman watched’
The verb in a headed relative clause

Basic clause: 
- **Vel-na=kinos**
- **kwe:ya**
- **is**
- **dichi:ye.**
- **watch-DIRECT=ART.F**
- **woman**
- **ART.PL**
- **child**

‘The woman watched (the) children.’

Headed RC: 
- **is**
- **dichi:ye**
- **di’**
- **vel-na=kinos**
- **kwe:ya**
- **ART.PL**
- **child**
- **REL**
- **watch-DIRECT=ART.F**
- **woman**

‘the children whom the woman watched’
The verb in a headed relative clause

**Basic clause**

*Vel-na* = *kinos kwe:ya is dichi:ye.*

watch-DIRECT=ART.F woman ART.PL child

‘The woman watched (the) children.’

**Headed RC**

*is dichi:ye di’ vel-na* = *kinos kwe:ya*

ART.PL child REL watch-DIRECT=ART.F woman

‘the children whom the woman watched’

**Antipassive**

*kinos kwe:ya di’ kaw vel-na*

ART.F woman REL ANTIP watch-DIRECT

*(n-is dichi:ye)*

OBL-ART.PL child

‘the woman who watched (the children)’
The verb in a headed relative clause

Basic clause
Vel-na=kinos kwe:ya is dichi:ye.
watch-DIRECT=ART.F woman ART.PL child
‘The woman watched (the) children.’

Headed RC
is dichi:ye di’ vel-na=kinos kwe:ya
ART.PL child REL watch-DIRECT=ART.F woman
‘the children whom the woman watched’

Antipassive
kinos kwe:ya di’ kaw vel-na
ART.F woman REL ANTIP watch-DIRECT
(n-is dichi:ye)
OBL-ART.PL child
‘the woman who watched (the children)’

Negation
is dichi:ye di’ loy vel-na=kinos kwe:ya
ART.PL child REL NEG.SUB watch-DIRECT=ART.F woman
‘the children that the woman did not watch’
Does extraction involve subordination?

→ Verbs in relative clauses have the same syntactic properties as verbs in the pronominal clause.
→ In a relative clause, the relativizing particle (di’) can be considered a marker of subordination.
→ By analogy, the verb in the pronominal clause can be considered subordinated as well.

Further support:
In the pronominal clause, the pronoun is the main predicate: In embedding/negation, the pronoun is nominalized, just like a main verb.
The construction might therefore be syntactically analyzed as a cleft, although it does not have a focus-marking function (see Haude 2018).

Does extraction involve subordination?

Identifying the pronoun as the predicate: embedding/negation

Negated basic clause

\[ Ka=s \quad vel-na-wa=sne \quad is \quad dichi:ye. \]

COP.\,NEG=DET \quad watch-DIRECT-NMZ=3F \quad ART.PL \quad child

‘She did not watch the children.’ (lit.: “Her watching the children is/was not.”)

Negated pronominal clause

\[ Ka=s \quad isko-niwa \quad vel-na=sne. \]

COP.\,NEG=DET \quad PRO.3PL-NMZ \quad watch-DIRECT=3F

‘It was not them she watched.’ (lit.: “Them being [who] she watched was not.”)

... But the “cleft” does not have the focus-marking function of clefts (Haude 2018), so maybe this analysis is inadequate.
The “verbal DP”

There is a third construction in which a verb is preceded by a referential expression and shares the same properties: the “verbal DP”.

Basic clause

\[ \text{vel-na}=\text{sne} \quad \text{kis} \]

watch-DIRECT=3F \quad 3\text{PL.OBV}

‘the (ones) she watched’

“Verbal DP”

\[ \text{is} \quad \text{vel-na}=\text{sne} \]

ART.PL \quad \text{watch-DIRECT}=3F

‘the (ones) she watched’
The “verbal DP”

Also here, the verb can be antipassivized or negated:

**Basic clause**

<table>
<thead>
<tr>
<th>Element</th>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>vel-na=sne</td>
<td>kis</td>
<td>watch-DIRECT=3F 3PL.OBV</td>
</tr>
<tr>
<td>‘the (ones) she watched’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**“Verbal DP”**

<table>
<thead>
<tr>
<th>Element</th>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>is</td>
<td>vel-na=sne</td>
<td>ART.PL watch-DIRECT=3F</td>
</tr>
<tr>
<td>‘the (ones) she watched’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Antipassive DP**

<table>
<thead>
<tr>
<th>Element</th>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>kinos</td>
<td>kaw</td>
<td>ART.F watch-DIRECT OBL-PRO.3PL</td>
</tr>
<tr>
<td>‘the (woman/girl who) watched (them)’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Negated verb in DP**

<table>
<thead>
<tr>
<th>Element</th>
<th>Form</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>is</td>
<td>loy</td>
<td>vel-na=sne</td>
</tr>
<tr>
<td>‘the (ones) she did not watch’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The “verbal DP”

• Canonical DPs are occupied by a noun: only 7% of all counted DPs (1873) contain a verb.
The “verbal DP”

- Canonical DPs are occupied by a noun: only 7% of all counted DPs (1873) contain a verb.
- DPs with verbs are pragmatically marked, usually occurring with nominal predicates as argument-focus constructions:

  \[
  \begin{array}{llllll}
  Rulrul & os & tikoy-na=\emptyset, \\
  \text{jaguar} & \text{ART.N.PAST} & \text{kill-DIRECT=1SG} \\
  ka=s & tikoy-ak-na=\emptyset & n-is & juyeni. \\
  \text{COP.NEG} & \text{kill-IRR-DIRECT=1SG} & \text{OBL-ART.PL} & \text{person} \\
  \end{array}
  \]

  ‘(A) JAGUAR (was what) I killed, I didn’t kill a human.’ (lit.: “... anyone of humans”)

The “verbal DP”

• Canonical DPs are occupied by a noun: only 7% of all counted DPs (1873) contain a verb.
• DPs with verbs are pragmatically marked, usually occurring with nominal predicates as argument-focus constructions:

\[
\begin{align*}
Rulrul & \quad os & \quad tikoy-na=\emptyset, \\
jaguar & \quad \text{ART.N.PAST} & \quad \text{kill-DIRECT}=1\text{SG} \\
ka=s & \quad tikoy-ak-na=\emptyset & \quad n-is & \quad juyeni. \\
\text{COP.NEG} & \quad \text{kill-IRR-DIRECT}=1\text{SG} & \quad \text{OBL-ART.PL} & \quad \text{person} \\
\text{‘(A) JAGUAR (was what) I killed, I didn’t kill a human.’ (lit.: “... anyone of humans”)}
\end{align*}
\]

→ The placement of a verb in non-initial position might be considered a (zero-marked) relativization. However, maybe it is much simpler ...
The non-initial position as a nominal domain

In Movima, nouns (and adjectives) are syntactically near-equivalent with verbs. They can function as predicates. A possessor is encoded like the agent of a direct-marked verb.

*Dichi:ye* is *majniwa=sne.*

child ART.PL offspring=3F

‘Her offspring are children (i.e. still young).’
The non-initial position as a nominal domain

In Movima, nouns (and adjectives) are syntactically near-equivalent with verbs: They can function as predicates. A possessor is encoded like the agent of a direct-marked verb.

\[ \text{Dichi:ye} \quad \text{is} \quad \text{majniwa=sne.} \]

\begin{align*}
\text{child} & \quad \text{ART.PL} & \quad \text{offspring=3F} \\
\text{‘Her offspring are children (i.e. still young).’} 
\end{align*}

However, referential (i.e. possessed or proper) nouns do not occur as basic predicates:

\[ ??\text{Majniwa=sne} \quad \text{is} \quad \text{dichi:ye.} \]

\begin{align*}
\text{offspring=3F} & \quad \text{ART.PL} & \quad \text{child} \\
\text{‘The children are her offspring.’} 
\end{align*}

\[ *\text{Majniwa=sne} \quad \text{kis.} \]

\begin{align*}
\text{offspring=3F} & \quad \text{3PL} \\
\text{‘They are her children.’} 
\end{align*}
The non-initial position as a nominal domain

Referential (i.e. possessed or proper) nouns can **only** occur in the non-initial position:

**DP**

- *is majniwa=sne*
- **ART.PL** offspring=3F
- ‘her offspring’

**Relative clause**

- *is dichi:ye di’ majniwa=sne*
- **ART.PL** child **REL** offspring=3F
- ‘the children who are her offspring’

**Pronom. clause**

- *Isko majniwa=sne.*
- **PRO.3PL** offspring=3F
- ‘They are her children.’
The non-initial position as a nominal domain

Antipassive is productive with nouns as well:

<table>
<thead>
<tr>
<th>DP</th>
<th>kinos</th>
<th>kwey</th>
<th>majni</th>
<th>(n-isko)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART.F</td>
<td>ANTIP</td>
<td>offspring</td>
<td>OBL-PRO.3PL</td>
<td></td>
</tr>
<tr>
<td>‘the mother (of them)’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Relative clause

<table>
<thead>
<tr>
<th>kinos</th>
<th>kweya</th>
<th>di’</th>
<th>kwey</th>
<th>majni</th>
<th>(n-isko)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART.F</td>
<td>woman</td>
<td>REL</td>
<td>ANTIP</td>
<td>offspring</td>
<td>OBL-PRO.3PL</td>
</tr>
<tr>
<td>‘the woman who is (a) mother (of them)’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pronom. clause

<table>
<thead>
<tr>
<th>Isne</th>
<th>kwey</th>
<th>majni</th>
<th>(n-isko)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRO.3PL</td>
<td>ANTIP</td>
<td>offspring</td>
<td>OBL-PRO.3PL</td>
</tr>
<tr>
<td>‘She is (a) mother (of them).’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The non-initial position as a nominal domain

Negation is found with adjectives:

DP: \(kos\ \emph{loy}\ \emph{rey} \ mowima-\emph{le}\)
\(\text{ART.N} \ \text{NEG.SUB} \ \text{EPIST} \ \text{Movima-NEG.N/ADJ}\)
‘the one/someone who is not Movima, you see’

RC: \(kos\ \emph{sot-lo:los} \ di’ \emph{loy} \emph{rey} \emph{lолос-a=n}\)
\(\text{ART.N} \ \text{other-village} \ \text{REL} \ \text{NEG.SUB} \ \text{EPIST} \ \text{village-LV}=2\)
‘another village, which is not your village’

PC: \(asko\ \emph{loy} \emph{jayaw-ле}\)
\(\text{PRO.3N} \ \text{NEG.SUB} \ \text{good-NEG.N/ADJ}\)
‘That is not good.’ (very infrequent)

→ There does not seem to be a categorical syntactic distinction between verbs and nouns/adjectives in the non-initial position.
The non-initial position as a nominal domain

Frequency counts:

59% of all counted **relative clauses** (1145) contain a N/ADJ:

```
is    so:te    di’    dichi:ye
ART.PL  other   REL  child
'the other children' (lit.: “the other (ones) who (are) children”)
```

52% of all counted **pronominal clauses** (453) contain a N/ADJ.

```
Isko    dichi:ye
PRO.3PL  child
'They are children.'
```

Thus, judging from frequency, the pronominal clause may not be a typical nominal domain. However, ...
The non-initial position as a nominal domain

For a referential noun to function as predicate, the pronominal clause is needed:

Basic clause: *Majniwa=sne kis. 
offspring=3F 3PL 
(‘They are her children.’)

Isko majniwa=sne. 
PRO.3PL offspring=3F 
‘They are her children.’
The non-initial position as a nominal domain

For a referential noun to function as predicate, the pronominal clause is needed:

Basic clause:    *Majniwa=sne    kis.
    offspring=3F   3PL
    (‘They are her children.’)

Isko    majniwa=sne.
    PRO.3PL   offspring=3F
    ‘They are her children.’

With verbs, in contrast, pronominal clauses have a pragmatically marked status:
→ The construction is a propositionally equivalent alternative to a basic main clause
→ It is a marked alternative: less then 10% of verbal predicates occur in a pronominal clause
→ Therefore, like DPs, pronominal clauses are a prototypical nominal domain.
Conclusions

• The non-initial position is part of a referential environment. The element in this position provides a characterization of the entity referred to by the pronoun/DP/article.

• Nouns and verbs are not easily distinguished syntactically in Movima: except possessed/proper nouns, they all can function as predicates or occur in referential constructions.

• Referentiality is a typical function of nouns. Also in Movima, the non-initial position is typically occupied by a noun.

• Only referential environments allow unrestricted access also to referential (possessed and proper) nouns.

• These environments can also host verbs, but this is less frequent and usually pragmatically marked.

→ There is no “extraction” involved: Particular construction types interact with the different lexical classes to trigger specific pragmatic effects.
Thank you!