MEANING, COMMITMENT, AND PROSODY

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General aim

Traditional view:

meaning and truth conditions.

- OK for declarative sentences and assertions
- but how to account for other sentence types and other types of speech acts: questions, commands, exclamations...
General aim

New propositions in terms of commitments:

• Gunlogson (2003, 2008), Farkas & Bruce (2010), Malamud & Stephenson (2011) to account for declarative questions, confirmation requests, polar particles...

• Portner & Rubinstein (2012), Portner (2015) to account for various imperatives.

• Krifka (2015, 2016) to account for information conveyed by an utterance, but also for the continuations of the conversation.
General aim

Meaning of intonation, in particular, when all other aspects of utterance don’t vary.

- Falling declaratives which are asserting
- Rising declaratives which are questioning

(1) It is raining ↑  
   Il pleut ↑
(2) It is raining ↓  
   Il pleut ↓

General aim

**Dynamic pragmatics** (à la Portner 2015)
- Sentences have standard static semantic values.
- The communicative effect of utterances in discourse is modeled as the effect they have on discourse context.
- The effect of a particular sentence is determined by pragmatic principles on the basis of the sentence form or semantics.

**Speech act theory** (à la Levinson, or Gazdar)

**Grammar for Conversation** (à la Ginzburg)
General aim

Main issues:

• The semantic value of non declarative sentences
• The representation of the discourse context
• The possible asymmetry between interlocutors
• The role of intonation in interpretation
Outline of lectures

Lecture 1. Commitment: from Hamblin to Krifka.

Lecture 2. Prosody and meaning.

   Focus on questions and commitments

Lecture 3. Questions, commitments and bias.

Lecture 4. Alternative questions.

Lecture 5. Rhetorical questions.
COMMITMENT:
FROM HAMBLIN TO KRIFKA

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1. Historical overview

1.1 Hamblin (1971)

Commitment is not belief

The speaker may commit herself to something, which she doesn’t believe.
To commit oneself = to act as if one believes a proposition p.

Belief: a private state of mind
Commitment: a public stance
I. Historical overview

1.1 Hamblin

By asserting, the speaker commits herself to a proposition, that she may abandon in case incompatible new information comes in.

- Assertions as the speaker’s commitments to a proposition.
I. Historical overview

1.1 Hamblin: a grammar for dialogue

- Five types of locutions: assertions, retractions, inquiries, retraction demands and *I don’t know.*

- A dialogue is a sequence of locutions.

- A commitment slate (i.e. a set of assertions) is associated with each participant.

- A context is a locution and an associated assignment of commitments slates to individuals.
I. Historical overview

1.1 Hamblin

• Rules define the set of well-formed dialogues.

1. Following an assertion, everyone’s commitment slate includes that assertion.

2. Following a retraction by p, p’s commitment slate doesn’t include (anymore) what’s retracted, but every other participant’s commitment slate remains unaltered.
I. Historical overview

1.2 Gazdar (1981)

Distinction between sentence types, semantic types, illocutionary force and speech acts.

• The meaning of a declarative sentence is a proposition.

• The meaning of an interrogative sentence is a set of propositions.
I. Historical overview

1.2 Gazdar (1981)

• An *illocutionary force* is a function from contents to update potentials.

• Update potential is a function from contexts to contexts.

• A *speech act assignment* is a pair \(<f, c>\) consisting of a force \(f\) and a content \(c\).

• A speech act is \(f(c)\), for any speech act assignment \(<f, c>\).
I. Historical overview

1.2 Gazdar (1981)

Issue: the speech act assignment problem

Thesis: the polyfunctionality of sentences.

A same sentence but various speech acts.
No constraint upon the uptake by Addressee

(1) A: You will go home tomorrow.
   B: a. How do you know? (assertion)
      b. Yes. (question)
      c. Okay. (command)
I. Historical overview

1.2 Gazdar (1981)

Gazdar used the notion of commitment to define the speech act import of utterances. He extends commitments to non-propositional contents.

"An assertion that $\Phi$ is a function that changes a context in which the speaker is not committed to justifiable true belief in $\Phi$ into a context he is so committed."
I. Historical overview

1.2 Gazdar (1981)

“A promise that $\Phi$ is a function that changes a context in which the speaker is not committed to bringing $\Phi$ about into one in which he is so committed.

A permission to $\Phi$ is a function that changes a context in which $\Phi$ is prohibited into one in which $\Phi$ is permissible.”

(Gazdar, 1981: 69)
I. Historical overview

1.3 Beyssade & Marandin (2006)

Our proposal is based on Gazdar’s extension, that we make explicit by using Ginzburg and Sag’s ontology (2000):

1. Proposition $(p)$
2. Question $(?p)$
3. Outcome $(!p)$
4. Fact
I. Historical overview

1.3 Beyssade & Marandin (2006)

• Commitment to a proposition: being ready to stand for the truth of that proposition.
• Commitment to a question: being interested in the issue defined by the question.
• Commitment to an outcome: being positively oriented towards the actualization of a potential state of affairs (Stefanovitch 2003)
II. Speech acts in dialogue

Consider the effect of an utterance in dialog in terms of updates

- The speaker commits to a content.
- The addressee may accept this content, but she may also refuse it.
- And the speaker may anticipate the addressee’s reaction.

(2) Tu ne vas pas me croire, but Marie ment.

You won’t believe me but Mary is lying.
II. Speech acts in dialogue

Distinguish two times in dialogue and in the context update:
- the speech act before its acceptation
- the speech act after the addressee’s reaction.

Account for the fact that the speaker always anticipates the addressee’s reaction:
- by default, the speaker anticipates an acceptance by interlocutors (non defective context à la Stalnaker)
- but there are utterances which explicitly convey the idea that interlocutors disagree.
II. Speech acts in dialogue

2.1 Stalnaker

He accounts for accepted assertions only.

« Once the context is adjusted to accommodate the information that the particular utterance was produced, how does the content of an assertion alter the context? [...] The essential effect of an assertion is to change the presuppositions of the participants in the conversation by adding the content of what is asserted to what is presupposed. This effect is avoided only if the assertion is rejected » (Stalnaker, 1978: 86)
II. Speech acts in dialogue

2.2 Ginzburg

He wants to account for the assertion before its acceptation.

He associates an assertive speech act ASSERT(p) with the following updates:

- Add p to Facts
- Add ?p to QUD
II. Speech acts in dialogue

2.2 Ginzburg

Highlights the asymmetry between Speaker and Addressee:
"Both the view of context incrementation deriving from Stalnaker and the discourse-structure tree-based view face certain problems. The crux of the matter is that when a new assertoric contribution is encountered, it cannot, as it is the case in the various standard approaches to discourse semantics, be attached simpliciter or added to FACTS. [...] A cannot update FACTS before receiving acceptance from B" (Ginzburg, 1997: 10).
II. Speech acts in dialogue

2.2 Ginzburg

Any assertion can be accepted, rejected, discussed...

(3) A: Jean est venu hier.
   Jean came yesterday.
B: a. C’est noté. / I get it.
   acceptation
b. C’est faux. Il est en congé. / It is false. He ‘s in vacation.
   reject
c. Qu’est-ce qui te fais croire ça ? / How do you know that?
   discussion
II. Speech acts in dialogue

2.2 Ginzburg

By default, an assertion is accepted, and backchannels are a way, among others, to indicate this acceptation. They can be verbal or non verbal (head movements, brief vocalizations, glances, and facial expressions, often in combination).

(4) A: Jean est venu hier.
    B: Mhmh. /Ouais. (backchannels)

(4’) A: Jean came yesterday.
    B: Uh huh. (backchannels)
II. Speech acts in dialogue

2.3 Generalisation to other speech acts

Double impact of speech acts on context

- The speaker takes a public stance: she shows something from her private mental state (Belief, Desire, Intention)

- The speaker expects a reaction from the addressee. Every expressed attitude, except exclamatives, is volitional (Zaefererer, 2001)
II. Speech acts in dialogue

2.3 Generalisation to other speech acts

Assertion

« Constatives express the speaker's belief and his intention that the hearer have or form a like belief » (Bach and Harnich, 1979: 41).

(5) It’s raining.

- I believe it’s raining.
- I want that you share this belief / I ask you to have a like belief.
II. Speech acts in dialogue

2.3 Generalisation to other speech acts

**Question**  
(6) *Is it raining?*

- I’m wondering whether it’s raining.
- I want you to answer this question / I ask you to have a like question.

**Order**  
(7) *Take an umbrella!*

- I suggest you to take an umbrella.
- I want you accept this suggestion and perform the corresponding action.
II. Speech acts in dialogue

2.3 Generalisation to other speech acts

Confirmation request

(8) Jean est venu hier, (hein / n’est-ce pas) ?
Jean came yesterday, didn’t he?

Particles or tags may be used to make explicit this inquisitive part of each utterance.

Not just a question, but an utterance often analyzed as conveying both an assertion (I believe that...) and a question (Could you confirm that...)
II. Speech acts in dialogue

2.3 Generalisation to other speech acts

Indirect speech acts

(9) Peux-tu me passer le sel?

Could you pass me the salt?

An utterance in which one speech act is performed indirectly by performing another. A question used to perform a command.
II. Speech acts in dialogue

2.3 Generalisation to other speech acts

indirect speech acts

• The Speaker makes as if she was asking about the hearer’s ability. She’s committing to a question.

• But she’s expecting that the addressee interprets her utterance as a command. She wants that the addressee accepts the suggestion and performs the corresponding action.
II. Speech acts in dialogue

2.3 Generalisation to other speech acts

By distinguishing two aspects in each speech act, we can easily account for:

- **Simple speech acts** (declaratives conveying assertions, interrogatives conveying questions, imperatives conveying command)

- **Complex speech acts** like biased questions or confirmation requests

- **Indirect speech acts**.
II. Speech acts in dialogue

2.4 Proposal

• Associate each speech act with **two updates**, analyzed in terms of commitments.

• Most approaches focus only on the update of common ground or of the speaker’s commitments.
II. Speech acts in dialogue

2.4 Proposal

Analyze the Addressee-oriented aspect of utterances in terms of commitment: Speaker wants Addressee to get committed.

The commitment that the speaker wants the addressee to endorse may be a commitment to a proposition, or a question, or an outcome.

Dialogues as a negociation between Speaker and Addressee.
II. Speech acts in dialogue

2.4 Proposal

• Speaker commits herself either to a proposition, or to a question or to an outcome.

• Simultaneously, she calls on Addressee to commit himself to a proposition, to a question, or to an outcome.

• By default, these two commitments share the same content.
## II Speech acts in dialogue

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Speech act</th>
<th>Speaker Commitment</th>
<th>Call-on Addressee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jean a vu quelqu’un.</td>
<td>Simple assertion</td>
<td>p</td>
<td>p</td>
</tr>
<tr>
<td>John saw somebody.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Est-ce que Jean a vu quelqu’un?</td>
<td>Simple question</td>
<td>?p</td>
<td>?p</td>
</tr>
<tr>
<td>Did John see anybody?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
II. Speech acts in dialogue

2.4 Proposal

But the content of the call-on-addressee may be different from the content of the speaker’s commitment.

Various constructional devices (particles, tags...) specify the type of content that the speaker expects the addressee to get committed to.
II. Speech acts in dialogue

2.4 Proposal

Confirmation requests: a speech act combining:

- The speaker’s commitment to p (like in assertion)
- Call-on-Addressee to ?p (like in question)

The speaker calls for the addressee to confirm her belief. The speaker is not strongly committed. She’s waiting for a commitment from the addressee.
II. Speech acts in dialogue

(10) Jean a vu quelqu’un, n’est-ce pas ?
John saw somebody, didn’t he?

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Speech act</th>
<th>Speaker Commitment</th>
<th>Call-on-Addressee</th>
</tr>
</thead>
<tbody>
<tr>
<td>(10)</td>
<td>Confirmation request</td>
<td>p</td>
<td>?p</td>
</tr>
</tbody>
</table>
III. Other proposals

3.1 Asher and Reese

Negative bias in polar question, SuB 9, 2005

• Focus on questions which convey an expectation on the part of the speaker of a negative answer (e.g. questions with NPI)

(11) Did John lift a finger to help Mary?

• Biased questions are complex speech acts associated with the type assertion• question (as dot types in generative lexicon)
III. Other proposals

3.1 Asher and Reese

They account

✓ neither for the **dynamicity of dialogues** (assertion before its acceptation),

✓ nor for the difference between **confirmation requests and biased questions**.

✓ Why the type **assertion • question** rather than **question • assertion**?
III. Other proposals

3.2 Farkas et Bruce


- Focus on reactions to assertions and polar questions, to capture the similarities and the differences between these speech acts.
- Characterize two types of responses: confirming and reversing reactions.
- Examine the distribution of a set of ‘polarity’ particles in Romanian and across languages.
III. Other proposals

3.2 Farkas et Bruce

(12) Anne: Sam is home.
   Ben: Yes/Yeah, he’s home./No, he isn’t home.

(13) Anne: Is Sam home?
   Ben: Yes/Yeah, he’s home./No, he isn’t home.

- Same reactions
- No in (12) creates a conversational crisis, not in (13)
- Anne’s utterance in (12) and in (13) raises the issue on Sam’s whereabouts
III. Other proposals

3.2 Farkas et Bruce

A model of context structure with the representation of the discourse commitments of participants.

They separate:

✓ the discourse commitment set of each participant
✓ the CG (propositions shared by all participants)
✓ a table which registers QUDs

They account for default conversational moves (assertion acceptance) and for disagreements in ordinary discourses.
III. Other proposals

3.2 Farkas et Bruce

• An assertion projects confirmation

(12) Sam is home. (asserted in a context where s1 is shared)

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>p</td>
<td>&lt;Sam is home[D]; {p}&gt;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Common Ground</strong></th>
<th><strong>Projected Set</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>s1</td>
<td>{s1 \cup {p}}</td>
</tr>
</tbody>
</table>

An assertion yields an output context that is categorically biased in favor of confirmation of the asserted proposition.
III. Other proposals
3.2 Farkas et Bruce

• A polar question projects two possible answers.

(13) Is Sam home? (asked in a context where s1 is shared)

<table>
<thead>
<tr>
<th>A</th>
<th>Table</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;Sam is home[I]; {p, ¬p}&gt;</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Com. Ground</th>
<th>Projected Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>s1</td>
<td>{ s1 ∪ {p}, s1 ∪ {¬p} }</td>
</tr>
</tbody>
</table>

**Default polar questions are non-biasing:** they don’t commit their author to either proposition in their denotation and project an inquisitive context with respect to their sentence radical.
III. Other proposals

3.2 Farkas et Bruce

• There are non default polar questions that are not impartial.
  ✓ Polar interrogatives involving external negation
    (14) Isn’t Sam home? (asked in a context where s1 is shared)

  ✓ Polar interrogatives involving NPI (cf. Asher et Reese)
    (15) Does Fred do a damn thing around the house?
III. Other proposals

3.2 Farkas et Bruce

To summarize

✓ discourse commitment set for each participant
✓ a table with the utterance and its denotation
✓ a common ground
✓ a projection of future common ground

Done:

✓ the difference between assertions, positive and negative polar questions

To be done:

✓ distinguish confirmation requests from question
✓ Account for different kinds of bias
III. Other proposals
3.2 Farkas et Bruce

Similarity: emphasizing the proposal nature of assertions

Assertion: proposing additions to the common ground, rather than actually changing it.

Differences:
- focus on reactions to assertions, on agreement and disagreement between interlocutors
- don’t account for the diversity of questions (biased, rhetorical…)
- don’t consider other types of speech acts (command…)
Three Ways to Avoid Commitments: Declarative Force Modifiers in the Conversational Scoreboard, 2011.

In the line of Farkas and Bruce, but discuss English markers that modify the force of declarative utterances:

- reverse-polarity tags (*Tom’s here, isn’t he?*)
- same-polarity tags (*Tom’s here, is he?*)
- rising intonation (*Tom’s here?*).
III. Other proposals
3.3 Malamud and Stephenson

• The three markers all seem to indicate some kind of uncertainty of the speaker, and/or a desire to seek confirmation from the addressee.

- How to distinguish them?
- Is F&B’s framework fine-grained enough to capture the difference between them?
III. Other proposals
3.3 Malamud and Stephenson

• reverse-polarity tags (*Tom’s here, isn’t he?*)
The speaker is not directly committing to p, but is indicating that if p is confirmed, she will share responsibility for it.

• same-polarity tags (*Tom’s here, is he?*)
The speaker is making a guess as to B’s belief. If B accepts this move, p is added to B’s commitments.

• rising intonation (*Tom’s here ↑*)
Rising declaratives are possible whenever the speaker isn’t sure if a plain assertion is appropriate. The uncertainty licenses the speaker in putting a metalinguistic issue about such an assertion on the Table.
III. Other proposals

3.3 Malamud and Stephenson

• They enrich Farkas & Bruce model. They posit present and projected versions of
  ✓ participants’ commitments,
  ✓ the Table,
  ✓ and the Common Ground.

• They introduce projected commitments for both the speaker and the hearer, which permits to account for the dyssymmetry between them.

• The projected Table allows speakers to tentatively raise issues.
III. Other proposals

3.3 Malamud and Stephenson

Similarities
Distinguish actual and projected CG

Newness
But also
✓ actual and projected commitments for each participants
✓ Actual and projected table

➢ Commitments may be dependent or independent. A can propose to attribute a commitment c to B. In this case, B is the source of c.
III. Other proposals
3.3 Malamud and Stephenson

Avantages
• Account for subtle distinctions in language
• The system includes two ways for information to make it to the Common Ground.
  ✓ The first way is via the projected CG.
  ✓ The second is that when both (all) participants are publicly committed to a proposition, this proposition is added to the CG

➢ All parts in this system are independent.
### III. Other proposals

#### 3.3 Malamud and Stephenson

A asserts $p$

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG {...}</td>
<td></td>
<td>CG* {{...,$p$}, ..., {...,p}}</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Proposes to add $p$ to the CG</strong></td>
</tr>
<tr>
<td>DC(A) {...,$p$}</td>
<td></td>
<td>DC(A)* {{...,$p$}, ..., {...,p}}</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>adds $p$ to A’s current and projected commitments</strong></td>
</tr>
<tr>
<td>DC(B) {...}</td>
<td></td>
<td>DC(B)* {...}, {...}</td>
</tr>
<tr>
<td>DC(C) {...}</td>
<td></td>
<td>DC(C)* {...}, {...}</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>No change to B or C’s commitments</strong></td>
</tr>
<tr>
<td>Table &lt;$p$, ...&gt;</td>
<td></td>
<td>Table* {&lt;...&gt;, {...},&lt;...&gt;}</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Adds $p$ to the top of the table; proposes that it be resolved</strong></td>
</tr>
</tbody>
</table>
## III. Other proposals

### 3.3 Malamud and Stephenson

**A utters p with a RP-tag**

<table>
<thead>
<tr>
<th>Current</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG {...}</td>
<td>CG* {{...,p}, ..., {...,p}}</td>
</tr>
<tr>
<td></td>
<td>Proposes to add p to the CG</td>
</tr>
<tr>
<td>DC(A) {...}</td>
<td>DC(A)* {{...,p}, ..., {...,p}}</td>
</tr>
<tr>
<td></td>
<td>adds p to A’s projected commitments</td>
</tr>
<tr>
<td>DC(B) {...}</td>
<td>DC(B)* {{...}, ..., {...}}</td>
</tr>
<tr>
<td>DC(C) {...}</td>
<td>DC(C)* {{...}, ..., {...}}</td>
</tr>
<tr>
<td></td>
<td>No change to B or C’s commitments</td>
</tr>
<tr>
<td>Table &lt;p, ...&gt;</td>
<td>Table* {&lt;...&gt;, ..., &lt;...&gt;}</td>
</tr>
<tr>
<td></td>
<td>Adds p to the top of the table; proposes that it be resolved</td>
</tr>
</tbody>
</table>
### III. Other proposals

#### 3.3 Malamud and Stephenson

**A utters p with a SP-tag**

<table>
<thead>
<tr>
<th>Current</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG {...}</td>
<td>CG* {{...}, ..., {...}}</td>
</tr>
<tr>
<td></td>
<td>No change to the CG</td>
</tr>
<tr>
<td>DC(A) {...}</td>
<td>DC(A)* {{...}, ..., {...}}</td>
</tr>
<tr>
<td></td>
<td>no change to A’s commitments</td>
</tr>
<tr>
<td>DC(B) {...}</td>
<td>DC(B)* {{...,p}, ..., {...,p}}</td>
</tr>
<tr>
<td></td>
<td>Adds p to B’s projected commitments</td>
</tr>
<tr>
<td>Table &lt;p, ...&gt;</td>
<td>Table* {&lt;..., ..., &lt;...}&gt;</td>
</tr>
<tr>
<td></td>
<td>No change to the Table</td>
</tr>
</tbody>
</table>
### III. Other proposals

#### 3.3 Malamud and Stephenson

**A utters p with a rising intonation**

<table>
<thead>
<tr>
<th>Current</th>
<th>Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG {...}</td>
<td>CG* {..., ...}</td>
</tr>
<tr>
<td></td>
<td><strong>no change to the CG</strong></td>
</tr>
<tr>
<td>DC(A) {...}</td>
<td>DC(A)* {..., p}, ..., {..., p}</td>
</tr>
<tr>
<td></td>
<td><strong>adds p to A’s projected commitments</strong></td>
</tr>
<tr>
<td>DC(B) {...}</td>
<td>DC(B)* {..., ...}</td>
</tr>
<tr>
<td></td>
<td><strong>no change to B’ commitments</strong></td>
</tr>
<tr>
<td>Table &lt;MLI(p), ...&gt;</td>
<td>Table* {&lt;p,...&gt;, ..., &lt;p,...&gt;}</td>
</tr>
<tr>
<td></td>
<td><strong>adds p to the projected Table</strong></td>
</tr>
<tr>
<td></td>
<td><strong>p is expected to become an issue:</strong> adds a metalinguistic issue (MLI(p) to the Table**</td>
</tr>
</tbody>
</table>
III. Other proposals

3.4 Krifka

Bias in commitment space semantics: declarative questions, negated questions and question tags, 2015

- A framework for illocutionary acts
- Capture information shared by interlocutors, but also possible continuations
  - Assertions: commitments for the truth of propositions
  - Questions: moves that restrict the continuation to assertions by other participants
- Applied to different types of questions: biased, negated, questions tags...

More details in Lecture 3 on biased questions.
Conclusions

• Speech acts rather than sentences
• Commitments rather than belief
• Distinguish between what is (effective) CG and projected CG
• Distinguish between private beliefs and public commitments
• Commitments to propositions and to non propositional contents.
Conclusions

- Use **commitments** for accounting for the double aspect of speech acts.

- Account for the **division of labour**, disentangling contributions of syntax (clause type), lexical semantics (particles), and prosody to these updates.
Conclusions

Figure 1: Evolution of dynamic pragmatics theories
References

N. Asher and B. Reese. 2005. 'Negative bias in polar questions'. In E. Maier, C. Bary, and J. Huitink (eds), Proceedings of SuB9, 30–43.


References


References


