Talk Outline

- Current treatment of before: Condoravdi & followers
- A counterfactual counterargument
- Truth conditions derived from possible futures
- A scale of modal hypotheticals
- A modal constraint on felicity of nonveridicals
- Veridicality coercion

Modal Aspects of Before:
Semantics and Pragmatics of Nonveridicals

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Condoravdi & Followers:

- Assume time is discrete, let \( t-1 \) denote the last moment preceding \( t \) that is contextually relevant, define \( \text{alt}_w(t) \) to be the set of worlds which branch off from \( w \) only at \( t-1 \), and in a reasonable manner.

Before: Nonveridicality

- A before \( B \) is nonveridical: \( B \) may not have happened, and the sentence is still fine:
  - The police caught the robber before he crossed the border.
- But then again, not every false \( B \) promises a felicitous before-sentence
  - # David ate lots of ketchup before he won all the gold medals in the Sydney Olympics.
    (Beaver & Condoravdi, 2003)

A Problem

- Introducing my class of morbid examples. We’ll start with Mozart: (background...)
  - Mozart died before he finished writing the Requiem.
- I argue C & followers’ truth conditions entail the following counterfactual:
  - Mozart couldn’t have finished the Requiem before the actual date of his death (Dec 5, 1791).
- But this is not necessarily the case.

Condoravdi & Followers:

- Define \( \text{earliest}_w(X) \) to be the earliest time where \( X \) occurs in any of the worlds in \( W \) (if at all). Then:
  - A before \( B \) is true in a world \( w \) iff there is a time \( t \) where \( A \) is true, and \( t \) precedes \( \text{earliest}_w(B) \) (meaning the earliest time, if at all, where \( B \) is true in any world branching from \( w \) no earlier than \( t-1 \), and in a reasonable manner).
The Morbid Scale (I)

• Three dead artists:
  — Kafka, who may or may not have wanted to finish writing *The Castle*
  — Schoenberg, who wanted to finish *Moses und Aron* but had writers’ block
  — Schubert, who left the 7th symphony unfinished, never intending to complete it
• And sentences of the form
  — <ARTIST> died before he finished <PIECE>
  — <ARTIST> died before he could finish <PIECE>

My Suggestion

• Pushing back t-1 doesn’t work
• Calculating *earliest* relative to all possible worlds doesn’t work
• I propose: take the last time where the following was true in our world, and see whether or not it is relevant in the context of conversation.
  \[ \exists t_2 \, F(A) \land \exists t_2 \, F(B) \]
• The rest of the truth conditions go back to Heinämäki, 1974: an A moment must precede all B moments (in our world alone)
• No new notions, just different use of them

The Morbid Scale (II)

• Three dead mathematicians:
  — Scheuler, who attempted to prove Fermat’s last theorem but died in 1990 (it was proven in 1996)
  — Chalois, who attempted to prove the consistency of Peano arithmetic but died in 1918 (this was proven to be unprovable in the 1930’s)
  — Scernoulli, who attempted to prove Riemann’s hypothesis but died in 1956 (its provability is still unknown)
• And sentences of the form
  — <MATHEMATICIAN> died before he proved <CLAIM>
  — <MATHEMATICIAN> died before he could prove <CLAIM>

The Morbid Scale (III)

• And one last body:
  — John’s 70th birthday is today, but he passed away last night.
• Consider
  — John died before he turned 70
  — (odd) John died before he could turn 70

Grades of Modality

(Grades of Modality)

Physical Necessity

A living human being necessarily has two lungs

F

G

In all worlds, a living human being has two lungs

True here

False here

Don’t know

Grades of Modality (based on Kratzer, 1981)

• There are more than just two modal degrees
• Two constructs (in a world-based account) are needed:
  — F: “the modal base” or “what we know”: a set of worlds that comply with what is known in our world
  — G: a set of worlds that are “close to an ideal”, and which contains our own world

G

F

“what we know”

“worlds close to the ideal”

(Not in Kratzer ‘81)
Graded Modality Comparison: A Modified Approach

Grades of Modality

**Human Necessity**
That conceited kid is probably an only child.

- F: "what we know"
- G: "worlds close to the ideal"

In all black worlds, the kid is an only child (and we don’t care about the rest).

**Necessity**
Reading *The Odyssey* must take more than a day.

- F: "what we know"
- G: "worlds close to the ideal"

In all black worlds, reading *The Odyssey* takes more than a day (and we don’t care about the rest).

**Possibility**
Psycho was possibly the best suspense movie ever made.

- F: "what we know"
- G: "worlds close to the ideal"

In at least one F world, Psycho was the best suspense movie ever made (and we don’t know if this world is in G or not).

**Human Possibility**
It can well be that the ocean water isn’t too cold for a swim.

- F: "what we know"
- G: "worlds close to the ideal"

In at least one F ∩ G world, the water isn’t too cold (and we don’t know if this world is in G or not).

**Slight Possibility**
I got up at 7:15, but there’s still a slight chance of me making it to my 8:00 class on time.

- F: "what we know"
- G: "worlds close to the ideal"

In at least one F world which is not in G, I’ll make it to my class on time.

Implications

- Some relations between the degrees hold:
  - A **Necessity** is more probable than a **Human Possibility**
  - So is a **Human Necessity**
  - All are more probable than a **Possibility**
  - Which is more probable than a **Slight Possibility**
  - If a statement is a **Slight Possibility**, its negation is a **Human Necessity**
Some Observations

- **The Modal Condition on Nonveridical before Felicity:**
  The more probable B had A not happened is, the more indicatively acceptable A before B is.

- **The Modal Requirement for Indicative Nonveridical before Felicity:**
  For nonveridical A before B, in the indicative form, to be felicitous, A had B not happened should be at least slightly possible (⋆).

Veridicality Coercion

- Luigi owes my respectable organization money. I’m going to beat him up
  — Luigi gave me a check before I could beat him up
  — Luigi gave me a check before I beat him up

- His friend is sitting with him, he knows what I’m there for, so he shouts as I walk in:
  — Give him the check!

Questions?

Some References


Back to Our Deceased

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<th>Subjunctive form</th>
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<td>#</td>
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<td>Peano consis.</td>
<td>⊥</td>
<td>#</td>
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Counterfactual probability

Indicative acceptability

Focusing on the Riemann Example

- Is there a process being interrupted?
- Are the different modal bases at play here?
- Is the Riemann example a noncommittal?
  — Maybe a new meta-class: a nonveridical noncommittal

- **The Infelicity Limit Hypothesis:**
  All infelicitous nonveridical A before B sentences where A had not B has physical certainty sound worse than ones where it has none.