The pragmatics of argument-reversing verb phrase ellipsis: a Question Under Discussion-based account

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1 Introduction

The dominant view: verb phrase ellipsis requires identity between antecedents and ellipsis sites.

(1) Ossie loves orange cats, and Ayla does <love orange cats>, too.

Identity is often framed in terms of semantic equivalence:

(2) A: Do you think Ayla loves me₁?  
    B: Of course she does <love you₁>.

Argument reversals in verb phrase ellipsis (AR-VPE):

i. involve subject-nonsubject reversals across the antecedent and ellipsis clauses,
ii. are said to involve a salient other relation between participants (Chung 2000),
iii. and are especially available in situations of love (3), conflict (4), and negotiation (5) (Bevington 1998; Chung 2000; Charnavel 2019).

(3) Context: Paul and Julie are lovers.  
    Paul: I₁ love you₂.  
    Julie: I₂ do <love you₁>, too.

(4) Jack: I₁ don’t want to be divorced from you₂.  
    Jill: Well, I₂ do <want to be divorced from you₁>!

(5) Jane: I₁’ll negotiate with you₂.  
    Jill: Okay, I₂ will <negotiate with you₁>, too.

Other situational classes: Do situations of love, conflict, and negotiation form a natural class? How should we handle cases that don’t obviously fall into one of these categories?

(6) John₁ wanted to dance with Mary₂, but she₂ didn’t <want to dance with him₁>. (Stockwell 2020)
(7) Jane: For instance, I would be reluctant to criticize you in public. (Chung 2000)
   a. Jill: Well, I wouldn’t be.
   b. Jill: I would, too.

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**Previous approaches** to argument reversals enforce identity by manipulating...

i. the representations over which identity is evaluated (e.g. LF), or

ii. the licensing condition on ellipsis.

However, these accounts

i. take for granted that some notion of identity should be maintained, and

ii. leave the pragmatic conditions on ARs under-explained.

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**Proposal:** AR-VPE is licensed via accommodation of reciprocal Questions Under Discussion (rQUD) in reciprocal situations, evoked by a behavioral principle, the *Norm of Reciprocity* (Gouldner 1960).

(8) Reciprocal QUD structure for (6):

```
rQUD:
Did John and Mary want to dance with each other?

aQb:  
Did John want to dance with Mary?
  
   p: John wanted to dance with Mary
   ~p: John didn't want to dance with Mary

bQa:  
Did Mary want to dance with John?
  
   q: Mary wanted to dance with John
   ~q: Mary didn't want to dance with John
```

Roadmap:

§2 - §2.1: Refine the structural/pragmatic properties of AR-VPE.

- §2.2: Discuss the pragmatic source of rQUDs and define reciprocal situations.

§3 - §3.1: Background on QUD theory (Roberts 2012).

- §3.2: Derive reciprocal exchanges using the *Table* model of discourse (Farkas and Bruce 2010).

§4: Address open questions and conclude.

2 Properties of argument reversals

2.1 Structural & pragmatic properties

Q: Is AR-VPE grammatical, or merely interpretable?

- Anecdotally: wide heterogeneity in acceptability.

Two situational classes:

i. love, conflict, and negotiation between interlocutors (Bevington 1998; Chung 2000; Charnavel 2019),

ii. and desires with respect to the joint action of third parties (Stockwell 2017, 2020).
2.1.1 More than an interlocutor relation

The salient other: a relation inherent to interlocutors \( \text{(Charnavel 2019)} \).

Assimilation with standard sloppy pronominal identity via (i) an E-type construal of indexicals and (ii) binding parallelism.

\[
\text{INTER} = (\lambda c) \lambda x \lambda y. \text{y is the interlocutor of x (in c), where x, y} \in \{s_c, a_c\}.
\]

(10) a. Context: Paul and Julie are lovers.
   Paul: I \text{ love you (= my }_1 \text{ INTER}).
   Julie: I \text{ do } <\text{love you (= my }_k \text{ INTER)>, too.}

b. \([\text{VP}]^{c,g} = \lambda x. \text{x love the INTER(x)}

More than an interlocutor relation:

(11) A: I saw you.
    B: ?I did, too.
(12) Context: Claire is talking to a neighbor.
    Claire: I came across your daughter yesterday.
    Neighbor: ?I did, too. \text{(Charnavel 2019)}

The proposed situational restrictions \( \text{(Charnavel 2019: 30):}\)

“...love, conflict, negotiation, or any other type of specific interaction between interlocutors.”

Joint actions and desires:

- AR-VPE requires intensional embedding \( \text{(wanted to, needed to, yearned to, should, etc.),} \)
- and symmetrical embedded clause predicates \( \text{(dance with, marry, work with, etc.).} \)
  → attributed to predicate-specific properties \( \text{(Stockwell 2017, 2020).} \)

(13) John wanted to dance with Mary, but she didn’t <want to dance with him>.

2.1.2 Refining the empirical landscape

No requirement on symmetry:

(14) Context: Finny and Mara are coworkers with a longstanding rivalry.
    Finny was eager to criticize Mara at the meeting, and she was, too.

Binding dependency motivated by a requirement on c-command \( \text{(Charnavel 2019).} \) However:

(15) a. Context: Two friends are fighting.
    A: [The things you said] made me feel excluded.
    B: Well you know, [the things you said] did <make me feel excluded>, too.

b. Context: Two parents discussing their children.
    A: [The things Jack said] made Jill feel excluded.
    B: Well you know, [the things Jill said] did <make Jack feel excluded>, too.
The pragmatics of argument-reversing VPE

AR readings involve some notion of **reciprocity** and show preference for **pairwise interactions between participants** (Chung 2000; Stockwell 2017):

(16) Ayla always gives Ossie the benefit of the doubt, even though he never does.
(17)  
  a. Ossie introduced Ayla to Mara, and Ayla, Mara] did, too.
  b. Ossie needed to be introduced to Ayla, and Ayla did, too.  

*(Stockwell 2020)*

**Reversals at a distance:**

(18)  
  a. Ossie danced with Ayla, Finny danced with Mara, and Mara did, too.  
  b. Finny danced with Mara, Ossie danced with Ayla, and Mara did, too.  

(19) Ossie wanted to go to the dance with Ayla, but he needed to study for a huge test.
  
  a. They’re in the same class, so it turns out that she did, too.
  b. He never thought she’d notice him, but it turns out that she did, too.

**Requirement on presupposition triggers or contrastive focus:**

(20) Ossie loves Ayla, and she does *(too).*
(21) A: I love you. B: Well, I don’t!
  
  – Presupposition triggers ameliorate other VPE mismatches (Arregui et al. 2006).

Sentence-internal AR-VPE shows a preference* for **syntactic parallelism:**

(22) ?Ossie\textsubscript{1} danced with Ayla\textsubscript{2}, and so did she\textsubscript{2} <dance with Ossie\textsubscript{1} >.

**Note:** neither of these properties are true of standard sloppy ellipsis.

(23) Ayla\textsubscript{1} loves her\textsubscript{1} cat, and Mara\textsubscript{2} does <love her\textsubscript{2} cat >.
(24) Ayla\textsubscript{1} loves her\textsubscript{1} cat, and so does Mara\textsubscript{2} <love her\textsubscript{2} cat >.

*The upshot: These properties are idiosyncratic to AR-VPE.*

  – AR-VPE is available in only a highly restricted set of contexts.
  – Its distribution differs from standard VPE.
  – Consequently, its interpretation may rely on repair/accommodation mechanisms.


  – **Pragmatic rescuing mechanism:** a highly salient implicit question may serve as an antecedent to an otherwise ungrammatical ellipsis.

*Though note that syntactically non-parallel clauses are also attested:

i. And if she didn’t tell you her story, maybe it’s because she didn’t want to be judged by you. But it seems like you did <judge her> anyway.  

*Emily in Paris, S2E9 17:51*
2.2 Reciprocity

Q: How do rQUDs arise?
A: Triggered by a behavioral principle, the Norm of Reciprocity, in reciprocal situations.

(25) The Norm of Reciprocity (NoR): Given a pair of participants A and B, any act performed by A for or on B that is associated with some positive or negative perceived kindness value, $k$, will trigger a pressure for B to respond in equal measure (i.e. by matching $k$ in polarity and value).

- Originally stated in terms of favors/injuries (Gouldner 1960).
- Acts of perceived (un)kindness elicit a matched response (Falk and Fischbacher 2005).
- Co-participants instinctively reciprocate, even when not being observed and when doing so has no direct benefit (Perugini et al. 2003; Carter 2014).

Properties of reciprocal behavior: Insights from behavioral economics

In 2-player mini-ultimatum games, player 1 is asked to allocate resources, and player 2, to rate the kindness of the opposing player’s offer (Falk and Fischbacher 2005). Experimental results suggest:

- Equitable distribution is the reference standard.
- Perceived kindness is evaluated relative to alternative possible actions.
- Players aim to reciprocate, rather than reduce inequity.

Extending the NoR to speech acts (expressions of affection, compliments, insults):

- The NoR applies to reciprocity and retaliation.


(27) A: You don’t understand me. B: Well, you don’t either!

- Expressions of affection: Face-supporting/threatening consequences for the speaker and addressee in (Erbert and Floyd 2004).

(28) A: I think I’m in love with you. B: I think I am, too. B’: Well, I’m not. / I like you, too.

- Initiating speech acts in reciprocal situations evoke questions of reciprocity.

(29) Reciprocal situation: Any situation in which the NoR exerts its influence (those situations in which co-equal animate participants act for or on each other).

Returning to the situational classes, we can recast situations that license ARs as those that either comply with or violate the NoR.

- Compliance: signaled by matching polarity and presupposition triggers.
- Violation: signaled by mismatching polarity and contrastive focus.

→ Signals of parallelism/contrast in the discourse structure.
3 Proposal

Overview of the analysis:

- Situational pragmatic principles (including the NoR) make certain QUDs highly salient.
- Emergence and resolution of these implicit rQUDs is modeled via a feature-based account of response polarity within the Table (Farkas and Bruce 2010).
  i. Implicit QUDs are added to the stack of issues (the Table).
  ii. As such, participants may respond to this content.

3.1 Discourse preliminaries

Roberts 2012: Hierarchical QUD model, in which implicit questions guide discourse and are structured according to d-trees (Büring 2003), which encode question-subquestion-answer relationships.

(30) Reciprocal QUD structure for (6):

[rQUD: Did Ossie and Ayla want to dance with each other?

aQb: Did Ossie want to dance with Ayla?

\( p \): Ossie wanted to dance with Ayla
\( \neg p \): Ossie didn’t want to dance with Ayla

bQa: Did Ayla want to dance with Ossie?

\( q \): Ayla wanted to dance with Ossie
\( \neg q \): Ayla didn’t want to dance with Ossie

Polar subquestions serve as a strategy to resolve the superquestion on a clause-by-clause basis.

3.2 Reciprocal responses

Recall the effects of the NoR:

i. Gives rise to an rQUD structure (32) in reciprocal situations.
ii. Introduces a pressure/expectation to “respond in kind”.

Two goals of conversation in reciprocal situations:

- Arrive at a joint commitment, i.e. avoid total denials.
- Arrive at a reciprocal commitment, i.e. execute a matching response wrt the unanswered sub-question in the QUD structure.

(31) Discourse Reciprocity Principle:

If a discourse move \( m \) raises whether \( \mathcal{R}(a,b) \), where \( \mathcal{R} \) is any relation expressing a reciprocal situation (i.e. a situation governed by the NoR), then \( m \) concurrently raises the reciprocal question, whether \( \mathcal{R}(a,b) \& \mathcal{R}(b,a) \).
Possible responses to the implicit subquestion can be viewed in terms of confirming and reversing moves (Farkas and Bruce 2010).

These conversational moves align with relative polarity features: compliance with the NoR is associated with the \[\text{AGREE}\] feature, whereas violation of the NoR is associated with \[\text{REVERSE}\].

(32) **Jane:** For instance, I would be reluctant to criticize you in public.  
\(\sim bQa: \text{Would } b \text{ be reluctant to criticize } a \text{ in public?}\)  
**Jill:** I would, too.  \[\text{AGREE}\]  
**Jill:** I \(F\) wouldn’t.  \[\text{REVERSE}\]  
(Chung 2000)  
(33) Reciprocal QUD structure for (32):

\begin{align*}  
\text{aQb:} & \quad \text{Would } a \text{ (not) be reluctant to criticize } b? \quad \{p, \neg p\} \\
\text{rQUD:} & \quad \text{Would } a \text{ and } b \text{ (not) be reluctant to criticize each other?} \\
\text{bQa:} & \quad \text{Would } b \text{ (not) be reluctant to criticize } a? \quad \{q, \neg q\} \nonumber
\end{align*}

An initiating assertion in a reciprocal situation...

- gives rise to the reciprocal QUD structure, following the *Discourse Reciprocity Principle* (30),
- simultaneously raises and resolves the first subquestion (aQb) by asserting \(p\),
- and leaves the second (bQa) unresolved.

A responding assertion in a reciprocal situation...

- resolves the second subquestion (bQa) as well as the superquestion (rQUD) by contributing a confirming or reversing move relative to bQa.
3.2.1 The Table model

The Table is a dynamic model of conversation, which has previously been applied to reactions to assertions and polar questions.

(34) Sample context structure (Farkas and Bruce 2010)

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC_A</td>
<td>S</td>
<td>DC_B</td>
</tr>
<tr>
<td>Common Ground cg</td>
<td>Projected Set ps</td>
<td></td>
</tr>
</tbody>
</table>

- **DC_{A,B}**: individual commitment lists of participants A and B
- **Table**: issues publicly raised by participants; QUD model is assumed
- **ps**: potential futures of conversation, given the content currently on the Table and anticipated conversational moves
- **cg**: content agreed upon by both participants is added to the common ground

3.2.2 Context update in reciprocal situations

(35) (Non-)reciprocal responses (32):

<table>
<thead>
<tr>
<th>Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>K_0: initial context state</td>
</tr>
<tr>
<td>K_1: (p, rQUD, aQb, bQa) ASSERT</td>
</tr>
<tr>
<td>K_2: (q, rQUD, bQa) [AGREE]</td>
</tr>
<tr>
<td>K_2': (¬q, rQUD, bQa) [REVERSE]</td>
</tr>
</tbody>
</table>

Projected set \( ps_1 = [p], [p] \cup \{q\}, [p] \cup \{¬q\} \)

Context update for (32):

i. **Initiating move:**

\( A(a \text{ would be reluctant to criticize b}|D), a, K_0) \)

\( \sim rQUD: \text{Would } a \text{ and b be reluctant to criticize each other?} \)

\( \sim bQa: \text{Would b be reluctant to criticize a?} \)

ii. **Compliance with the NoR:**

Input context condition: \( top(T_i) = <q, ¬q> \)

\[\text{[AGREE]}: PQ-C(I would <be reluctant to criticize you>|D), b, K_1)\]

iii. **Violation of the NoR:**

Input context condition: \( top(T_i) = <q, ¬q> \)

\[\text{[REVERSE]}: PQ-R(I wouldn’t <be reluctant to criticize you>|D), b, K_1)\]

Failure to reach a reciprocal commitment results in an alternative type of conversational crisis, which may have further consequences in the discourse.
**Taking stock:** Initiating assertions in reciprocal situations evoke implicit questions.
- They add implicit rQUDs to the Table.
- Participants may respond directly to these QUDs.

**Speech acts vs. reports on third parties:**
In the case of proper name ARs, the implicit subquestions are raised (by the NoR) and resolved by each clause.

(36) Ossie wanted to dance with Ayla...
   ↝ bQa: Did Ayla want to dance with Ossie?
   ...but SHE didn’t.
   ↝ ¬q: Ayla didn’t want to dance with Ossie.

- Felicity of proper name ARs is dependent on contextual support for a reciprocal situation.
- The NoR can also govern expectations in situations involving third parties (c.f. *Expectancy Violations Theory* (Burgoon and Hale 1988)).
- The Table model can also be applied to within-speaker cases (Farkas, to appear).

**Beyond the NoR:** Not all AR-VPE is licensed by reciprocal QUDs.

(37) Context: Tess and Sean are talking about their colleagues.
    Tess: Matthew owes Clarissa.  
    Sean: Clarissa does, too.  
    *(Charnavel 2019)*

**Beyond names and interlocutors:** A range of possible argument reversals.

(38) If you’re not in control of your emotions, does that mean that they must be <in control of you>?
    *(sign from a local free library, p.c. Stephanie Rich)*

(39) A: Parents often worry for their children.
    B: Well, children do <often worry for their parents>, too.

4 **Conclusion**

ARs are generally licensed by implicit questions concerning reciprocity or actuality, which arise from pragmatic principles such as the NoR.

- This enforces a reciprocal relation between participants without incorporating such a relation into the syntax.
- Extends beyond VPE to other constructions:
  A: I really enjoy working with you.  B: Me too.
  A: I love you.  B: And I you.
  A: You always criticize me.  B: Well, you do the same!
Open questions:

- **The generality of AR-VPE**: Is AR-VPE possible (i) cross-linguistically, and (ii) with other types of ellipsis?

- **The issue of acceptability**: how does the acceptability of AR-VPE in context compare with that of standard VPE?

Q: What does it mean to be an ungrammatical but interpretable ellipsis?

A: Identity (1) and discourse coherence (2) co-determine the interpretation of VPE. When (1) is incoherent, the QUD may trigger *editing* of the antecedent.

1: **Identity Condition**

   A: I\(_a\) love you\(_b\).
   B: I\(_b\) do, too.
   \(\rightarrow\) I\(_b\) do <love myself\(_b\)> , too.

2: **Discourse Coherence**

   A: I\(_a\) love you\(_b\).
   \(\sim\) bQa: Does B love A?
   1: I\(_b\) do <love myself\(_b\)> , too. \(\times\)
   2: I\(_b\) do <love you\(_a\)> , too. \(\checkmark\)

(1): **Ellipsis Resolution**

   A: I\(_a\) love you\(_b\).
   \(\rightarrow\) bQa: Does B love A?
   1: I\(_b\) do <love myself\(_b\)> , too.
   2: I\(_b\) do <love you\(_a\)> , too.

- **The function of reciprocity**: reciprocal exchanges are not information-seeking.
  e.g., expressions of affection are affirmation-seeking.

- **The status of implicit questions**: How do they arise, and how can they be responded to?

QUD-based account *could* be viewed as a pragmatic supplement to an LF-matching analysis, but...

**Tentative conclusion**: AR-VPE is not syntactically well-formed; instead, in the right situational context, it is interpretable via accommodation of rQUDs.

- **Evidence**: pragmatic, structural, and distributional contrasts with standard VPE.
- Anecdotally, wide heterogeneity in acceptability.
- If ARs are ungrammatical but interpretable, we should expect to see some signature of this in acceptability/interpretations.

**Complicating the pragmatics, not the logical form**: To account for AR-VPE, we neither need to augment our theories of ellipsis licensing, nor enrich the representations over which identity is evaluated. But, we do need a more explicit theory of implicit questions.
### Appendix

**QUDs license other mismatches in argument structure**

(1) John wanted to dance with Mary...

\[ \sim rQUD \rightarrow bQa: \text{Did Mary want to dance with him?} \]

\[ \sim aQUD \rightarrow bQa: \text{Did they actually dance? Did Mary dance with him?} \]

(a): reciprocity

(b)/(c): actuality

- And she did, too. / ...But she didn’t. [AR-VPE]
- ...And, in the end, she did. / ...But, in the end, she didn’t. [embedded AR-VPE]
- ...And, in the end, they did <dance>. [transitivity-switching VPE]

*Actual QUdS (aQUdS) are evoked by intensional triggers (wanted to, eager to, should, could, needed to) and ameliorate passive-active mismatches (Grant et al. 2012; Clifton and Frazier 2018):*

(2) John wanted to go to Paris... \( \sim aQUD: \text{Did John actually go to Paris?} \)

(3) a. *This information was released, but Gorbachev didn’t.

b. ?This information *should* have been released, but Gorbachev didn’t.

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### Responding to implicit questions

**Assumption:** overtly raised issues on the Table can interact with implicit content.

- **Note:** Responding to implicit vs. overt questions is not the same.

**No polarity particles, unless the question is overtly raised:**

(4) A: I would be reluctant to criticize you. *(Would you?)

B: No, I wouldn’t.

(5) A: I would be reluctant to criticize you.

B: [silence]

A: Well, would YOU?

B: No, I wouldn’t.

**Responses depend on antecedent clause form:**

(6) a. A: I don’t want to be divorced from you.

\( \sim Does b \text{ not want to be divorced from } a? \)

B: I MIGHT. / *I’m not sure.

b. A: I’m pretty sure I don’t want to be divorced from you.

\( \sim Is b \text{ pretty sure they don’t want to be divorced from } a? \)


**Homeomorphic reciprocity:** exchanges are identical in form.

\( \rightarrow \) suggestive evidence of a pragmatic pressure for identical responses.
References


