METAPHOR ENTRENCHMENT
A PROCESS ACCOUNT FOR SCIENTIFIC PRACTICE

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‘Entrenchment’

Example of entrenchment $\rightarrow$ ‘entrenchment’

$\rightarrow$ connotations?

$\rightarrow$ tacit presuppositions?
‘Entrenchment’

Innovative status → alive to dead

Meaning → metaphorical to literal

Use → one-off to continual

E.g.,

- Lakoff and Johnson → alive/dead
- Max Black → meaning change
- Cristina Bicchieri → use

Or a mix: “A dead metaphor is simply an expression whose frequent use as a metaphor has led to its loss of metaphorical force and, simultaneously, to its acquisition of a new literal meaning”

Structure of the talk

1. Introduction

2. Case: ‘financial ecosystems’

3. Metaphors?

4. Entrenchment
   4.1 Methodology
   4.2 Process
      4.2.1 Narrative
      4.2.2 Mechanism

5. Concluding remarks
2. ‘Financial ecosystems’
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2. ‘Financial ecosystems’

“... If financial crises may be compared with forest fires, causes for the initiating sparks pose important questions in their own right: for example, the role of excessive leverage and credit growth or the pricing for complex financial instruments. Here, however, our focus is on the role of large banks in the “flammability” of the system, or its capacity for amplification and propagation of an initiating shock.

We ask the following questions: How does the impact of a bank’s collapse scale with its size? How might capital adequacy standards seek to mitigate this impact? More broadly, what is the effect of concentration and diversification on system stability?”

2. ‘Financial ecosystems’

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3. View of metaphors

Premises:

1. social, communicative, and normative enterprise
2. seeking knowledge and understanding
3. accessible language $\leftrightarrow$ complexity, exactitude, rigour
4. metaphor $\rightarrow$ message cannot (yet) be literally expressed
3. View of metaphors

message

‘initiating belief’ about the topic under study


perspective
3. View of metaphors

message

‘initiating belief’ about the topic under study


perspective

But... uphill battle?
3. View of metaphors

<table>
<thead>
<tr>
<th>message</th>
<th>perspective</th>
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<tr>
<td>‘initiating belief’ about the topic under study</td>
<td>novel conceptualisation of the topic → provisional justification</td>
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But... uphill battle? ... and entices us to look further.
4. Entrenchment: methodological issues

The phenomenology of entrenchment → ‘How true!’-phenomenology
4. Entrenchment: methodological issues

The phenomenology of entrenchment → ‘How true!’-phenomenology

1. descriptions over time  
   “a willing suspension of ontological disbelief” (Black, Max. *Models and Metaphors*, Cornell U.P., 1962.)

2. 
4. Entrenchment: methodological issues

The phenomenology of entrenchment → ‘How true!’-phenomenology

1. descriptions over time
   "a willing suspension of ontological disbelief" (Black, Max. *Models and Metaphors*, Cornell U.P., 1962.)

2. metaphor-based inferences
   - Problem description based on causal model
   - Projection of possible interventions
   - Intervention on cause X
4. Entrenchment: methodological issues

4. Entrenchment: methodological issues


Process tracing, interviews, observation, ... → beyond my scope today
## 4. Entrenchment: a process account

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MESSAGE & PERSPECTIVE

‘flammability’


4. Entrenchment: a process account

MESSAGE & PERSPECTIVE

‘flammability’

hypothesis 1
hypothesis 2
...
hypothesis n


4. Entrenchment: a process account

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empirical studies and conceptual articulation


4. Entrenchment: a process account

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‘flammability’

hypothesis 1

hypothesis 2

…

hypothesis n

empirical studies and conceptual articulation

‘finance as moral community’


4. Entrenchment: a process account

DYNAMICS OF INQUIRY
‘from metaphor to world’

MESSAGE & PERSPECTIVE
‘flammability’

hypothesis 1
hypothesis 2
...
hypothesis n

empirical studies and conceptual articulation

‘finance as moral community’


4. Entrenchment: a process account

Mechanism

• **Attention** shift from interpretative to articulative work

• **Epistemic attitude** shift ‘significance’
  ‘explanatoriness’
  ‘predictiveness’
  ‘salience’
4. Entrenchment: a process account

Narrative Perspective

As interpretive aid for message, perspective gains some autonomy, highlights more than message… diminishes attention for other features… ‘finance as moral community’… projects further hypothetical inferences & empirical work… now focusing on the world rather than our description of it
“frame was established using vivid verbs ... crime was said to be either preying & lurking, or infecting & plaguing”

or

“Crime is a virus ravaging the city of Addison”
“Crime is a beast ravaging the city of Addison”

... now focusing on the world rather than our description of it
4. Entrenchment: a process account

Mechanism

- **Attention** shift from interpretative to articulative work

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4. Entrenchment: a process account

Mechanism

• **Attention** shift from interpretative to articulative work

• **Epistemic attitude** shift ‘reinforcement ≈ justification’ from utility to belief
George Sugihara of the University of California at San Diego expanded on the possibility of rich analogies between ecosystems and financial systems. Perfect parallelism is not required if the goal is merely to stimulate fresh thinking that generates productive hypotheses for research and even policy formation related to financial systems, although empirical corroboration of the analogy is, of course, one way to strengthen its utility. He pointed out that most ecosystems are innately robust because they

4. Entrenchment: a process account

2011

4. Entrenchment: a process account

2013


4. Entrenchment: a process account

Mechanism

• **Attention** shift from interpretative to articulative work

• **Epistemic attitude** shift ‘reinforcement ≈ justification’ from utility to belief

Self-reinforcing shifts $\rightarrow$ focus on the world $\rightarrow$ ‘How true!’-phenomenology
5. Conclusion

Process view

attention $\rightarrow$ attitude

Benefits?

makes difficulty of evaluating metaphors intelligible
accommodates non-epistemic factors for attention
trade-off: cognitive efficiency vs bad warranting
5. Conclusion

Process view

attention $\rightarrow$ attitude

Benefits?

makes difficulty of evaluating metaphors intelligible
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trade-off: cognitive efficiency vs bad warranting

Importance?

overconstraining our thought

object-level & meta-level
Thank you for your attention

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