CONTEXT AND INTERPRETATION
TOWARDS AN INFERENTIAL MODEL OF INTERPRETATION

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Overview

1. **Two-Dimensionalism in a Nutshell**

2. **Shortcomings of Parameter-Based Approaches**

3. **An Inferential Model of Interpretation**
Parameter-based Two-Dimensionalism

Basic Notions

- **Linguistic Meaning 
  
  A function from expressions and contexts into a function from circumstances of evaluation (CEs) to an extension.**

- **Semantic Content 
  
  A function from circumstances of evaluation to an extension.**

- **Extension 
  
  Semantic values such as an object in $D$ for a singular term, a subset of the $n$-ary Cartesian product of $D$ for an $n$-ary predicate, *true* or *false* for a formula."
• Context and CE initially coupled: CE contains world and time of context unless modified by operator (alethic modalities, doxastic modalities, tense operator).

• Features of context determine semantic values of contextually-variant expressions.

• CEs only encode features that are shifted by modal operators to which certain natural language expressions correspond.
Following Stojanovic/Predelli (2008):

- Context and CE not initially coupled.
- Features of context determine semantic values of indexicals, features of CE determine semantic value of contextuals.
- CEs encode features shifted by modal operator and whatever else is needed for determining the extension of contextuals.
Let the lexicon entry for ‘fun’ be a function 
\[ \text{Fun} : C \rightarrow (I \rightarrow \mathcal{P}(D)) \] s.t. either of the following holds:

**Contextualist Fun**
\[ \text{Fun}(c)(i) = \{ x \in D \mid x \text{ is fun at } \text{time}(i) \text{ in } \text{world}(i) \text{ for assessor}(c) \} \]

**Relativist Fun**
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Fun or not Fun? (continued)

Example
(1) Alice in $c_1$: Eddy is fun.
(2) Bob in $c_2$: Eddy is not fun.

- Contextualism: Assessor depends on $c$, thus
  $[[\text{Fun}]](c_1) \neq [[\text{Fun}]](c_2)$ if $[[\text{Fun}(e)]](c_1)(i) = \text{true}$ and
  $[[\neg \text{Fun}(e)]](c_2)(i) = \text{true}$. $\Rightarrow$ no faultless disagreement possible

- Relativism: Assessor depends on $i$, thus it is possible that
  $[[\text{Fun}]](c_1) = [[\text{Fun}]](c_2)$ if $[[\text{Fun}(e)]](c_1)(i_1) = \text{true}$ and
  $[[\neg \text{Fun}(e)]](c_2)(i_2) = \text{true}$ and even $c_1 = c_2$. $\Rightarrow$ faultless disagreement possible
Relativism vs. Contextualism

Recipe
(i) Is the expression systematically context-sensitive?
(ii) Is faultless disagreement possible?
If the answer is Yes to (i) and No to (ii), then the expression in question is a traditional indexical.
If the answer is Yes to both (i) and (ii), then the expression needs to be analyzed according to the relativist doctrine.

• Stojanovic (Wednesday evening in the pub): But according to the RT view, the assessors differ. This is not real disagreement!
**Relativism vs. Contextualism**

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- Stojanovic (Wednesday evening in the pub): But according to the RT view, the assessors differ. **This is not real disagreement!**
What’s Wrong With Two-Dimensionalism?

The Underdetermination Thesis
Context does not determine semantic values.

Bach (2005)
“Context does not literally determine what is said or what is meant.”

Mount (2008)
“. . . there are no automatic indexicals. All indexicals are discretionary. . . .”
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Indexicals vs. Contextuals

**Indexicals**
+ depend on deictic center
+ dependence encoded by linguistic meaning
+ relatively small and homogeneous class of expressions
+ particular ingredient missing
+ pass Cappelen & Lepore’s tests

**Contextuals**
- don’t depend on deictic center
- dependence not encoded by linguistic meaning
- huge and inhomogeneous class of expressions
- missing ingredient a ‘gap’ or not even present in lexicon
- fail Cappelen & Lepore’s tests
It is well-known that the boundaries of spatial and temporal indexicals can vary almost arbitrarily:

**Example**

(3) Alice in the water: I can stand *here*.
(4) Bob about religion: The natural laws hold *here*, but in the divine realm they are of no significance.
(5) Alice: Salaries are *now* higher than 30 years ago.
(6) At the horse race: And Anderson wins...*now*! Anderson on Althea!
Example
(1) Eddy is fun.
(7) Alice is tall.
(8) John is ready.

- (i) Eddy is fun for whom? (ii) In comparison to which class is Alice tall? (iii) For what is John ready?
- Some answers to (i)–(iii) may be more salient than others in a given context, but they are not given objectively, they are not perceivable or measurable as a feature of the utterance situation.
Conclusions

• If indexicals of the ‘basic set’ (Cappelen & Lepore) aren’t automatic, so aren’t contextuals. Contextuals don’t even semantically depend on features of the deictic center.

• Relativism transforms aspects of subjective interpretation into objective partial truth-makers.

• When contexts are taken as entities that provide semantic values, this is only descriptively adequate under a fairly high degree of idealization—perhaps too high.
An Alternative?

Literal Meaning + Assumptions \[\Downarrow\]
Interpretation

Assumptions: generated from recipient’s beliefs + recipient’s beliefs about what the sender believes

Literal Meaning: what is derivable from the lexicon

Inference: deduction, default reasoning, . . . ?
A Simple Example

Example

(7) Alice is tall.

- Intensional interpretation operator: \( M, c, i \models T_{\text{all}}(a) \) iff.
  \( \forall c', i' \text{ s.t. } R_b^J(c, c') \text{ and } R_b^J(i, i'): M, c', i' \models T_{\text{all}}(a) \)

- Context-sensitivity can be captured in this case if 'tall' is given a relativist semantics:
  - 'tall' is domain-sensitive
  - the domain is shifted when \( c, i \) are shifted (assuming there is a domain function for contexts and indices)

- No complex reasoning chain needed in this case.
**A Complicated Example**

**Example**

(8’) Alice at a party: John is ready.

- Usually, when people intend to leave a party, they say good-bye, grab their jacket, etc. when they are about to leave the party.
- John has grabbed his jacket and said good-bye to some people.
- John intends to leave the party. (unless there is specific counter-evidence)
- John is about to leave the party. (unless there is specific counter-evidence)
- Usually, when somebody intends to do X and is about to do X, he has to be ready for X.
- Interpretation: John is ready to leave the party.
Open Problems

- What relations can there be between literal meaning and interpretations? (cf. Generalized Quantifiers)

- Heavy technical apparatus required:
  - representations of uncertainty (e.g. for checking)
  - default reasoning on the basis of rich background knowledge
  - semantic implementations of AGM-style revision (e.g. DDL, DEL) and preferably in a higher-order setting

- Does it really make sense to take a look at interpretation from an ideally rational perspective? (vs. Relevance Theory; vs. Gricean programme)