Bipartite NPs and Secondary Predication

Introduction


a. Definition:
   ▪ A string that looks like a canonical NP that is interrupted by some other material.
   ▪ In a string of the form $A...B$, $A$ and $B$ form a bipartite NP if $[\text{NP} AB]$ is also possible.
   ▪ $A$ and $B$ are the members of the bipartite NP in $A...B$.

b. Example (Serbian):
   - Do you ever wear silver jewelry?
     - Da. Srebrne nosim minduše. (bipartite NP)
       yes silver wear-I earrings
       ‘Yes. I wear silver earrings.’
     vs.
     - Da. Nosim srebrne minduše. (non-bipartite NP)
       yes wear-I silver earrings
       ‘Yes. I wear silver earrings.’

c. Similar phenomena cross-linguistically:
   ▪ Other Slavic languages: e.g. Russian, Czech, Polish (see e.g. Sekerina 1997, Pereltšvaig 2008, Corver 1992, Kučerova 2007, etc.);
   ▪ German, but more limited (see e.g. Fanselow 1988, Bader & Frazier 2005);
   ▪ Latin (Uriagereka 1988);

(2) Some relevant properties of Serbian regular (non-bipartite) NPs

a. Serbian NPs lack articles
   Sunce sija. / U sandučetu je bilo pismo.
   sun shines in mailbox aux.cl be.past letter
   "The sun is shining." "There was a letter in the mailbox."

* Many thanks to Boban Arsenijević, Molly Diesing, Roni Katzir, Michael Wagner and Draga Zec for their helpful comments and suggestions. I am completely responsible for all errors.
b. exhibit an order asymmetry between the noun and adjectival modifiers
   ▪ Adj-N order is unmarked (judged as grammatical when a sentence is given in isolation).
     Nosim **srebrne minduše**.
     wear-I silver earrings
     "I am wearing silver earrings."

   ▪ N-Adj order is marked (judged as ungrammatical when a sentence is given in isolation; requires a special context).
     ?Nosim **minduše srebrne**.
     wear-I earrings silver
     "I am wearing silver earrings."

- Can undergo N'-ellipsis (or N'-drop)
  - What kind of pencil would you like me to buy for you?
    - Hoću [NP **crnu Ø**].
    want-I black
    "I want a **black** one."

  - Which yogurt do you buy?
    - Kupujemo [NP **onaj Ø u flašici**].
    buy-we that in bottle
    "We buy **that** one in the **bottle**."

Properties in (a) and (c) have sometimes been claimed to correlate with the existence of at least some types of bipartite NPs (cf. Bošković 2008 for the correlation between the existence of some bipartite NPs and property a, and Fanselow 1988 for the correlation with property c).

<table>
<thead>
<tr>
<th>(3) <strong>Question 1</strong>: Are bipartite NPs derived from their non-bipartite NP counterparts, or not?</th>
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<tbody>
<tr>
<td>▪ &quot;No.&quot; – (Fanselow 1988: a bipartite NP consists of two full NPs, which are linked via a binding relation).</td>
</tr>
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</table>

Some properties of bipartite NPs

(4) **Property 1**: One of the members of a **bipartite NP** may appear to not form a constituent on its own (see Fanselow and Ćavar 2002, Pereltsvaig 2008, among others).

Context: No doubt that John is a good programmer despite him being self-taught. However,…

a. …mi želimo **onog programera s diplomom**. (non-bipartite NP)
   we want that programmer with diploma
   ‘…we want that programmer with a diploma.’

a'. …mi **onog s diplomom** želimo programera. (bipartite NP)
   we that with diploma want programmer
   ‘…we want that programmer with a diploma.’
A similar problem occurs when a bipartite NP is PP-internal:

Context: - Boss, maybe we should hire younger and less expensive programmers for this project…

b. – Ne. Oslanjajte se na sposobne programere.
no rely-on part. on capable programmers
‘No. Rely on capable programmers.’

b’. – Ne. Na programere se oslanjajte sposobne...
no on programmers part. rely capable
‘No. Rely on capable programmers…(and I will worry about the money).’

(5) Property 2: Bipartite NPs require special contexts

The context must allow for one of the members (=the structurally higher member) to be construed in the restriction clause of the Quantification structure (QS) – Predolac (2011), based on an interpretation of Diesing's (1992) Mapping Hypothesis. In (a), where the context does not allow for the member srebrne "silver" to be construed in the restriction clause of the QS, the bipartite NP is infelicitous. This context is compatible with the non-bipartite NP counterpart that is completely in the nuclear scope (b), or with the bipartite NP in which the context allows for the structurally higher member to be construed in the restriction clause of the QS (c):

- What kind of jewelry do you usually wear?
  a. - #Srebrne nosim minduše. (bipartite NP)
     silver wear-I earrings
     intended (informal translation): Opₜ.x.silver(x) AND I-wear(x). earrings(x)
  b. - Nosim srebrne minduše. (non-bipartite NP)
     wear-I silver earrings
     "I wear silver earrings." (that is, informally translated as: Opₜ.x.I-wear (x). silver-earrings(x))
  c. - Minduše nosim srebne. (bipartite NP)
     silver wear-I earrings
     Informally translated as: "Opₜ.x.earrings(x) AND I-wear(x). silver(x)"

While it is necessary that the two members of a bipartite NP belong to distinct partitions of the Quantification structure (e.g. restriction clause vs. nuclear scope); the relative prominence between the two members is irrelevant. In terms of Schwarzschild's (1999) theory of GIVENness and F-marking, we can say that it is not necessary that the two members of the bipartite NP differ in (non-embedded) F-marking.

Examples (d-g) show that all four logical possibilities for the distribution of non-embedded F-marks (foci) on the two members, informally represented as G-F, F-G, G-G and F-F, are attested. While in (d) and (e), the two members of the bipartite NP srebrne...minduše "silver...earrings" differ in focus, the ones in (f) and (g) do not. Yet, all these cases of bipartite NPs are attested in Serbian:

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1 For the ease of exposition, the examples (d-g) contain the descriptive label G, which is not a part of Schwarzschild's apparatus. It is just used as a convenient label that stands for "GIVEN, not F-marked".
d. - Do you ever wear silver jewelry?
   - Da. SrebrneG nosim minđušef.
     yes silver wear-I earrings
     (informal translation): Opx.silverG(x) AND I-wear(x). earringsF(x)

e. - Which kind of earrings do you wear with these white glasses: silver or golden?
   - SrebrneF nosim mindušefG.
     silver wear-I earrings
     (informal translation): Opx.silverF(x) AND I-wear(x). earringsG(x)

f. - You should definitely wear silver earrings tonight.
   - Naravno. SrebrneG i nosimF minĎušefG.
     sure silver part. wear-I earrings
     (informal translation): Opx.silverF(x) AND I-amF-wearing(x). earringsG(x)

g. - Do you wear exclusively golden jewelry, or do you wear some silver stuff as well?
   - Pa, zlatne nosim ogrlice i prstenje, ali srebrneF nosim mindušefG.
     well golden wear-I necklaces and rings but silver wear-I earrings
     (informal translation): …Opx.silverF(x) AND I-wear(x). earringsG(x)

(6) Property 3: Order between the two members of a bipartite NP is not fixed
While the examples in (5d-g) consist of bipartite NPs in which the adjective precedes the noun (=order Adj-N), the examples below (a-d) illustrate a bipartite NP whose two members occur in the reverse order (=order N-Adj). Note that cases with the reverse order have the context requirements of the kind observed in (5):

a. - What kind of earrings do you usually wear?
   - MindušefG nosim srebrneF.
     earrings wear-I silver
     (informal translation): Opx.earringsG(x) AND I-wear(x). silverF(x)

b. - Do you wear any silver jewelry?
   - Da. MindušefF nosim srebrneG.
     yes earrings wear-I silver
     (informal translation): Opx.earringsF(x) AND I-wear(x). silverG(x)

c. - Well, if you are going to wear earrings tonight, then they better be silver.
   - Naravno. MindušefG(uvek) i nosimF srebrneG.
     Sure. earrings always part. wear-I silver
     (informal translation): Opx.silverG(x) AND I-dorF-wear(x). earringsG(x)

d. - What kind of necklaces, rings and earrings do you usually wear?
   - Pa, ogrlice i prstenje nosim zlatne, ali mindušefF nosim srebrneF.
     well necklaces and rings wear-I golden but earrings wear-I silver
     (informal translation): …Opx.earringsF(x) AND I-wear(x). silverF(x)
Central claims of the talk

i. Serbian Bipartite NPs are not derived from their non-discontinuous-NP counterparts.

ii. Instead, the two members of a bipartite NP are independent syntactic constituents, base-generated independently of one another.

iii. The two members are linked via a secondary-predicate relation. Bipartite NPs are only a special case of a wider phenomenon of secondary predication in Serbian. I show that both their syntactic form and their pragmatic properties follow from the standard properties of secondary predication.

Outline of the talk

- Earlier accounts of bipartite NPs in Serbian.
- Relevant syntactic, semantic and pragmatic facts related to secondary predication in Serbian.
- Show how the secondary-predication account works with bipartite NPs.

Earlier accounts

(7) a. A common assumption in the earlier accounts:
A single underlying basic NP-structure for both bipartite NPs and their non-bipartite-NP counterparts, such as the following one:

\[ NP[\ldots [N \ (AP) [N \ YP]]] \]

In other words, most accounts derive bipartite NPs from their non-bipartite-NP counterparts.

b. Two major types of such accounts:
Depending on what types of mechanisms they employ, they can be divided into:

i. Extraction accounts
ii. Distributed-PF-deletion accounts


a. Definition:
A bipartite NP is a result of the extraction of subconstituents out of a regular, non-bipartite NP.

b. Variants:
Abstracting away from the information structure for the moment, the extraction has been argued to happen in one of the following three ways:
(i) as the extraction of a left-branch modifier out of the non-bipartite NP; a.k.a. Left-Branch Extraction – (cf. van Riemsdijk (1989), Corver (1992), Bošković (2004, 2005), among others):

\[
[srebrni_{i} \quad \ldots [VP \; nosim \; [NP \; [N_{i} \; t_{i} \; [N' \; minduše].] \\
\text{silver} \quad \text{wear-I} \quad \text{earrings}
\]

(ii) as the extraction of an N'/N'-like constituent out of the non-bipartite NP (see e.g. Franks and Progovac (1994), Bašić (2004)):

\[
[[ \ldots [VP \; [V \; nosim \; [NP \; one \; srebrni \; t_{i}] \; [N' \; minduše].] \; ] \\
\text{wear-I} \quad \text{those silver} \quad \text{earrings}
\]

(iii) as the extraction of either a left-branch element or an N'/N'-like element (a. and b. mechanisms combined, as in Sekerina (1997)).

(9) Arguments against the extraction accounts:

a. Argument against the left-branch extraction approach:
Most notable are cases in which one of the members of a bipartite NP does not form a constituent on its own.

Example: The sentence in (ii) below cannot be derived:
Context: No doubt that John is a good programmer despite him being self-taught. However,…

(i) …mi želimo onog programera s diplomom. (non-bipartite NP)
we want that programmer with diploma
‘…we want that programmer with a diploma.’

(ii) …mi onog s diplomom želimo programera. (bipartite NP)
we that with diploma want programmer
‘…we want that programmer with a diploma.’

Explanation: The NP onog programera s diplomom (=’that programmer with a diploma’) seemingly occurs as a bipartite NP whose left member onog s diplomom (=’that with diploma’) is not a constituent on its own. Under the assumption that only constituents can move, (ii) cannot be derived.

b. Argument against the N'-movement approach:
Involves certain cases in which a bipartite NP occurs within a PP.

Example: The sentence in (ii) below cannot be derived:
Context: - Boss, maybe we should hire younger and less expensive programmers for this project…

2 The N'-movement in (ii) is shown as a rightward movement. However, such a movement need not be rightward necessarily. For example, Bašić (2004) employs a leftward movement instead. The present discussion is not dependent on these details.

3 For a more detailed discussion of specific extraction accounts, see e.g. Bašić (2004), Bošković (2005), Pereltsvaig (2008), Predolac (2011).
(i) – Ne. Oslanjajte se na sposobne programere.
    No rely-on part. on capable programmers
    ‘No. Rely on capable programmers (only).’

(ii) – Ne. Na programere se oslanjajte sposobne...
    No on programmers part. rely capable
    ‘No. Rely on capable programmers (only)...(and I will worry about the money).’

Explanation: Additional assumptions would be needed to explain how the non-bipartite PP na sposobne programere (=‘on capable programmers’) would become bipartite in such a way that the preposition na (=‘on’) ends up being adjacent to the supposedly extracted N’ programere (=‘programmers’) and not to the AP sposobne (=‘capable’).

c. Argument against the combined-extraction approach (and all extraction approaches):
   - The combined extraction approach, in which both the left-branch extraction and the N’-extraction are allowed, avoids the above mentioned undergeneration problems of the other two extraction approaches.
   - However, this approach (and all extraction approaches), cannot derive bipartite NPs whose non-bipartite-NP counterparts are islands for extraction.

E.g. The adjunct-island constraint holds in Serbian (examples from Bošković (2005)):

(i) On je pobegao [Adjunct zbog pretnje oružjem]?  
   he aux run-away because threat weapons  
   ‘He ran away because of the threat with weapons.’  
   vs.

(ii) *Čime i je on pobegao [Adjunct zbog pretnje tij]?  
    of-what aux he run-away because threat  
    intended:’Because of the threat of what did he ran away?’

Nevertheless, adjunct bipartite NPs are not impossible in Serbian, as illustrated in (iv) – See e.g. Pereltsvaig (2008) for Russian:

Example:
   Context: - Boss, do not worry. I and my team will successfully finish the job, no matter how complex it is…

(iii) Radim [Adjunct sa sposobnim programerima].  
    work-I with capable programmers  
    ‘I’m working with capable programmers.’

(iv) Sa sposobnim radim programerima.  
    with capable work-I programmers  
    ‘I’m working with capable programmers.’

Explanation: It follows from (i-iv) that, in order to derive (iv), an extraction approach has to violate a constraint that is otherwise not violable in Serbian.

(10) Summary of the extraction approaches to bipartite NPs:
    - They cannot explain Serbian bipartite NPs, no matter how the extraction is done.
(11) **Distributed-PF-deletion accounts** (proposed by Fanselow and Čavar (2002), and later developed by Pereltsvaig (2008))

a. **Definition:**
The extraction does not happen at all during the derivation of bipartite NPs. Instead, a bipartite NP is simply the result of partial pronunciation of two full copies of a single non-bipartite NP.

b. **How does it work?**
   - First, two copies of an NP occur as a result of an independent movement that the relevant NP undergoes:
     
     (i) 1\textsuperscript{st} step: $[\text{NP srebrne minduše}]$ nosim $[\text{NP srebrne minduše}]$.
     
     silver earrings wear-I silver earrings

   - The copies are then each partially deleted (i.e. interpreted) at PF, so that they end up being complements to the full original NP for one another:
     
     (ii) 2\textsuperscript{nd} step: $[\text{NP srebrne minduše}]$ nosim $[\text{NP srebrne minduše}]$
     or $[\text{NP srebrne minduše}]$ nosim $[\text{NP srebrne minduše}]$

c. **Advantages over extraction approaches:**
Distributed PF-deletion, taken in its unconstrained form, does not undergenerate in the cases where the extraction approaches do.

d. **Distributed PF-Deletion has a major issue with potential overgeneration:**
   - It needs constraints on the overly powerful distributed PF-deletion operation.

E.g. Bošković (2005): How do we prevent the occurrence of examples such as (i-iii)?
   (i) *The students were arrested the students.
   (ii). *The students were arrested the students.
   (iii). The students were arrested the students.

e. **Proposed solution by the proponents of these accounts:**
   - Only multiple copies of an NP that exhibits split information structure are eligible for such deletion.
   More precisely:
   (i) If A and B are two parts of an NP, and if they respectively carry information-structure features x and y (x≠y), then multiple copies of the relevant NP are eligible for distributed deletion such that parts A and B end up being interpreted by the PF-interface (i.e. pronounced) in distinct copies.\(^4\)

(13) **An argument against the PF-deletion accounts**

a. **Semantic interpretation in the PF-deletion accounts:**
   - It is a standard property of a PF-deletion operation that it does not affect the semantic interpretation.

\(^4\) I use the information-structure variables x and y in (i) as a shorthand for concrete information structure features used in each of the two PF-deletion accounts in question, i.e. [topic], [focus], [contrastive], or any possible combinations of these.
Therefore, semantic contribution of bipartite NPs and non-bipartite NPs to the truth conditions of the sentence are predicted to be identical.

Problem: This is not empirically correct!

b. Nowak’s (2000) Polish data:
Nowak (2000) notes that bipartite NPs whose one member is a non-subsective adjective such as Polish byly (=‘former’) are less acceptable than other bipartite NPs in Polish (i-ii):

(i) *Z bylym rozmawiała prezydentem.
   with former talked-she president
   intended: ‘She talked with the former president.’

(ii) *Z prezydentem rozmawiała bylym.
   with president talked-she former
   intended: ‘She talked with the former president.’

c. Comparable Serbian example:
Context: This organization does not dare to attribute any real crimes. Instead, its task is completely different…

(i) …Ona pripisuje navodneF zločineG.
   it attributes alleged crimes
   ‘…It attributes alleged crimesG.’

(ii) …Ona [navodneF zločineG] pripisuje t.i.
   it alleged crimes attributes
   ‘…It attributes alleged crimesG.’

(iii) #…Ona navodneF pripisuje zločineG.
   it alleged attributes crimes
   ‘…It attributes alleged crimesG.’

Explanation of the Serbian example:
- A split-IS non-bipartite NP with a non-intersective adjective of this type, e.g. navodni (=‘alleged’), is perfectly acceptable in Serbian, as shown in (i-ii).
- Crucially, (iii) shows that the corresponding bipartite NP with the same split IS is ungrammatical in the very same context.
- Now, under distributed-PF-deletion accounts of bipartite NPs, at least (ii) and (iii) would have identical LF-representations.

5 In fact, Nowak (2000) considers such bipartite NPs ungrammatical. However, at least for Serbian, it is more accurate to say that these are grammatical but very restricted pragmatically. One can construct a context in which they are acceptable:
- Tell me an alleged thing that you’d be most scared of being charged with as a politician?
  - Pa, navodnih se plašim (ratnih) zločina.
    well alleged part. fear-I war crimes
    ‘Well, as far as alleged things go, I am scared of alleged (war) crimes.’
The data show that these semantic representations cannot be identical.

It follows from the data in (i-iii) that sentences with bipartite NPs and corresponding minimal-pair sentences with non-bipartite-NPs do not compose their meanings in the same way. While the results of these two distinct ways of composition (i.e. the final truth conditions) may often seem indistinguishable, NPs with non-subsective adjectives such as navodni (=‘alleged’) show that they clearly are distinct in certain cases, and thus provide strong evidence that the meanings are distinct.

(14) Summary of distributed-PF-deletion accounts:
- The PF-deletion approaches do not account for Serbian bipartite NPs.

(15) Conclusion for this section:
- The assumption that the underlying structure of bipartite NPs is in fact the structure of their regular non-bipartite-NP counterparts runs into serious problems.

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Proposal (Part 1): A Secondary-Predication Account for Bipartite NPs

(16) The proposal, in a nutshell
- An approach to bipartite NPs, which is not based on the assumption that bipartite NPs are derived from their non-bipartite counterparts.  
- Bipartite NPs are a special case of another type of structure – secondary predicates.

(17) Secondary predicates (fundamentals)

a. Definition (tentative):
- An adjunct-like predicate that is present in addition to a verbal (=primary) predicate.

b. Examples of standard depictive secondary predicates:
Depictive secondary predicates attribute a state to one of the arguments of the verb during the event described by the verb (i.e. to the subject argument in (i), and to the direct object argument in (ii)):
(i) \textit{Jovan\textsubscript{Arg-Subj} je došao na posao umoran\textsubscript{SP}.}
   Jovan aux come to work tired
   `Jovan\textsubscript{Arg-Subj} came to work tired\textsubscript{SP}.`

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6 An account that does not derive bipartite NPs from their non-bipartite counterparts was offered earlier by Fanselow (1988).
(ii) Nemoj da dovodiš JovanaArg-Dir.Obj. pijanogSP.
   ‘Do not bring JovanArg-Dir.Obj. drunkSP.’

c. The secondary-predicate structure (informal):^7
   [NP/PP] …primary predicate [AP/NP/PP]
   argument   (VP/V’)   secondary predicate (adjunct)

(18) Relevant properties of secondary predication in Serbian:

a. Secondary predication covers a broader range of constructions than it does in English, which only allows that secondary predicates modify subjects or direct objects. Serbian allows that secondary predicates also modify indirect objects (as in (i)) or PP-internal NPs (as in (ii)):

(i) Dao sam JovanuArg-Ind.Obj. pijanomSP da vozi.
   let aux Jovan drunk to drive
   ‘I let JovanArg drive drunkSP.’

(ii) Naišao sam [na JovanaArg-Acc] (još) pospanogSP-Acc.
   run aux at Jovan still sleepy
   ‘I ran into Jovan, who was still sleepy.’

This is not an idiosyncratic feature of Serbian; see Pylkkänen (2002), who identifies a class of languages in which secondary predicates can modify indirect objects or PP-internal arguments, mentioning Albanian as an example.

b. Semantically, phrases that normally occur as individual-level predicates elsewhere can also occur as secondary predicates under certain conditions:

The treasurer can be anybody, but as far as the manager goes…
   …njegaArg uzmite dobrog inženjeraSP.
   him take good engineer
   ‘…but take (/pick) the manager who is a good engineer.’

c. Finally, there is a specific set of pragmatic conditions under which secondary predicates are used.

   ▪ The information structure (=IS) of secondary-predicate structures comes in two forms, which will be referred to as IS Type 1 and IS Type 2.

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^7 The precise formulation of the secondary-predicate structure for Serbian is an open issue. While secondary predicates could be base-generated in the same way as is claimed for languages such as English (see e.g. Williams (1980), Bowers (1993), Pylkkänen (2002), among others), it seems that their positions are less fixed in Serbian.
(19) **Pragmatic conditions: IS Type 1**

a. **Description:**

<table>
<thead>
<tr>
<th></th>
<th>syntax</th>
<th>primary predicate (VP/V')</th>
<th>secondary predicate (adjunct -AP/NP/PP)</th>
<th>argument NP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Quantification structure</strong></td>
<td><strong>Restriction clause</strong></td>
<td><strong>Restriction clause</strong></td>
<td><strong>Nuclear scope</strong></td>
</tr>
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<td></td>
<td><strong>F-marking</strong></td>
<td><strong>Non-embedded F (Foc) or G</strong></td>
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<td><strong>Non-embedded F (Foc) or G</strong></td>
</tr>
</tbody>
</table>

The restriction clause of QS contains a conjunction of the argument NP and the primary predicate. The nuclear scope consists of the secondary predicate.

b. **Example 2:**

- **Jovan je došao na posao umoran**
- **Jovan aux come to work tired**
- "John came to work tired"

(20) **Pragmatic conditions: IS Type 2**

a. **Description:**

<table>
<thead>
<tr>
<th></th>
<th>primary predicate (VP/V')</th>
<th>secondary predicate (adjunct -AP/NP/PP)</th>
<th>argument NP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Quantification structure</strong></td>
<td><strong>Restriction clause</strong></td>
<td><strong>Restriction clause</strong></td>
</tr>
<tr>
<td></td>
<td><strong>F-marking</strong></td>
<td><strong>Non-embedded F (Foc) or G</strong></td>
<td><strong>Non-embedded F (Foc) or G</strong></td>
</tr>
</tbody>
</table>

The restriction clause of QS contains a conjunction of the primary predicate and the secondary predicate. The nuclear scope consists of the argument. (a specificational sentence)

b. **Example:**

- Did you ever see a drunk cop on duty?
- **Da. Pijanog sam video Jovana iz glavne stanice.** (Sec.P-Prim.P-Arg order)
- **Yes drunk aux saw J. from main station**
- ‘Yes. I saw Jovan from the main station when he was drunk.’

(21) **Summary for semantic/pragmatic conditions on secondary predication in Serbian:**

- The semantics and information structure of the secondary-predicate structures is always asymmetric, that is, split over the Quantification structure.

- The information-structure-related is accordingly realized in two ways on the secondary predicate (IS Type 1 and IS Type 2).
Proposal (Part 2): Bipartite NPs as instance of the sec.-predicate structure

(22) Major claim:
- A bipartite NP is always an instance of the secondary-predicate structure

\[
\begin{array}{ll}
\text{[NP/PP]} & \text{…primary predicate} \\
\text{argument} & \text{(VP/V')} \\
\text{[AP/NP/PP]} & \text{secondary predicate (adjunct)}
\end{array}
\]

(23) How does it work?

a. Recall bipartite NP example:
- What kind of earrings do you usually wear?
  - Mindušeg nosim srebrne\(_f\).
  earrings wear-I silver
  (informal translation): Op\(_x\).earrings\(_G\)(x) AND I-wear(x). silver\(_f\)(x)

Note for Example:
- Mindušeg (=‘earrings’) is the argument NP in the restriction clause of QS together with the primary predicate. The secondary-predicate AP srebrne (=‘silver’) is in the nuclear scope of QS.

b. Notes about apparent differences from typical secondary predication:

- One of the main differences between our standard examples of secondary predication and bipartite NPs is now seen as simply a difference in the type of the argument NP in the secondary-predicate structure in (22). Namely, in the standard examples of secondary predicates, this is often a proper name, which clearly is a full NP. On the other hand, in bipartite NPs we instead typically find common nouns in this position. The present analysis sees them as full NPs associated with secondary predicates.

- Bipartite NPs may appear to be unlike the standard cases of secondary predication when they involve N’-ellipsis in the argument member: Recall that Serbian allows N’-ellipsis (or N’-drop).\(^8\) This is a characteristic comparable to English one-replacement.

Examples of N’-ellipsis:
Context: - What kind of pencil would you like me to buy for you?
(i) - Hoću [\(\text{NP crnu } \emptyset\)].
  want-I black
  ‘I want a black one.’

Context: - Which yogurt do you buy?
(ii) - Kupujemo [\(\text{NP onaj } \emptyset\) u flašici].
  buy-we that in bottle
  ‘We buy that one in the bottle.’

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\(^8\) The idea of N’-ellipsis and bipartite NPs going hand in hand was already used in Fanselow (1988), for example.
Example of N’-ellipsis with bipartite NPs:
Context (two people in a grocery store):
  - My kids love this yogurt, so I always buy several cartons!

(iii) - A mi [NP-Arg onaj Ø (u flašici)] kupujemo [NP-Sec.Pred. jogurt],
  but we that in bottle buy yogurt
  ‘We, on the other hand, buy that yogurt (in the bottle).’

Explanation of (iii):
  ▪ In (iii), it is the Type-1 IS of the secondary-predicate structure that is at work.
    Namely, the NP onaj Ø u flašici (=‘that in the bottle”) is the argument of
    the secondary predicate jogurt (=‘yogurt’).
  ▪ However, the secondary predicate is prosodically marked as GIVEN because it has a
    salient antecedent in the context, which also licenses the N’-drop.

(24) Parallelism between bipartite NPs and secondary predication

  a. Same range of syntactic possibilities:

  ▪ Secondary predicates in Serbian can modify subjects, direct objects, indirect objects and even
    PP-internal arguments.

  ▪ Bipartite NPs in Serbian have exactly the same range of syntactic possibilities, since they can
    apparently occur as subjects (i), direct objects (ii), indirect objects (iii), or as PP-internal (iv):

    (i) E, ovaj me nervira voditelj.
        now this me annoys TV-host
        ‘Now, this TV-host annoys me.’

    (ii) - Do you ever wear silver jewelry?
      - Da. Srebrne nosim minduše.
        yes silver wear-I earrings
        ‘Yes. I wear silver earrings.’

    (iii) E, tom je Jovan pomogao čoveku.
      now that aux Jovan helped man
      ‘Now, Jovan helped that man.’

    (iv) - Boss, maybe we should hire younger and less expensive programmers for this project…
      - Ne. Na programere se oslanjate sposobnē...
        no on programmers part. rely capable
        ‘No. Rely on capable programmers (only)…(and I will worry about the money).’

  ▪ At the same time, when secondary predicates are not possible in Serbian, bipartite NPs are not
    possible either.

    For example, secondary predicates are impossible with NPs that are internal to other NPs (as in
    (v) and (vi); see Neeleman (1994) for Dutch, and Müller (2004) for German):
(v) *Jovan je [ kutiju [ribeArg ]] pojeo živeSP. (impossible SP)
    J. aux box fish eaten raw
    intended: ‘Jovan has eaten a box of raw fish.’

(vi) *Jovan je [ puževe i [ ribu ]] pojeo živu. (impossible SP)
    J. aux snails.pl and fish sg eaten raw
    intended: ‘Jovan has eaten up snails and raw fish.’

Likewise, bipartite NPs are impossible in the corresponding cases:

(v’) *Jovan je [NP kutiju [minĎuša ]] kupio srebrnih. (impossibe bip. NP)
    J. aux box earrings bought silver
    intended: ‘Jovan bought a box of silver earrings.’

(vi’) *Jovan je [ minĎuše i [ prsten]] kupio srebrni. (impossible bip. NP)
    J. aux earrings and ring bought silver.sg
    Intended: ‘Jovan bought earrings and a silver ring.’

b. Phrases that normally occur as individual-level predicates are found with both phenomena:

- Recall that secondary predicates do not need to be phrases that occur exclusively as stage-level predicates in Serbian, and that some phrases that are normally used as individual-level predicates can occur in this role as well (as it was shown in (18b)).

- Likewise, bipartite NPs can employ both types of phrases as secondary predicates. We have seen examples of what is often used as an individual-level predicate used in bipartite NPs (e.g. srebrne [=“silver”], as in “silver earrings”). A stage-level predicate can also be used in bipartite NPs, making them indistinguishable from classic cases of secondary predication, as in (i):

(i) - Should I fry the fish? (a stage-level predicate in a bipartite NP)
    - Ne. Ribu jedem živu.
    no fish eat-I raw
    ‘No. I eat fish raw.’

c. Same pragmatic conditions:

- Split IS that bipartite NPs exhibit, as shown in (2) and (3) has to belong to one of the two general IS types that the secondary-predicate structures can occur with: either IS Type 1 in (19) or Type 2 in (20) – compare examples of both from before.

d. Same ordering patterns are possible:
Secondary predicates in Serbian can precede their arguments under special pragmatic conditions (cf. German (Jacobs (1997), and also Haider (1997)):

(i) - Did you ever see a drunk cop on duty?
    - Da. Pijanog sam video Jovana iz glavne stanice. (SP-Arg order)
    yes drunk aux saw J. from main station
    ‘Yes. I saw Jovan from the main station drunk.’
Recall that the order between the two members of a bipartite NP is not fixed either.

(25) Some welcome predictions of the Secondary-predicate account of bipartite NPs

a. PP-data

Some PP-internal referential NPs can only occur as bipartite NPs in one of the two logically possible ways (i.e. (i) is grammatical, but (ii) is not):

(i) Ne! Naonaj u flašici mislim jogurt.  
   no on that in bottle mean-I yogurt  
   ‘No! That yogurt in the bottle, I mean.’

(ii) Ne! Na jogurt mislim onaj u flašici.  
   no on yogurt mean-I that in bottle  
   intended: ‘No! As for yogurt, I mean that one in the bottle.’

Explanation:

- At least one of the members of a bipartite NP, namely the secondary-predicate member, has to be in a non-argument position.
- It follows from this that if one of the members of a bipartite NP is referential, then this has to be the argument part of the secondary-predicate structure.
- The bipartite NPs in the example can only be analyzed so that the referential member onaj Ø u flašici (=‘that one in the bottle’) is the argument NP for the secondary-predicate NP jogurt (=‘yogurt’).
- What goes wrong in (ii) is that the relevant PP can only be understood as the argument of the verb. Our analysis predicts that onaj u flašici (=‘that in the bottle’), being referential, cannot be used as a secondary predicate, which is what the example attempts to do.

b. Behavior of non-subsective adjectives in bipartite NPs:

Recall the relevant class of cases.

Example:

Context: This organization does not dare to attribute any real crimes. Instead, its task is completely different…

(i) …Ona pripisuje navodne zločine.  
   it attributes alleged crimes  
   ‘…It attributes alleged crimes.’

(ii) …Ona navodne zločine pripisuje.  
   it alleged crimes attributes  
   ‘…It attributes alleged crimes.’

(iii) #…Ona navodne pripisuje zločine.  
   it alleged attributes crimes  
   intended: ‘…It attributes alleged crimes.’

(iv) #…Ona zločine pripisuje navodne.  
   it crimes attributes alleged  
   intended: ‘…It attributes alleged crimes.’
Explanation of Example (iv):

- The sentence in (iv) is, according to this approach, analyzed as in (v):

  $$(v) \quad \# [_{NP-Arg} zlo\check{c}ine]_G \ pripisuje \ [_{AP-\text{Sec.Pred}} navodne]_F$$
  $$\text{crimes} \quad \text{attributes-it} \quad \text{alleged}$$

- Crucially, (v) is an instance of the Type-1 IS for the secondary-predicate structure.

- What goes wrong is that (v) attempts to use the non-subsective adjective *navodne* (=‘alleged’) subsectively.

Explanation of Example (iii):

- Example (iii) is an instance of the Type-2 secondary-predicate structure, and is analyzed as in (vi):

  $$(vi) \quad \# [_{NP-Arg navodne}]_F \ pripisuje \ [_{AP-\text{Sec.Pred} zlo\check{c}ine}]_G$$
  $$\text{alleged} \quad \text{attributes-it} \quad \text{crimes}$$

- *zlo\check{c}ine* (=‘crimes’) is used anaphorically. It has a salient antecedent in the context. The fronted secondary predicate *navodne* (=‘alleged(x)’) is to be understood as the domain restrictor that is construed as a subset of crimes of *zlo\check{c}ine* (=‘crimes(x)’). This is not possible with subsective adjectives.

26 Main Summary:

- Earlier approaches to *bipartite NPs* are inadequate:
  
  (i) the extraction approaches to *bipartite NPs* undergenerate.
  
  (ii) The distributed-PF-deletion approaches overgenerate.

- *Bipartite-NP* phenomenon is an instance of a more general phenomenon of secondary predication.

- Properties such as syntactic discontinuity and split IS of *bipartite NPs* follow from the standard properties of secondary predication.
References


Bašić, Monika 2004. Nominal subextractions and the Structure of NPs in Serbian and English. MPhil-avhandling; Set humanistiske fakultet Universitetet i Tromsø.


