Theme session: *Issues in Metonymy*

**WHAT KIND OF REASONING MODE IS METONYMY?**

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Contents

1. The basic metonymic relation (Figure 1)
2. Deduction, induction, abduction
3. Contingency, defeasibility, reinforceability
4. Conclusions
Figure 1. **The basic metonymic relation**

- **FORM**
  - <Linguistic Vehicle>

- **CONTENT**
  - SOURCE
    - Conceptual Vehicle
  - TARGET
    - Conceptual Vehicle

- **Metonymic Sense**

- **OTHER CONCEPTUAL COMPONENTS**

- **Conceptual Frame**

- **OTHER PRAGMATIC EFFECTS**

**SHADING:** degree of shading ~ degree of prominence
2. Deduction, induction, abduction
Deduction (syllogism)

Table 1. Deductive reasoning

<table>
<thead>
<tr>
<th>Inference mode</th>
<th>Structure of argument</th>
<th>Defeasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deductive</td>
<td>∀x (P(x) ⊃ Q(x))</td>
<td>major premise or general law</td>
</tr>
<tr>
<td></td>
<td>P(a)</td>
<td>minor premise</td>
</tr>
<tr>
<td></td>
<td>Q(a)</td>
<td>conclusion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>no</td>
</tr>
</tbody>
</table>

∀: universal quantifier
P, Q: predicate letters
x: individual variable (bound by ∀)

Problem: Deduction is not defeasible; metonymy is in principle defeasible (see e.g. Panther & Thornburg 2007)
Entailment (non-defeasible)

- Entailment: deductive, not defeasible
- Thesis: entailments cannot be the basis of metonymies since metonymies are contingent, i.e. in principle defeasible)

For example:

*John devoured the steak*

entails ‘John ate the steak’

There is no metonymy DEVOURING FOR EATING
## Induction


Table 2. Inductive reasoning

<table>
<thead>
<tr>
<th>Inference mode</th>
<th>Structure of argument</th>
<th>Defeasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inductive</td>
<td></td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>P(a)</td>
<td>observed fact</td>
</tr>
<tr>
<td></td>
<td>Q(a)</td>
<td>observed fact</td>
</tr>
<tr>
<td>[... ]</td>
<td></td>
<td>other observed facts</td>
</tr>
<tr>
<td>( \forall x \ (P(x) \supset Q(x)) )</td>
<td>induced generalization</td>
<td></td>
</tr>
</tbody>
</table>
Induction: problems

• KLEENEX FOR PAPER TISSUE or ASPIRIN FOR PAIN KILLER could be regarded as instances of inductive reasoning (ELEMENT FOR ANY OTHER ELEMENT OF A SET).

• However, many other standard exx. of metonymy are not based on inductive reasoning: EFFECT FOR CAUSE, POTENTIALITY FOR ACTUALITY, PRODUCER FOR PRODUCT, etc.
Abduction

Coined by C. S. Peirce (1839–1914)

- Peirce believed that “abductive suggestion comes to us like a flash. It is an act of insight although of extremely fallible insight.” (Peirce, in Buchler 1955: 151)
Abductive instinct

• The premises and the inference are not consciously formulated (either verbally or mentally); the link between them is “an associative connection rather than reasoning.” (Paavola 2005: 147)
## Abduction


Table 3. Abductive reasoning

<table>
<thead>
<tr>
<th>Inference mode</th>
<th>Structure of argument</th>
<th>Defeasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abductive</td>
<td>∀x (P(x) ⊃ (Q(x)))</td>
<td>known generalization or law observed fact</td>
</tr>
<tr>
<td></td>
<td>Q(a)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P(a)</td>
<td>hypothesized explanation</td>
</tr>
</tbody>
</table>

∀: universal quantifier  
P, Q: predicate letters  
a: individual constant  
⊃: (material) implication  
x: individual variable (bound by ∀)
Abduction as reasoning from evidence to explanation

• “Inference to the Best Explanation” (Douven 2011) or “thinking from evidence to explanation, a type of reasoning characteristic of many different situations with incomplete information” (Aliseda 2005: 28)

• Abductive inferencing: pervasive in both scientific and common sense reasoning (Thagard 2007: 227)
Metonymy as abductive reasoning

• Hobbs (2006) claims that the interpretation of pragmatic meanings (implicatures, metonymies) is based on abductive reasoning.

• If so, is metonymy reducible to implicature, or vice versa?
Metonymy as abductive reasoning?

Schema

Premise 1
CONCEPT₁ is associated with CONCEPT₂

Premise 2
CONCEPT₂ is coded in utterance

Inferred meaning
CONCEPT₁
Metonymy as abductive reasoning?

Premise 1
‘Tennis championships taking place in Wimbledon’ (EVENT) is associated with ‘Wimbledon’ (LOCATION)

Premise 2
‘Wimbledon’ (LOCATION) is coded in utterance [ˈwɪmbəldən] (linguistic vehicle)

Inferred meaning
‘Tennis championships taking place in Wimbledon’ (EVENT)
3. Contingency, defeasibility, reinforceability
Conversational Implicature 1
[Grice 1989, Levinson 2000]

Generalized Conversational Implicature (GCI)
Default inference, i.e. preferred/normal interpretation, e.g.:
We found that **most countries** used ad hoc priority-setting and planning methods, with little to no underlying systematic risk analysis. (COCA 2012)
Default inference: ‘We found that **not all countries** [...]’
Conversational Implicature 2
[Grice 1989, Levinson 2000]

Generalized Conversational Implicature (GCI) vs. Particularized Conversational Implicature (PCI)

GCI: default inference, i.e. preferred normal interpretation

PCI: inference arising in particular contexts
Conversational Implicature: GCI vs. PCI

Example 1 (Levinson 2000: 16)
A: What time is it? [CONTEXT]
B: Some guests are already leaving.
GCI: Not all the guests are already leaving.
PCI: It must be late.
Conversational Implicature: GCI vs. PCI

Example 2 (Levinson 2000: 16)
A: Where is John? [CONTEXT]
B: Some guests are already leaving.
GCI: Not all the guests are already leaving.
PCI: Perhaps John has already left.
Properties of Conversational Implicatures 1 (Grice 1989)

1. **Cancellable/defeasible**: The inference can be defeated by adding premises/additional assumptions.

2. **Nondetachable**: Same coded content = same implicatures (except those that are based on the Maxim of Manner).

3. **Calculable**: The structure of the inference is transparent, reconstructable.

4. **Not coded**: GCIs are not coded (whereas conventional implicatures are).
5. **Reinforceable**: What is implicated can be added to what is said without causing too much redundancy (in contrast to real tautologies).
Defeasible vs. Reinforceable Implicature

Defeasibility
And I think, in fact I know, Governor Wilson yesterday said that California shares some responsibility for the crime committed against the lady in Florida for releasing him in the first place. (COCA 1997, CNN_Talkback)

Reinforceability
I think but I don’t know for sure that metonymy is a kind of implicature.
Are metonymies implicatures?

Four parameters to check

• Metonymic sense
• Contingency
• Defeasibility
• Reinforceability
Contingency vs. defeasibility
(see e.g. Panther 2006, Panther & Thornburg 2007)

Contingency: metonymies are based on world knowledge, not on conceptual necessity; therefore, they are, in principle, defeasible.

However: linguistic context/situation may coerce a non-defeasible metonymic reading.
Paul Auster is on the second floor

<table>
<thead>
<tr>
<th>Metonymic sense</th>
<th>Contingency</th>
<th>Defeasibility</th>
<th>Reinforceability</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Paul Auster’s novels</td>
<td>Empirical (not conceptually necessary) fact: Paul Auster writes novels</td>
<td>Auster</td>
<td>Paul Auster is on the second floor – in fact / I mean, all of his novels are there.</td>
</tr>
</tbody>
</table>
She is the **mother** of two daughters

<table>
<thead>
<tr>
<th>Metonymic sense/ I-implicature</th>
<th>Contingency</th>
<th>Defeasibility</th>
<th>Reinforceability</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td><strong>Metonymic model</strong> (Lakoff 1987) vs. I-Heuristic (Levinson 2000): ‘housewife mother’</td>
<td>Empirical (not conceptually necessary) fact: In some societies / cultures /social classes, mothers are typically housewives.</td>
<td>She is <strong>not a housewife mother</strong></td>
<td>She is the mother of two daughters – i.e. a typical housewife mother.</td>
</tr>
</tbody>
</table>
**Paul Auster began a new book**

<table>
<thead>
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<th>Contingence</th>
<th>Defeasibility</th>
<th>Reinforceability</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
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**ACTIVITY:** writing a new book

Empirical (not conceptually necessary) fact: *Paul Auster writes novels*

**THING:** a new book

Paul Auster began a new book— I mean, he started writing one.
Paul Auster began a new book

Note

- The schematic metonymic sense is ‘do something that is typically done with a new book’
- This schematic sense allows for some indeterminacy: prototypical, peripheral, unlikely events involving a new book
Hollywood made millions with *The Titanic*

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<thead>
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<th>Contingency</th>
<th>Defeasibility</th>
<th>Reinforceability</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
<td>−</td>
<td>+</td>
</tr>
<tr>
<td>the American movie industry located in Hollywood</td>
<td>Empirical (not conceptually necessary) fact: <em>The American movie industry is located in Hollywood</em></td>
<td>Hollywood</td>
<td>Hollywood made millions with <em>The Titanic</em> – I mean, the American movie industry did.</td>
</tr>
</tbody>
</table>
### The kettle is boiling

<table>
<thead>
<tr>
<th>Metonymic sense</th>
<th>Contingency</th>
<th>Defeasibility</th>
<th>Reinforcability</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>‘the liquid in the kettle’ CONTAINER → CONTENT</td>
<td>Empirical (not conceptually necessary) fact: A kettle does not necessarily contain liquid</td>
<td>‘kettle’ CONTAINER</td>
<td>The kettle is boiling – of course, I mean the water in the kettle.</td>
</tr>
</tbody>
</table>
The kettle is boiling

Note

Stainless steel:

- melting point: $1510^0 \text{C}$
- boiling point: $3000^0 \text{C}$

The interpretation that the kettle itself is boiling is unlikely but it is **not impossible**!
4. Conclusions
What (some) metonymies have in common with implicatures

- **Defeasibility**: This is not surprising given that the relation between source and target is contingent.

- **Reinforceability**: the possibility to make the target meaning explicit
When (some) metonymies do not behave like implicatures

**Metonymic coercion**

Occurs typically when semantic selection restrictions are violated; e.g. incompatibility between *verb* and *NP* meaning or between *construction* and *lexical* meaning.

Such cases instantiate **non-defeasibility** but they nevertheless exhibit the relation of **contingency** between source and target.
Metonymically coerced target meanings

• Genuine metonymic coercion typically occurs when semantic selection restrictions are violated:

• Ontological clash: *enjoy the wine* ‘enjoy drinking the wine’; direct object must be EVENT

• Aspectual clash between construction meaning (ACTION) and lexical meaning (STATE): How to Own a Piece of Ontario Cottage Country for $199,000
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References


References 2
