

Meanings as proposals: a new semantic foundation for a Gricean pragmatics

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SemDial 2012, September 19th

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Previous work

- ▶ Alonso-Ovalle, L. (2008).
- ▶ Chierchia, G., Fox, D., & Spector, B. (2008).
- ▶ Groenendijk, J., & Roelofsen, F. (2009).
- ▶ Horn, L. (1972).
- ▶ Rooij, R. van, & Schulz, K. (2006).
- ▶ Sauerland, U. (2005).
- ▶ Spector, B. (2007).
- ▶ ...

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A new approach

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Part II: Semantics

Semantics

Meanings as proposals

In uttering φ , a speaker proposes to update the common ground
in one of several ways.

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In uttering φ , a speaker proposes to update the common ground *with one of the pieces of information in* $[\varphi]$.

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Definition: Compliance and entailment

$A \propto B \iff$ for some $C, B \cup C = A$ (compliance)

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Discourse context and attention

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- ▶ For an initiative φ and response ψ s.t. $\varphi \propto \psi$, ψ *unattends* a possibility α iff $\alpha \in [\varphi]$ and $\alpha \cap \cup[\psi] \notin [\psi]$.

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Fact: Attention and entailment

For an initiative φ and response ψ s.t. $\varphi \propto \psi$, ψ unattends a possibility iff $\psi \not\# \varphi$.

Part III: Pragmatics

A new approach

1. S said $p \vee q$, attending the possibilities p , q
2. R said p , unattending the possibility q
3. The reason may be that R believes q is false.

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The conversational maxims

Maxim of Quality

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Only say what you believe to be true.

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Be relevant.

The conversational maxims

Maxim of Quality'

Only propose to do one of a set of updates if you consider them individually possible, and their union necessary.

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Do not attend/unattend a possibility without reason.

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Examples

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Examples

1. S said $p \vee q \vee r$, attending the possibilities p, q, r
2. R said p , unattending the possibilities q, r
3. The reason may be that R believes q, r are false.
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Examples

1. S said $p \vee q \vee (p \wedge q)$, attending the possibilities p , q , $p \wedge q$
 2. R said p , unattending the possibilities q , $p \wedge q$
 3. The reason may be that R believes q , $p \wedge q$ are false.
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1. S said $p \vee q \vee (p \wedge q)$, attending the possibilities p , q , $p \wedge q$
2. R said $p \vee q$, unattending the possibility $p \wedge q$
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Examples

For a domain $\{j, m, b\}$:

1. S said $\forall x.P(x) \vee Q(x)$,
2. R said $P(j) \wedge P(m) \wedge Q(b)$, unattending the other possibilities
3. The reason may be that R believes they are false.

(by the Maxim of Quality')

Implicatures and suggestions

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Definition: Attention-Quality implicature

For an initiative φ and response ψ , s.t. $\varphi \propto \psi$:

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- ▶ $p \vee q$ suggests $[\neg q \vee \neg p]$
- ▶ $p \vee q \vee r$ suggests $[(\neg q \wedge \neg r) \vee (\neg p \wedge \neg r) \vee (\neg p \wedge \neg q)]$
- ▶ $p \vee q \vee (p \wedge q)$ suggests $[\neg q \vee \neg p \vee \top]$

Implicatures and suggestions

Definition: Attention-Quality implicature

For an initiative φ and response ψ , s.t. $\varphi \propto \psi$:

$$\mathbf{AQimpl}(\psi, \varphi) := \bigcap \{ \bar{\alpha} : \alpha \in [\varphi], \alpha \cap \bigcup [\psi] \notin [\psi] \}$$

Definition: Attention-Quality suggestion

$$\mathbf{AQsugg}(\varphi) := \{ \mathbf{AQimpl}(\psi, \varphi) : \varphi \propto \psi, \mathbf{size}([\psi]) = 1 \}$$

Examples:

- ▶ $p \vee q$ suggests $[\neg q \vee \neg p]$
- ▶ $p \vee q \vee r$ suggests $[(\neg q \wedge \neg r) \vee (\neg p \wedge \neg r) \vee (\neg p \wedge \neg q)]$
- ▶ $p \vee q \vee (p \wedge q)$ suggests $[\neg q \vee \neg p \vee \top]$
- ▶ $\forall x. P(x) \vee Q(x)$ suggests $[\forall x. \neg Q(x) \vee \neg P(x)]$

Conclusion

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- ▶ Dialogue as a cooperative enterprise.

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- ▶ ...

Fin.

Thanks to the Netherlands Organisation for Scientific Research (NWO) for financial support; to F. Roelofsen, J. Groenendijk, and three anonymous reviewers for valuable comments.