Sluicing in Romanian: IP-Ellipsis or Cleft-Reduction?

Frederick Hoyt (fmhoyt@mail.utexas.edu)
Alexandra Teodorescu (teodorescu@mail.utexas.edu)
University of Texas at Austin
LSRL 33, Indiana University
April 29, 2003

1 Introduction

Sluicing is ellipsis of some sub-constituent within an embedded question, leaving one (or more) wh-words (or remnants) “floating” in the complement position of the main verb.

(1) Cineva mi-a mâncat pârâjiturile,
someone me-AUX3S eat cookies-the

“Someone ate my cookies

dar nu ştiu cine [mâncat pârâjiturile ],
but not know who me-AUX3S eat cookies-the

but I don’t know who.”

Sluicing in English has been widely analyzed as IP-ellipsis (Chung, et al (1995), Merchant 1998, 2000):

(2) English
a. Arabelle is getting married! Guess [cp to whom [ip she is getting married]].
b. Max is meeting Julia, but nobody knows [cp when [ip he is meeting her]].

In contrast, sluicing in Japanese has been analyzed as ellipsis of the CP constituent of a cleft-construction (c.f. Shimoyama 1995; Merchant 1998, 2000; Hiraiwa & Ishihara 2002):

(3) Bill-ga nanika-o mmunda rassii ] kedo,
Bill-PCA something-ACC stole seem but

“It seems that Bill stole something, 

boku-wa [ip Bill-ga mmundari nanika-o ] nani-o ka (da) siruai.
I-VOP Bill-PCA stole seem C what-ACC 2 = know-not

but I don’t know what.”

At first blush, Romanian sluicing resembles Japanese sluicing more than it does English sluicing. This is because both Romanian and Japanese allow the following categories of constituents in the remnant of a sluice (Merchant 1998, 2000):

(4) a. multiple wh-remnants;
b. semantically referential remnants;
c. polarity-sensitive remnants;
d. overt complementizers.

However, upon closer examination, we find that Romanian sluicing is fundamentally similar to English sluicing. This is for two reasons.

(5) a. Sluicing is island-insensitive in both Romanian and English;
b. The difference in the number of remnants tolerated in the two languages can be explained by the availability of multiple wh-fronting in Romanian.

We argue the following:

(6) a. Romanian sluicing is a form of IP-ellipsis, as has been proposed for English
b. Romanian has an articulate phrase-structure between the sluice and complementizer;
c. Differences between sluicing in Romanian and English on the one hand, and similarities between sluices in Romanian and Japanese on the other, follow from these points.

*We would like to thank the following for their comments and encouragement: Bernhard Schwarz, Rajesh Bhatt; Steve Wechsler; Lisa Green, Danny Fox. We thank Tomoko Sakuma, Makiko Irie, Hitoshi Hirishita, and Masah Deguchi for their help with the Japanese data. We also extend extremely grateful thanks to Dan Tecuci for his invaluable assistance with Romanian native speaker judgements as well as with logistical matters. We also thank Kathryn Tippetts for hosting us at LSRL 33, and for her logistical assistance.

1We use the term sluicing descriptively, without intending any particular analysis. To be more specific, we will refer to the English-type sluicing as IP-Ellipsis, and the Japanese-type as Cleft-Reduction.
1.1 Outline of talk

2: Similarities between sluicing in Romanian and Japanese
3: Similarities between sluicing in Romanian and English
4: Summary of data
5: Previous analyses of sluicing
6: Evidence for IP-ellipsis in Romanian

2 Romanian and Japanese

Romanian and Japanese sluices share several properties. These include the presence of multiple wh-remnants, as well as a variety of non-WH remnants, such as:

2.1 Multiple WH-remnants

Both Japanese and Romanian allow multiple remnants in the sluice:

(7) a. Ion a ceva dat cuiva,
Ion ACC3S give to-someone something
“I gave something to someone,
și vreau să știu cine ce.
and wantIS that know-SUBJ whom-DA what
and I want to know what to whom”

b. Taro ga dareka-ni naniko-o ageta rasii,
Taro-NOM someone-DAT something-ACC gave heard
“I heard that Taro gave someone something,
ga bolu-va dare-ni nani-o da la wakara-nai.
gan TOP who-DAT what-ACC that Q know-not
but I don’t know who [he gave] what.”

English sluicing does not 2.

(8) ??John gave someone something, and I want to know who what.

2.2 Non-WH remnants

Both Japanese and Romanian allow non-WH constituents as the remnants of sluices:

2.2.1 Referential constituents

Noun phrases and argumental PPs:

(9) a. Mi s-a spus că cineva s-a întâlnit cu cineva.  
Me REFLECT-AUX3S tell that someone REFLECT-AUX3S meet ACC someone
“I was told that someone met with someone,…
si mă întreb dacă Ion cu Maria.  
and me-refl wonder of Ion with Maria
and I wonder if John with Mary.”

b. John-qa dareka-o kubinisita rasii,
John-NOM someone-ACC fired seem
“It seems that John fired someone,
koko boku-wa Bill-o to eomune.
but TOP Bill-ACC that think
and I think Bill.”

Adverbial PPs:

(10) a. Da, am aflat și ei că Ioana a fugit cu cineva.  
Yes, AUXIS learned and I that Ioana AUX3S eloped with somebody
“Yes, I’ve found out too that Ioana has eloped with somebody,
dar n-aș paria că cu Radu.  
but not-OPT1S bet that with Radu
but I wouldn’t bet that with Radu.”

b. Akiko-ga dareka-to kalechista to kiiita kedo,
Akiko-NOM someone-WITH eloped to what-DA but
“I heard that Akiko eloped with someone,
Taroo-to to-wa omowahanakatta.  
Taroo-WITH C-TOP not-expected
but I didn’t expect Taroo.”

Adverbs:

(11) a. Carmen vrea să-i ia masina,
Carmen wants SUBJ-GEN-3S take degree
“Carmen wants to buy herself a car,”
and suspect that pretty soon.”

b. Hanako-wa kuruma-o kaitagatte iru sugurida da to omou. Hanako-TOP car-ACC buy-want ASP soon is C think
“Hanako wants to buy a car, [and] I suspect that soon.”

2.2.2 Polarity-sensitive remnants

Bare quantifiers:

(12) a. Știu că profesorul ajută pe multă lume, know1S that professor-the help ACC many people
“I know that the professor helps many people,
dar mă întreb dacă pe oricine oricând. but me-REFL wonder if ACC anyone anytime
but I wonder if he helps ANYone ANYtime.”

b. Dareka-ga kono-kuruma-o nansu to omou kedo, daredemo ka-wa wakaranai.
someone-NOM this-car-ACC can-fix C think but anyone Q-TOP think-not
“It seems that John fired someone,
boku-wa Bill ka dooka siranai. I-TOP Bill Q whether know-not
but I don’t know if Bill.”

Aggressively non-d-linked wh-words (c.f. Pesetsky 1987, Giannikadou & den Dikken 2002):

(13) a. Cineva mi-a ascuns cheile și aș vrea să știu și eu cine someone me-ayux3S hidden keys-the and opt1S want subj know1S and I who dracu.
devi
“Someone hid my keys on me, and I’d like to know who the hell.”

b. Minna-ga awateteiru kedo, boku-wa itai nani-o ka siranai.
everyone-NOM panic but I-TOP hell what-ACC Q know-not
“Everyone is panicking, but I don’t know why-the-hell.”

2.3 Overt complementizers

Both Japanese and Romanian tolerate an overt complementizer in the remnant of the sluice:

2.3.1 Overt [+Q] complementizers

(14) a. Am aflat că cineva a plecat, AUX1S learned that someone AUX3S left
“I found out that someone left,
dar nu știu dacă Ion. but not know1S if Ion
but I don’t know if Ion.”

b. John-ga dareka-o kubinisita rasii kedo, John-NOM someone-ACC fired seem but
“It seems that John fired someone,
boku-wa Bill ka dooka siranai, I-TOP Bill Q whether know-not
but I don’t know if Bill.”

2.3.2 Overt [-Q] complementizers

(15) a. Dan: Cine crezi că a ciștigat premiul întâi?
Who think1S that AUX3S won first-the prize?
“I know [that] Anca [did].
Alex: Știu că Anca. know1S that Anca.
I know [that] Anca [did].”

b. John-ga dareka-o kubinisita rasii kedo, John-NOM someone-ACC fired seem but,
“It seems that John fired someone,
boku-wa Bill to omou, I-TOP Bill that think
and I think that (it was) Bill.” (Merchant 1998)

The following tables summarize which English, Romanian and Japanese complementizers license sluicing (shaded cells indicate feature sets which license sluicing):

(16) English:

<table>
<thead>
<tr>
<th></th>
<th>+Q</th>
<th>-Q</th>
</tr>
</thead>
<tbody>
<tr>
<td>+WH</td>
<td>o</td>
<td>relative-that, o</td>
</tr>
<tr>
<td>-WH</td>
<td>whether, if</td>
<td>that</td>
</tr>
</tbody>
</table>
3 Similarities between Romanian and English sluicing

3.1 Island constraints

English and Romanian sluices both seem to violate island constraints: the dependency between the wh-remnant and the position it binds within the sluice crosses the boundary of a syntactic island. In contrast, remnants in Japanese sluices seem to respect islands.

3.1.1 Coordinate structure constraint

(18) a. He invited [ Akiko and someone else ],
   but I don’t know who ( *he invited [ Akiko and t i ]).
   Dan a invitat-o [ pe Anca si pe încă cineva ],
   Dan AUX3S invite-CLFS ACC Anca and ACC other someone
   “Dan invited Anca and someone else.
   banmi ca pe Elena (* Dan a invitat-o [ pe Anca si t i ]).
   suspect1S that ACC Elena Dan AUX3S invite-CLFS ACC Anca and
   I suspect that Elena (Dan invited and ).”

3.1.2 Complex NP Constraint

(19) a. Jerry heard [ John’s rumour that John burned someone’s house down ],
   but I don’t know who ( *Jerry heard [ John’s rumour that John burnt t i down ]).
   Emil a împărtășit [ xP zvonul că cineva a dat foc casei lui Ion ],
   Emil AUX3S spread rumor-the that someone AUX3S gave fire house-DAT to Ion
   “Emil spread the rumour that someone set John’s house on fire,
   și eu suspecțez că Gheorghe. (* Emil a împărtășit [ xP zvonul că t i ])
   and I suspect that George Emil AUX3S spread rumor-the that
   but I don’t know who.”

3.1.3 Relative Clause Island

(20) a. Dan talked to a Romanian [ who is married to somebody from Dallas],
   but I don’t know who ( *Dan talked to a Romanian [ who is married to t ]).
   Dan a vorbit cu un român [ care e căsătorit cu cineva din Dallas ],
   Dan AUX3S talk with a romanian who is married with someone from Dallas
   “Dan talked with a Romanian who is married to someone from Dallas,
   dar nu mi-e clar dacă cu Radu ( * Dan a vorbit cu un român [ care e
   but it’s not clear to me if Radu.”
   Dar aux3S talked with a Romanian which is
cărător cu t i ]).”

b. Dan a vorbit cu un român [ care e căsătorit cu cineva din Dallas ],
   Dan AUX3S talk with a romanian who is married with someone from Dallas
   “Dan talked with a Romanian who is married to someone from Dallas,
   dar nu mi-e clar dacă cu Radu”

3.1.4 Sentential subjects

(21) a. E posibil [ cu Ion să se fi întâlnit cu cineva ],
   is possible that Ion SUBJ REFL be-SUBJ met with someone
   “It is possible that Ion met with someone,
   dar nu as paria că cu Mihai
   but not-OPT15 bet that with Mihai
   but I wouldn’t bet with Mihai
   (** e posibil [ cu Ion să se fi întâlnit t i ]).”
   “is possible that Ion SUBJ REFL be-SUBJ met
   it is possible that Ion met with.”
   Dar aux3S met with someone

b. [ Dakeka-ga ga kamoshirenai-koto]-ga Taroo-o nayamae iru
   someone-nom cancer may-have-fact-nom Taroo-ACC before AXN
   “The fact that someone might have cancer has been bothering Taroo,
3.1.5 Adjunct islands

(22) a. John left the Smiths’ house [ because the host was gossiping about some politician ], but I don’t know which (* John left the Smiths’ house [ because the host was gossiping about t ] ).

b. Ion a plecat de la Popești...

Ion AUXIS left from the Popeșcu-poss.

[ deoarece gazda il vorbea de rău pe un politician ],

because host-the CLMS gossip-PAST ACC a politician

because the host was gossiping about some politician,

mi se pare că pe Vadim (* a plecat de la Popești me REFL seem that ACC Vadim AUXINS leave from to Popestu-DAT.PL

it seems to me that Vadim.”]

[ deoarece gazda il vorbea de rău tî ]).

because host-the CLMS gossip-PAST

c. * Taroo-wa [ dareka-ga gan kamoshirenai to-o kiita node ] naita. Taroo-TOP someone-NOM cancer may-have q-ACC hear-PAST because cry-PAST

“Taroo cried because he heard that someone might have cancer,

sikashi buko-wa darega ka siranai. but I-TOP who-NOM q know-not

but I don’t know who.”

4 Summary

The properties of sluicing in English, Romanian, and Japanese are summarized in the following table:

<table>
<thead>
<tr>
<th>Sluices in... Allow overt CP</th>
<th>Multiple Wh-remnants</th>
<th>Aggresively non-D-linked wh-words</th>
<th>Non-wh remnants</th>
<th>Island sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Romanian</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Japanese</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

| (23) | (24) | (25) |

5 The Syntax of Romanian Sluices

5.1 Previous analyses of sluicing

5.1.1 English sluice is IP-Ellipsis (Merchant 1998, 2000)

Merchant (2000) argues that English sluicing is IP-ellipsis. IP-ellipsis is subject to two licensing requirements: the e-Givenness condition, and sisterhood/government by a ([+WH, +Q]) complementizer.

(24) The e-Givenness Condition: An expression E counts as e-given iff E has a salient antecedent A and, module 3-closure:

a. E entails the Focus Closure of E, and

b. E entails the focus closure of A.

(25) IP-Ellipsis condition: Ellipsis of IP is licensed by a ([+WH, +Q]) complementizer.

Merchant’s analysis is therefore that English IP-ellipsis involves syntactic ellipsis under semantic identity with its antecedent.

5.1.2 Japanese sluicing as Cleft-reduction

Merchant (1998, 2000) and Hanawa & Ishibani (2002) argue that Japanese sluicing is reduction of the presupposed CP-constituent of a cleft structure. Japanese clefts allow multiple pivots, so the analysis explains both the island sensitivity of Japanese sluices, as well as the availability of multiple remnants.

(26) Taroo-ga dareka-ni nanika-o ageta rasi ga

Taroo-NOM someone-DAT something-ACC gave heard but

“I heard that Taro gave someone something,

a. buko-wa [ dare-ni nanika-o | dare-ni, nani-o ] (da) ka siranai.

b. buko-wa | [ dare-ga nanika-o ] (da) ka siranai.

I don’t know who what.” (SLUI CE)

I don’t know what ACC is q know-not

(27) John-ga dareka-o kubinisita rasi kedo, John-NOM someone-ACC fired heard but

“I heard that John fired someone, and
5.2 Romanian sluices?

Given that Romanian sluices share properties with both Japanese and English sluices, which analysis might apply?

5.2.1 Cleft reduction

Romanian does not have clefts with multiple pivots. In fact, it may not have clefts at all (c.f. Dobrovie-Sorin 1990, Merchant 2000).

(28) a. Nu știu cine a fost de a bătut-o pe Maria, dar e rănită.  
I don't know who it was who beat Maria, but she is hurt.

(29) a. Nu știu cine pe cine a văzut?  
I don't know who whom it was who saw

Therefore, the cleft-reduction analysis cannot account for the apparent similarities between Romanian and Japanese. Therefore, an English-type analyses is more promising.

6 Towards an IP-Ellipsis Analysis

An IP-ellipsis analysis of Romanian sluicing would have to answer the following questions:

6.1 Multiple wh-fronting

The availability of multiple remnants in Romanian sluices makes sense, given that Romanian requires all wh-words to fronted in (non-echo) questions (c.f. Comorovski 1994; Dobrovie-Sorin 1994; Alboiu 2000):

(34) a. Cine pe cine a văzut?  
who ACC who AUXIS saw  
"Who saw whom?"

(35) a. Cine cu ce a dat?  
who who-DAT what AUXIS gave  
"Who gave what to whom?"

(36) a. Cineva mi-a măcinat prăjiturile,  
someone me-AUXIS ate cookies-the  
"Someone ate my cookies"

b. Nu știu cine [mi-a măcinat prăjiturile],  
but not know who me-AUXIS ate cookies-the

b. I not [PRES know [who [PAST eat my cookies]]]
Second, a WH-remnant can be assigned nominative case within the sluice:

(37) Carmen mi-a spus că cineva a văzut-o pe Anca, dar nu știu cine; [Carmen cl.1S-AUX3S said that someone AUX3S seen-CL3FS ACC Anca but not know1S who
t1 aux3S]

“The presence of a tense operator, as well as a nominative case-assigning or -checking feature are characteristics of a tensed I° or T°. Therefore, the presence of these properties in a Romanian sluice indicates that the sluiced constituent consists of an IP.

6.3 The structure of the remnant domain and the left periphery

6.3.1 Distribution of non-wh-constituents

Constituents from a variety of categories can be topicalized in Romanian. These include NPs, PPs, and d-linked WH-phrases (Dobrovie-Sorin 1990, 1994; Cornilescu 2000; Alboiu 1999, 2000):

6.3.2 Distribution of polarity-sensitive constituents

In root clauses, the position immediately to the left of the tensed verb is filled by focused constituents, non-d-linked wh-words, and polarity sensitive expressions (such as negative polarity items, free choice polarity items, and aggressively non-d-linked wh-words).

Expressions in this position must be immediately adjacent to the verb (Dobrovie-Sorin 1990, Alboiu 2000):

(38) a. Cine a văzut-o pe Maria ieri?
who AUX3S seen-CL3FS ACC Maria yesterday

“Who saw Maria yesterday?”

b. Pe Maria cine a văzut-o ieri?
ACC Maria who AUX3S seen-CL3FS yesterday

“Maria, who saw her yesterday?”

c. * Pe Maria cine ieri a văzut-o?
ACC Maria who yesterday AUX3S seen-CL3FS

“Same.”

d. * Cine pe Maria a văzut-o ieri?
who ACC Maria AUX3S seen-CL3FS yesterday

“Same.”

More than one expression belonging to one of the categories can appear this position,

(39) a. Cine ce a mâncat
who what AUX3S ate

“Who ate what?” (Multiple Wh-words)

b. Nimeni cu nimic nu te va ajuta.
nobody with nothing not you fut3S help

“Nobody is going to help you with anything.”

c. Cineva ceva va găsi de făcut.
somebody something fut3S find of done

“Somebody is will find something to do.” (Alboiu 1999)

d. * Unde MARIA trebuie să stea (și nu Ion)
where Maria must3S SUBJ stay3S and not Ion

“Where is it that MARY has to stay (rather than John)?”

d. * MARIA cu nimic nu m-a deranjat.
Mary with nothing not me-AUX3S bother

“It was MARY that didn’t bother me with anything.” (Alboiu 1999)
This indicates that there is a syntactic position which can be occupied by more than one constituent immediately to the left of the tensed verb, and that this position is open to several classes of expressions which are polarity-sensitive or associated with semantic focus.

Expressions in these categories cannot be topicalized. Argumental topics are clitic doubled (Dobrovie-Sorin 1990, 1994; Albiou 1999, 2000), while non-referential arguments cannot be:

\[(41)\]

\[
\begin{align*}
\text{a. } & \text{Pe nimeni n-am văzut la petrecere.} \\
& \text{ACC nobody not-aux1S saw at party-the}
\end{align*}
\]

“I didn’t see anybody at the party.”

\[
\begin{align*}
\text{b. } & \text{Pe nimeni nu l-am văzut la petrecere.} \\
& \text{ACC nobody not cl3MS-aux1S seen at party-the}
\end{align*}
\]

“Same.”

\[(42)\]

\[
\begin{align*}
\text{a. } & \text{Pe cine dracu-a sărutat Maria?} \\
& \text{ACC who devil aux3S kissed Maria}
\end{align*}
\]

“Who the hell did Mary kiss.”

\[
\begin{align*}
\text{b. } & \text{Pe cine dracu i-a sărutat Maria?} \\
& \text{ACC who devil cl3MS-aux kissed Mary}
\end{align*}
\]

“Same.”

\[(43)\]

\[
\begin{align*}
\text{a. } & \text{Lui Ionescu, nimeni niciodată, nu i-a vorbit așa.} \\
& \text{DAT Ionescu, nobody never not cl3MS-aux3S spoke such}
\end{align*}
\]

“Ionescu, nobody ever spoke to him in such a manner.”

\[
\begin{align*}
\text{b. } & \text{Lui Ionescu, niciodată, nimeni nu i-a vorbit așa.} \\
& \text{DAT Ionescu never nobody not cl3MS-aux3S spoke such}
\end{align*}
\]

“Same.”

\[
\begin{align*}
\text{c. } & \text{Nimeni lui Ionescu niciodată nu i-a vorbit așa.} \\
& \text{nobody DAT Ionescu never not cl3MS-aux3S spoke such}
\end{align*}
\]

“Same.”

This set of constituents must be in a cluster adjacent to the verb, cannot be topicalized, and occur in the remnant of a sluice. Therefore, the position which they occupy must be in the remnant of this sluice.

\[(44)\]

\[
\begin{align*}
\text{... dar mă întreb dacă pe oricine oricând [... întreb] but me-refl wonder if } \text{acc anyone anytime refl-aux3S meet}
\end{align*}
\]

“... but I wonder if anyone anytime.”

\[\text{7 Summary}\]

The similarities between Romanian and Japanese sluices are accidental. An IP-ellipsis analysis of Romanian sluicing (along the lines proposed by Merchant 1998, 2000) accounts immediately for the availability of multiple wh-remnants as well as their island insensitivity.

However, Romanian sluicing sets itself apart from English sluicing with a number of properties, including the presence of non-wh-remnants of various kinds, as well as overt, non-wh-complementizers.

These properties follow from the presence of a richer structure in the left periphery of embedded clauses in this language: Romanian allows more constituents to precede the IP in an indirect question than English does. As a consequence, IP-ellipsis leaves a larger class of remnants in Romanian.

\[\text{7.1 Questions for further research}\]

\[(45)\]

\[
\begin{align*}
\text{a. } & \text{Is IP-ellipsis licensed indirectly by the head of C, or by another syntactic position?} \\
\text{b. } & \text{What structure is found in the left periphery of the Romanian clause?} \\
\text{c. } & \text{If the semantics of sluicing is associated with the semantics of focus (c.f. Romero 1997, 1998; Merchant 2000), then how does focus marking in Romanian differ from focus marking in English?}
\end{align*}
\]
References

Alboiu, G. (1999), Romanian wh-phrases revisited. MS, University of Manitoba.


Motapanyane, V. (1998), ‘Focus, checking theory and fronting strategies in romanian’, *Studio Linguistica* 52


