

# Dialogue and commitments

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# Introduction

A strong (and famous!) claim by Wittgenstein:

**Meaning is Use**

but in a particular sense:

The use in a central game:

**The Game of Giving and Asking for Reasons** (W. Sellars, R. Brandom)

**Language** makes this game **explicit**

... **Ludics** shows how it works!

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# Dialectics

This assumes that language rests on Dialectics, not (only) in the Aristotelician sense, but also in the more modern (Hegelian?) sense:

Brandom, *Articulating Reasons*, p. 11:

*Grasping the concept that is applied is mastering its inferential use: knowing (in the practical sense of being able to distinguish, a kind of knowing how) what **else one** would be committing oneself to by applying the concept, what would entitle one to do so, and what would preclude such entitlement.*

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# Dialogue

The first linguistic phenomenon we have to deal with is *dialogue*.

## Why?

It realizes the main features of human language:

- contextualism (the role of context)
- conciseness, ellipsis (the role of implicit)
- it is the form under which the inferential roles are made apparent (from the empirical confrontation of two speakers toward the confrontation of a speaker and her “scorekeeper”, that is the objectivization of her sayings - set of all demands of justification -)

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# A dialogue

## Example

(a) Emma: *We have a flat.*

(b) Robert: *Ah, I see. (Pause) Nice? (Pause) A flat. It's quite well established then, your . . . uh . . . affair?*

(c) Emma: *Yes.*

(d) Robert: *How long?*

(e) Emma: *Some time.*

(f) Robert: *But how long exactly?*

(g) Emma: *Five years.*

(h) Robert: *Five years?*

(p. 85, Harold Pinter *Betrayal*, Faber and Faber, London, 1991.)

## Some features of dialogue

### J. Ginzburg (2011):

- “**Coherence**: each conversational move seems to cohere smoothly with its predecessor: **questions are followed by answers which, in turn, raise new questions**”.
- “**Conciseness**: conversation is, by comparison with text, **a highly efficient medium**. Emma’s affirmation of the well-established nature of the affair, Robert’s wondering how long the affair has been going on, Emma’s informing Robert that it has gone on for five years and Robert’s astonishment at Emma’s informing him this, all of this which takes 40 odd words of text to convey, **takes a dozen words of dialogue**.”
- “**Radical Context Dependence**: **Isolated from their occurrence in a dialogue many utterances lose most of their import**. None of the utterances ((c)-(h)) could stand on their own in a text. Indeed, some utterances (e.g. ((d),(h))) resist a univocal sentential paraphrase. At the same time, in context, all these utterances seem readily comprehensible to the conversationalists.”

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# The example of a dialogue

## Example

MEG's voice : Is that you, Petey? (*un temps*) Petey, is that you?

PETER : What?

LA VOIX DE MEG : Is that you?

PETER : Yes, it's me.

MEG : What? Are you back?

PETER Yes.

MEG :I've got your cornflakes ready. Here's your cornflakes. Are they nice?

PETER : Very nice.

MEG : I thought they'd be nice. You got your paper?

PETER : Yes.

MEG : Is it good?

PETER Not bad.

MEG : What does it say?

PETER: Nothing much.

MEG : You read me out some nice bits yesterday.

PETER :Yes, well, I haven't finished this one yet.

MEG : Will you tell me when you come to something good?

PETER : Yes.

MEG : Have you been working hard this morning?

PETER : No. Just stacked a few of the old chairs. Cleaned up a bit.

MEG : Is it nice out?

PETER : Very nice.

# Dialogues and arenas

A dialogue between two speakers S and A takes place in a “universal arena”.

- the moves are the special action  $\dagger$  and the actions  $(\xi', I)$  where every  $\xi'$  has some  $\xi \in \Gamma$  as prefix, ( $\dagger$  and actions  $(\xi, I)$  where  $\xi \in \Gamma$  are called **initial**)
- the polarity of the initial actions  $(\xi, I)$  is the one indicated by the base for  $\xi$ , and other polarities are deduced by alternation,
- the enabling relation is such that
  - 1  $(\xi, I) \vdash (\xi.i, J)$  for all  $i \in I$
  - 2  $x \vdash y$  for each  $x$  negative action and  $y$  positive initial action

Is that you, Petey?<sub>ξ.0</sub> ? (Pause) Petey, is that you?

Is that you?<sub>ξ.0</sub>

What? Are you back?<sub>ξ.0.1.0</sub>

I've got your cornflakes ready<sub>σ.0</sub>.

Here's your cornflakes<sub>σ.0</sub>.

Are they nice?<sub>σ.0</sub>

I thought they'd be nice<sub>σ.0.1.0</sub>.

You got your paper?<sub>τ.0</sub>

Is it good?<sub>τ.0.0.1</sub>

What does it say?<sub>τ.0.0.1.1.0</sub>

You read me out some pink bits yesterday<sub>μ.0</sub>.

Will you tell me when you come  
to something good?<sub>μ.0.1.0</sub>

Have you been working hard this morning?<sub>λ.0</sub>

Is it nice out?<sub>κ.0</sub>

What?

Yes, it's me<sub>ξ.0.1</sub>.

Yes<sub>ξ.0.1.0.1</sub>.

Very nice<sub>σ.0.1</sub>.

Yes<sub>τ.0.0</sub>.

Not bad<sub>τ.0.0.1.1</sub>.

Nothing much<sub>τ.0.0.1.1.0.1</sub>.

Yes<sub>μ.0.1</sub>,

Yes, well, I haven't finished this one yet<sub>τ.0.0.1.1.0.1.0.1</sub>.

Yes<sub>μ.0.1.0.1</sub>.

No<sub>λ.0.0</sub>.

Just stacked a few of the old chairs<sub>λ.0.0</sub>.

Cleaned up a bit<sub>λ.0.0</sub>.

Very nice<sub>κ.0.1</sub>.

## Some essential concepts for the analysis of dialogue:

### 1- QUD

- *question under discussion* (QUD):  
Ginzburg writes: “an assertion *that p*, apart from having the potential to increment FACTS with *the fact that p*, can also give rise to discussion which tries to establish *whether p*, which might itself lead to the discussion of other questions before it can be resolved. → an additional contextual resource *conversational participants need to keep track of*, one which regulates the coherence of discussion, namely **the issue or question currently under discussion**”

## Some essential concepts for the analysis of dialogue: 2- *DGB*

- *dialogue gameboard* (DGB):  
Ginzburg writes: “A component of context is those questions that are raised for discussion and which condition both what can be said (information pertaining to that question) and how (“dialogue ellipsis”). I will refer to this component of context as a **dialogue gameboard** (DGB), representing as it does **information that arises from publicized interactions**”.

- QUDs are successively introduced, (even if sometimes it is possible to get back to a previous one)
- as said by Ginzburg, “each move by a conversational participant sets up a restricted set of options for follow-up”:  
**in ludical** terms, each positive action is followed by a set of expectations, which **entitles the other participant to a restricted set of moves**
- the DGB of each participant can be displayed as a tree of addresses : a **design**
- the conversation itself is a **dispute**, that is the trace of the interaction between both DGBs

## Example

Are they nice? <sub>$\sigma.0$</sub>

Very nice <sub>$\sigma.0.1.$</sub>

I thought they'd be nice <sub>$\sigma.0.1.0.$</sub>

$$\begin{array}{c}
 \dots \\
 \hline
 \vdash \tau, \Gamma \\
 \hline
 \dots \quad \frac{\quad}{\sigma.0.1.0 \vdash \Lambda} \quad c^- \\
 \hline
 \vdash \Lambda \quad \frac{\quad}{\vdash \sigma.0.1, \Lambda} \quad b^+ \\
 \hline
 \sigma.0 \vdash \Lambda \quad a^-
 \end{array}$$

view from MEG

- after her question (positive move), she expects an answer (negative move :  $a^-$ )
- she elaborates on that answer **iff** this answer is positive ("very nice") (positive move :  $b^+$ )
- then she expects no new answer on  $\sigma$ , but plans a new QUD ( $c^-$ )



# QUD

## Definition

*question under discussion* or QUD : every sequence of loci  $(a_\sigma)_{\sigma \in \mathbb{N}^*}$  such that:

- the  $\sigma$ 's make a sequence ordered by the prefix order ( $\mu$  immediately precedes  $\nu$  if and only if there is an integer  $i$  such that  $\nu = \mu.i$ )
- the first  $\sigma$  is made of only one integer (odd rank, corresponding to a positive action)
- the last  $\sigma$  is of even length and terminal (there is no longer  $\sigma$  in the set of  $a_\sigma$ 's)

## Convergence, closed nets

Is that you, Petey? $\xrightarrow{\xi.0}$ ? (*Pause*) Petey, is that you?

Is that you? $\xi.0$

What? Are you back? $\xi.0.1.0$

I've got your cornflakes ready $\xrightarrow{\sigma.0}$ .

Here's your cornflakes $\xrightarrow{\sigma.0}$ .

Are they nice? $\sigma.0$

What?

Yes, it's me $\xi.0.1$

Yes $\xi.0.1.0.1$ .

Very nice $\sigma.0.1$ .

# MEG's design

$$\begin{array}{c}
 \frac{\dots}{\vdash \Lambda} \quad \frac{\dots}{\vdash \sigma.0.1, \tau, \Gamma} \\
 \hline
 \frac{\dots}{\vdash \Delta} \quad \frac{\sigma.0 \vdash \Lambda}{\vdash \xi.0.1.0.1, \sigma, \Lambda} \\
 \hline
 \frac{\dots}{\vdash \Delta} \quad \frac{\xi.0.1.0 \vdash \Delta}{\vdash \xi.0.1, \Delta} \\
 \hline
 \frac{\xi.0 \vdash \Delta}{\vdash \xi, \Delta} (+, \xi, \{0\})
 \end{array}$$

# MEG's design

$$\begin{array}{c}
 \frac{\dots}{\vdash \Lambda} \quad \frac{\dots}{\vdash \sigma.0.1, \tau, \Gamma} \\
 \hline
 \frac{\dots}{\vdash \Delta} \quad \frac{\sigma.0 \vdash \Lambda}{\vdash \xi.0.1.0.1, \sigma, \Lambda} \quad \text{"your cornflakes nice?"} \\
 \hline
 \frac{\dots}{\vdash \Delta} \quad \frac{\xi.0.1.0 \vdash \Delta}{\vdash \xi.0.1, \Delta} \quad \text{"are you back?"} \\
 \hline
 \frac{\xi.0 \vdash \Delta}{\vdash \xi, \Delta} \quad \text{"is that you?"}
 \end{array}$$

# PETER's design

$\xi \vdash \sigma \vdash \tau \vdash \mu \vdash \lambda \vdash \kappa \vdash$

Designs:

$$\begin{array}{c}
 \frac{}{\xi.0.1.0.1 \vdash} (-, \emptyset) \\
 \frac{}{\vdash \xi.0.1.0} \\
 \frac{}{\xi.0.1 \vdash} \\
 \frac{}{\vdash \xi.0} \\
 \frac{- \dagger}{\vdash} \frac{}{\vdash \xi.0} \\
 \frac{}{\xi \vdash} (-, \{\emptyset, \{0\}\})
 \end{array}
 \qquad
 \begin{array}{c}
 \frac{}{\sigma.0.1 \vdash} (-, \emptyset) \\
 \frac{}{\vdash \sigma.0} \\
 \frac{}{\sigma \vdash}
 \end{array}
 \qquad
 \text{etc.}$$

# PETER's design

$\xi \vdash \sigma \vdash \tau \vdash \mu \vdash \lambda \vdash \kappa \vdash$

Designs:

$$\begin{array}{c}
 \frac{}{\xi.0.1.0.1 \vdash} (-, \emptyset) \\
 \frac{}{\vdash \xi.0.1.0} \text{ "yes"} \\
 \frac{}{\xi.0.1 \vdash} \text{ "yes it's me"} \\
 \frac{}{\vdash \xi.0} \\
 \frac{}{\xi \vdash} (-, \{\emptyset, \{0\}\})
 \end{array}
 \qquad
 \begin{array}{c}
 \frac{}{\sigma.0.1 \vdash} (-, \emptyset) \\
 \frac{}{\vdash \sigma.0} \text{ "very nice"} \quad \text{etc.} \\
 \frac{}{\sigma \vdash}
 \end{array}$$

# Convergence

Let us suppose an end to the dialogue, for instance MEG stops at:

## Example

Will you tell me when you come  
to something good? <sub>$\mu.0.1.0$</sub>

Yes <sub>$\mu.0.1.0.1$</sub>  .

that is, the LAST MOVE is:

$$\frac{\frac{\frac{\quad}{\vdash \mu.0.1.0.1} \dagger \quad \frac{\quad}{\vdash} \dagger}{\mu.0.1.0} \vdash}{\vdash \mu.0.1}}$$

vs

$$\frac{\frac{\frac{\quad}{\vdash \mu.0.1.0.1} \emptyset}{\vdash \mu.0.1.0} \quad \frac{\quad}{\vdash \mu.0.1.i} \dots}{\vdash \mu.0.1}}$$

**normalization** leads to:

$$\frac{\quad}{\vdash} \dagger$$

# Consequences

- **Context:** Sequences of integers keep track of the previous steps, and thus code the context
- **Ellipses:** Because of normalization, *Non-Sentential Utterances* (NSU) (“yes”, “very nice”...) are resolved
- **Dialogue Game Board:** can be seen as the sequence of states resulting from normalization of “online” designs associated with both speakers (at each stage of the exchange)



## third feature...

- it is the form under which the inferential roles are made apparent (from the empirical confrontation of two speakers toward the confrontation of a speaker and her “scorekeeper”, that is the objectivization of her sayings - set of all demands of justification -)

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# Rational pragmatism

**Robert Brandom** (born 1947) - American philosopher - a descendant of Classical Pragmatism (Peirce, James, Dewey...), a pupil of Wilfried Sellars, pertains at the same time to different traditions:

- **pragmatism** : *thinking of concepts in terms of the way they develop by being applied in practice, rather than in terms of their representational content*
- **analytic philosophy** (Wittgenstein, Strawson, Sellars...)
- **Kant / Hegel**

For instance, he disagrees with Wittgenstein on purpose of **language games**: *Practices that do not involve reasoning are not linguistic or (therefore) discursive practices [...] By contrast to Wittgenstein, the inferential identification of the conceptual claims that language has a center; it is not a motley. Inferential practices of producing and consuming reasons are downtown in the region of linguistic practice.*

leads to **rational pragmatism**, strongly influenced by Kant and Hegel

*I take from Hegel the idea of a rationalist expressivism. By “expressivism” I mean the idea that discursive practice makes us special in enabling us to make explicit, in the form of something we can say or think, what otherwise remains implicit in what we do. Calling it “rationalist” points to the crucial role of inference, of reasoning in the form of the relation between premise and conclusion, in determining what counts as explicit.*

## Brandom's inferentialism

- Brandom: “saying things” amounts to entering some special activity, the main component of which consists of being able **to draw inferences**, undertaking **responsibility to entitle oneself to some commitments**, responding to **possible objections coming from other speakers**”.
- W. Sellars: “*for a response, to have conceptual content is just for it to play a role in the inferential game of making claims and **giving and asking for reasons***”.

## How the notion of score is introduced

- “understanding a speech act - grasping its discursive significance - is being able to attribute the right commitments in response. **This is knowing how it changes the *score* of what the performer and the audience are committed and entitled to**”. (p. 165).

# Asserting

Telling:

*The swatch is red*

is not simply submitting a proposition to an evaluation by “true” or “false”, but

- *playing it as a token in a game,*
- knowing that other players can ask for reasons for saying it,
  - either by challenging the choice of the name “swatch”
  - or by contesting that “it is red”.
- It is only after the game has come to an end that the assertion can be evaluated.

# The Assertion Game

Let  $A$  be the speaker who asserts the sentence, and let  $B$  his interlocutor. We must always assume that:

- the **commitment** is undertaken by  $A$  among a set of possibilities offered by  $B$ , as entitlements to undertake commitments,
- $A$  associates a set (directory) of **entitlements** concerning the way in which  $B$  can react toward his commitment



## Truth valuation according to Brandom

Brandom (*Articulating reasons* p. 168):

*Consider how assessments of truth work. Perhaps the central context in which such assessments classically arise is attributions of knowledge [...]*

*In order for [a statement] to be knowledge that a scorekeeper takes another to have, that scorekeeper must adopt three sorts of practical attitude. **First**, the scorekeeper **must attribute** an inferentially articulated **commitment** [...]. **Second**, the scorekeeper **must attribute** a sort of inferential **entitlement** to that commitment [...]. What is that then corresponds to the **third**, **truth** condition on knowledge? For the scorekeeper to take the attributed claim to be true is just for the scorekeeper **to endorse** that claim. That is, the third condition is that the scorekeeper himself **undertake** the same commitment attributed to the candidate knower.*

# Three moves in the convergence process

1 positive vs negative

$$\frac{\xi_0 \vdash \Gamma_0, \dots, \xi_n \vdash \Gamma_n}{\vdash \xi, \Gamma} (+, \xi, \{0, \dots, n\}) \quad \frac{\vdash \xi_{l_1}, \Delta_1, \dots, \vdash \xi_0, \dots, \xi_n, \Delta_k, \dots}{\xi \vdash \Delta} (-, \mathcal{N})}{\text{cut}}$$

2  $\sigma \mathcal{N} = \{l_1, \dots, l_k, \dots\}$   
 negative vs positive:

$$\frac{\vdash \eta_{l_1}, \Gamma_1, \dots, \vdash \eta_0, \dots, \eta_n, \Gamma_k, \dots}{\eta \vdash \Gamma} (-, \mathcal{N}) \quad \frac{\eta_0 \vdash \Delta_0, \dots, \eta_n \vdash \Delta_n}{\vdash \eta, \Delta} (+, \eta, \{0, \dots, n\})}{\text{cut}}$$

3 negative vs daimon

$$\frac{\xi \vdash \Gamma \quad \vdash \xi, \Delta}{\text{cut}}$$

## Comments

- 1 **assertion is performed**: *A* asserts something (“the switch is red”), *B* records its content among her expectations. Convergence if the representational content of the assertion belongs to *B*'s set of expectations,
- 2 **assertion has been performed**: *B* can ask for reasons. Convergence if *A* previewed answers.
- 3 *B* acknowledges *A*

## Building an assertion

- 1  $A$  chooses an object  $j$  in some set  $I_j$ , which is provided as *entitlements* to address some *theme*, by  $B$ ,
- 2 having chosen to speak of some definite object (here by means of a singular term),  $A$  requires from  $B$  an acknowledgement of that point, in order to give to  $B$  the entitlement to entitles  $A$  to choose now an expression inside a range of properties
- 3  $B$  entitles  $A$  to choose a property among this range,
- 4  $A$  chooses a property and entitles  $B$  to entitles  $A$  to treat this property as concerned by a range of *values*,
- 5  $B$  entitles  $A$  to choose a value,
- 6  $A$  chooses a value and entitles  $B$  to treat it according to a set of modalities (for instance *true* and *false*),
- 7  $B$  entitles  $A$  to choose a modality
- 8  $A$  chooses a modality and waits for an acknowledgement (or a continuation)

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- 8  $A$  chooses a modality and waits for an acknowledgement (or a continuation)

# The interaction as Dynamics of proofs

$$\frac{\frac{\dots, \vdash \xi.j.0.k, \dots}{\xi.j.0 \vdash} (-, \{\{1\}, \dots, \{k\}, \dots, \{m\}\})}{\frac{\vdash \xi_1, \dots, \quad \vdash \xi_j \quad \dots, \vdash \xi_n}{\xi \vdash} (+, \xi.j, \{0\})} \mathcal{N}$$

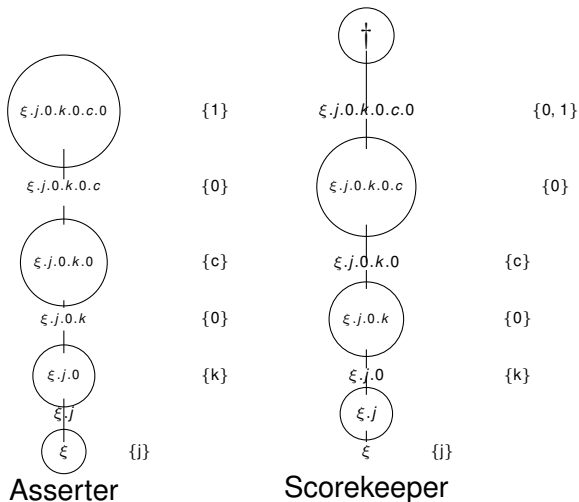
with, on the locutor's side:

$$\frac{\frac{\xi.j.0.k \vdash}{\vdash \xi.j.0} (+, \xi.j.0, \{k\})}{\xi.j \vdash} (-, \{\{0\}\})}{\vdash \xi} (+, \xi, \{j\})$$

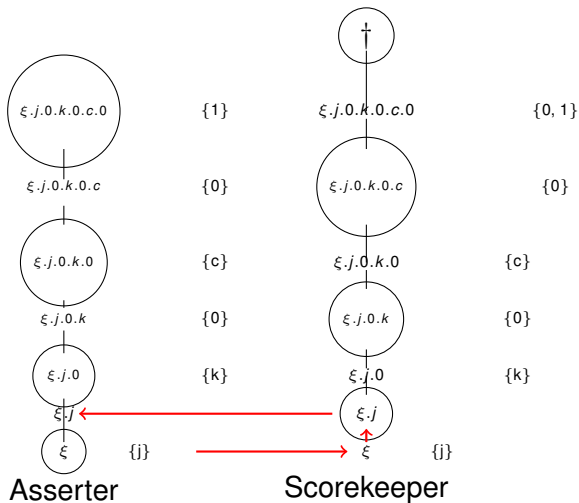
Then, the interlocutor still records the answer and continues the interaction by providing the range of values and so on.



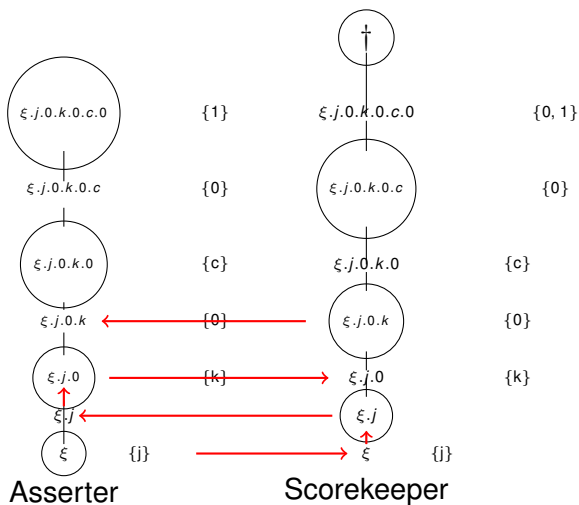
# Assertion game



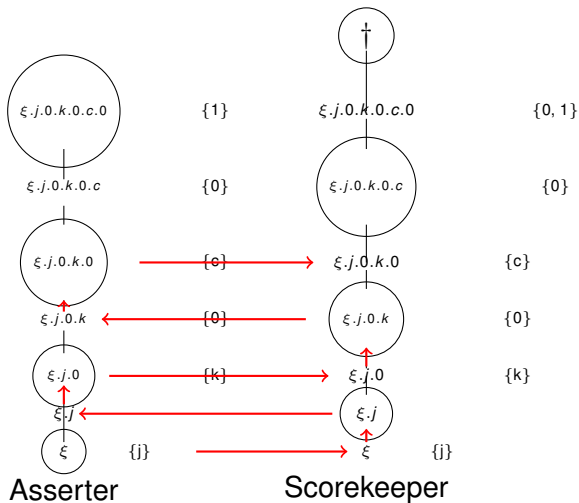
# interaction



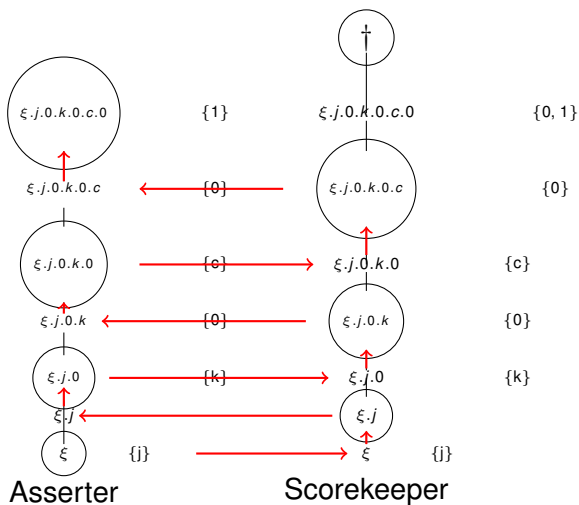
# interaction



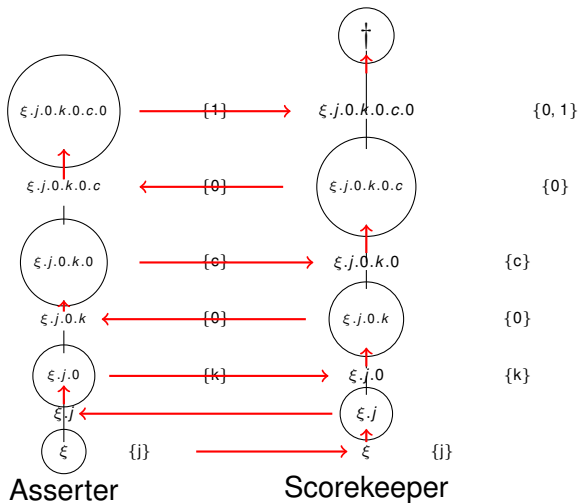
# interaction



# interaction



# interaction



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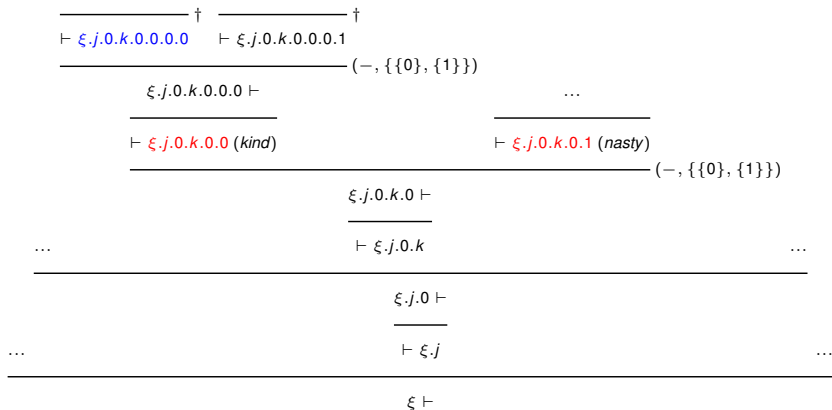
# The Asserter

$$\begin{array}{l}
 \frac{}{\xi.j.0.k.0.0.0.0 \vdash} \emptyset \\
 \frac{}{\vdash \xi.j.0.k.0.0.0} \text{ (chooses false) } (+, \{0\}) \\
 \frac{}{\xi.j.0.k.0.0 \vdash} \text{ "kind" accepted} \\
 \frac{}{\vdash \xi.j.0.k.0} \text{ (chooses "kind")} (+, \{0\}) \\
 \frac{}{\xi.j.0.k \vdash} \text{ "kind" vs "nasty" accepted} \\
 \frac{}{\vdash \xi.j.0} \text{ (chooses "kind" vs "nasty")} \\
 \frac{}{\xi.j \vdash} j \text{ accepted} \\
 \frac{}{\vdash \xi} \text{ (chooses } j)
 \end{array}$$

*she is not kind*



# The scorekeeper



The scorekeeper: his positive steps are mainly acceptance steps

his negative steps are **entitlements**

Logically speaking, these entitlements are combined by a &  
The speaker chooses one at a time.

ex: by  $(-, \{\{0\}, \{1\}\})$  *B* entitles *A* to choose a value among a spectrum offered by the selected property.

## Remark

- Theasserter closes the dialogue by a rule  $(-, \emptyset)$ , which is such that only the daimon rule can answer to it, on the score-keeper's side: this amounts to **asserting a fact**.
- Things could be different because the score-keeper may not agree to play  $\dagger$  and the speaker is committed to converge with the score-keeper...
- In such a case, the dialogue may continue above the actual  $\emptyset$  rule, opening the field to **modalities**:
  - the speaker claims a **possible** truth : for **at least a** slice offered by the score-keeper, she has a winning strategy for it
  - the speaker claims a **necessary** truth: she has a winning strategy for **any** slice

# Forms of negation

## Example

“she is not kind, on the contrary, she’s nasty”

### Ducrot, 1984:

- descriptive negation (“she is not kind”) vs
- **controversial** negation (“she is not kind, on the contrary she is nasty”)

## On the contrary...

An illegal move...

$$\begin{array}{c}
 \xi.j.0.k.0.1 \vdash \\
 \hline
 \vdash \xi.j.0.k.0.0.0.0.0 \\
 \hline
 \xi.j.0.k.0.0.0.0 \vdash \\
 \hline
 \vdash \xi.j.0.k.0.0.0 \\
 \hline
 \xi.j.0.k.0.0 \vdash \\
 \hline
 \vdash \xi.j.0.k.0 \\
 \hline
 \xi.j.0.k \vdash \\
 \hline
 \vdash \xi.j.0 \\
 \hline
 \xi.j \vdash \\
 \hline
 \vdash \xi
 \end{array}
 \quad (+, \xi.j.0.k.0, \{1\})$$
  

$$\begin{array}{c}
 \xi.j.0.k.0.0 \vdash \\
 \hline
 \vdash \xi.j.0.k.0 \\
 \hline
 \xi.j.0.k \vdash \\
 \hline
 \vdash \xi.j.0 \\
 \hline
 \xi.j \vdash \\
 \hline
 \vdash \xi
 \end{array}
 \quad (+, \xi.j.0.k.0, \{0\})$$

## Need to replay (backtracking)

- If the scorekeeper's viewpoint stays the same, **normalization** would lead to change the “slice” of the paraproof, playing on a branch which, after the previous normalization steps, has been removed. **In ordinary Ludics, normalization fails in such a case.**

In Ludics **with repetitions** (which amounts to **adding exponentiels**), that would be possible.

cf. Balsadella & Faggian (2009), K. Ranalter (september 2010),

...

# Morals

- words (like *but*, *on the contrary*, ...) are mere intructions in a game
- what are we doing when we use some words? what is it that counts for doing something in a game (argumentation) when saying some words?

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# Presupposition

A well known feature of presupposition is **projection**

see e.g.:

- 1 *John stopped smoking*
- 2 *John did not stop smoking*
- 3 *If John stops smoking, I will be happy*
- 4 *Did John stop smoking?*

**But**

It has been observed for some time that:

- not only presuppositions project (Chierchia & McConnell-Ginet, 1990; Beaver, 2001; Potts, 2005...):
  - John, who is Mary's friend, will arrive to morrow
  - John, the bastard, has not yet arrived
- implications project when they are *not at-issue* (Potts, 2005; Jayez, 2010; Simons, Beaver, Tonhauser, Roberts, 2010)

## Not at-issue contents project

(from Simons, Beaver, Tonhauser, Roberts, 2010)

### Example

*background scenario: a nutritionist has been visiting first grade classrooms to talk to the children about healthy eating*

**Q:** What most surprised you about the first graders

**A:** They didn't know that you can eat raw vegetables

The proposition “you can eat raw vegetables” is not at issue (since it does not entail an answer to Q), therefore it projects.

## Interaction in the first place

*As noted by Simons et al. and others, QUD, at-issueness and therefore projection phenomena can be dealt with only on a **dialogical background**.*

In particular, questions may be solved only when we are able to determine what is the implicit QUD in a discourse.

### Example

**Q1:** Are there any boys in your class?

**A1:** I don't like the boys in my class

Pb: the presupposition in A1 **is** at-issue! (and therefore should not project in order to give an answer to Q1).

Actually, this dialogue needs an effort of reconstruction of the implicit QUD, something involving a context where a young girl is writing invitations to her birthday party and her mom notices that all the invitations are sent to girls, the QUD is then **why** is it so

## Presuppositions in Ludics

- see also G. Winterstein, “Projection and Ludics”, LENS-2011
- A content is not at issue if it does not appear as the content of a selected locus (or if it addresses a locus which has not been selected)
  - Designs where steps have been replaced by whole sequences of steps (or **chronicles**)

## Designs with steps indexed by (sets of) chronicles

### Definition

a chronicle on a basis  $\Gamma \vdash \Delta$  is a non empty alternate sequence of actions  $\kappa_0, \dots, \kappa_n$  where  $\kappa_j = (\epsilon_j, \xi_j, l_j)$ , such that

- no two following actions have the same polarity
- for each pair of consecutive actions  $\kappa_j, \kappa_{j+1}$  such that  $\epsilon_j = +$ , we have that  $\kappa_{j+1}$  addresses  $\kappa_j$

## An example

### Example

- |          |  |       |
|----------|--|-------|
| <b>F</b> | What was your life at this time?   | $I_1$ |
| <b>E</b> | I was ready to become captain of the <i>Pharaon</i> ; I was about to marry a beautiful young girl. | $I_2$ |
| <b>F</b> | Was anyone interested in you not becoming the captain of the <i>Pharaon</i> ?                      | $I_3$ |
| <b>E</b> | [...], Only one man. [...]   | $I_4$ |
| <b>F</b> | Who was he?  | $I_5$ |
| <b>E</b> | Danglars.  | $I_6$ |
| <b>F</b> | Well, tell me about that young girl...   | $I_7$ |

...represented by:

$$\begin{array}{c}
 \frac{1.2.2 \vdash 1.1.1.1.1.1}{\vdash 1.1.1.1.1.1, 1.2} \quad l_7 \\
 \hline
 \frac{1.1.1.1.1 \vdash 1.2}{\vdash 1.1.1.1, 1.2} \quad l_5 \\
 \hline
 \frac{1.1.1 \vdash 1.2}{\vdash 1.1, 1.2} \quad l_3 \\
 \hline
 \frac{1 \vdash}{\vdash \langle \rangle} \quad l_1
 \end{array}$$

$$\begin{array}{c}
 \frac{1.1.1.1.1.1 \vdash}{\vdash 1.1.1.1.1} \quad l_6 \\
 \hline
 \frac{1.1.1.1 \vdash}{\vdash 1.1.1} \quad l_4 \\
 \hline
 \frac{1.1 \vdash \quad 1.2 \vdash}{\vdash 1} \quad l_2 \\
 \hline
 \langle \rangle \vdash
 \end{array}$$

## Example

what happens if we replace a rule indexed by a single action by a rule indexed by a chronicle?

$$\begin{array}{c}
 \frac{1.2.2 \vdash 1.1.1.1.1.1}{\vdash 1.1.1.1.1.1, 1.2} (+, 12, \{2\}) \\
 \frac{\quad}{\frac{1.1.1.1.1 \vdash 1.2}{\vdash 1.1.1.1, 1.2} (-, 11111, \{\{1\}\})} (+, 1111, \{1\}) \\
 \frac{\quad}{\frac{1 \vdash}{\vdash \langle \rangle} (+, \langle \rangle, \{1\})} \langle (-, 1, \{1, 2\}), (+, 11, \{1\}), (-, 111, \{1\}) \rangle
 \end{array}$$

Here, as if Faria went directly from  $I_1$  to  $I_5$



## An example

### Example

F	What was your life at this time?	$I_1$
E	I was ready to become captain of the <i>Pharaon</i> ; I was about to marry a beautiful young girl.	$I_2$
F	Who was the man interested in you not becoming the captain of the Pharaon ?	$I_5$
E	Danglars.	$I_6$
F	Well, tell me about that young girl. . .	$I_7$

This dialogue contains a presupposition which projects since the sentence:

some man was interested in Edmond not becoming the captain of the Pharaon is *never at issue*, contrarily to the previous version of the same dialogue.

## Projection and Local Contexts

It has been argued (Schlenker, 2009) that dynamic perspectives are not able to take projection presupposition adequately into account.

For instance:

### Example

John is incompetent and he knows that he is

- Dynamical perspective (Heim, Stalnaker...) :  $C[F \text{ and } G] = C[F][G]$

G is evaluated with respect to a local context, obtained by updating the global one with the content of F.

This assumes that the assertion of a conjunction can be equated with the successive assertion of each conjunct.

# Problems

But what if F and G's contents are not properly *asserted*?

## Example

- (1) If John is incompetent, then he is aware that he is
- (2) John is not incompetent, or he is aware that he is

## A ludical proposal

Take (1):

- 1 The speaker addresses the topic whether John is incompetent or not
- 2 planning thus two answers : 0 and 1 (John is not incompetent vs John is)
- 3 if 0, then the dialogue may continue on this branch
- 4 if 1, the speaker addresses the topic whether John is aware that he is incompetent or not
- 5 planning two answers: yes (1) or no (0)
- 6 if yes, the speaker claims it is a fact
- 7 if no, the speaker gives up the play (since her interlocutor denies her claim)

## Presuppositional account

in fact, in the first branch : John is incompetent is at issue  
in the second branch : it is not, and therefore “locally”  
presupposed

- 1 The speaker addresses the topic whether John is incompetent or not
- 2 planning three answers : 0 (John is not incompetent), 101 (John is incompetent and he knows it) and 100 (John is incompetent and he does not know it)
- 3 if 0, then the dialogue may continue on this branch
- 4 if 101, the speaker claims that this is a fact
- 5 if 100, the speaker gives up the play (since her interlocutor denies her claim)

# Designs

First, the design corresponding to a detailed dialogue:

## Example

$$\begin{array}{c}
 \frac{\dots}{\vdash 0100} \uparrow \frac{\dots}{\vdash 0101} \\
 \hline
 (-, 010, \{\{0\}, \{1\}\}) \\
 \dots \quad \frac{010 \vdash}{\vdash 01} (+, 01, \{0\}) \\
 \frac{\vdash 00}{\vdash 00} \quad \frac{\vdash 01}{\vdash 01} \\
 \hline
 (-, 0, \{\{0\}, \{1\}\}) \\
 0 \vdash \\
 \frac{\vdash < >}{\vdash < >} (+, < >, \{0\})
 \end{array}$$

# Designs

Second, the design corresponding to the sentence (1)

## Example

$$\begin{array}{c}
 \dots \quad \dots \\
 \hline
 \vdash 00 \quad \vdash 0101 \quad \vdash 0100 \quad \dagger \\
 \hline
 \phantom{\vdash 00} \phantom{\vdash 0101} \phantom{\vdash 0100} \mathcal{C} \\
 \phantom{\vdash 00} \phantom{\vdash 0101} \phantom{\vdash 0100} 0 \vdash \\
 \hline
 \phantom{\vdash 00} \phantom{\vdash 0101} \phantom{\vdash 0100} \vdash \langle \quad \rangle
 \end{array}$$

where:

$$\begin{aligned}
 \mathcal{C} = & \langle (-, 0, \{0\}) \rangle \cup \langle (-, 0, \{1\}); (+, 01, \{0\}); (-, 010, \{1\}) \rangle \\
 & \cup \langle (-, 0, \{1\}); (+, 01, \{0\}); (-, 010, \{0\}) \rangle
 \end{aligned}$$

# Interaction

This design converges with:

- John is not incompetent
- John knows that he is incompetent
- John does not know that he is incompetent



# Conclusion

## Ludics

- allows to get rid of a conception of **meaning based on model theory** (truth, denotation, truth conditions...)
- allows to put **“Semantics” into Pragmatics**
- allows to take into account **philosophical approaches** which consider **communication** and **interaction** a base on which human activity and human reason can be studied.

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