

***The generality constraint and  
the nature of concepts***

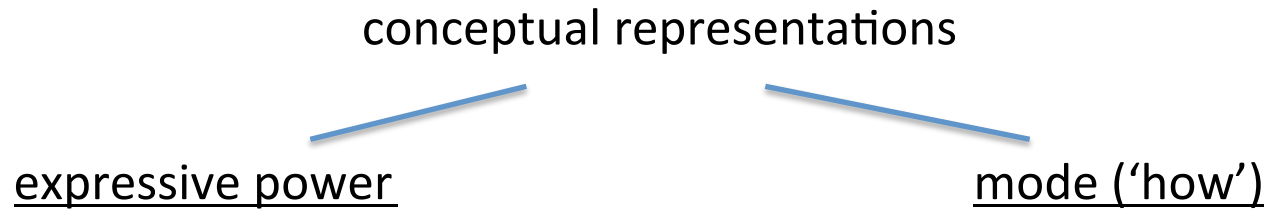
ESPP, London  
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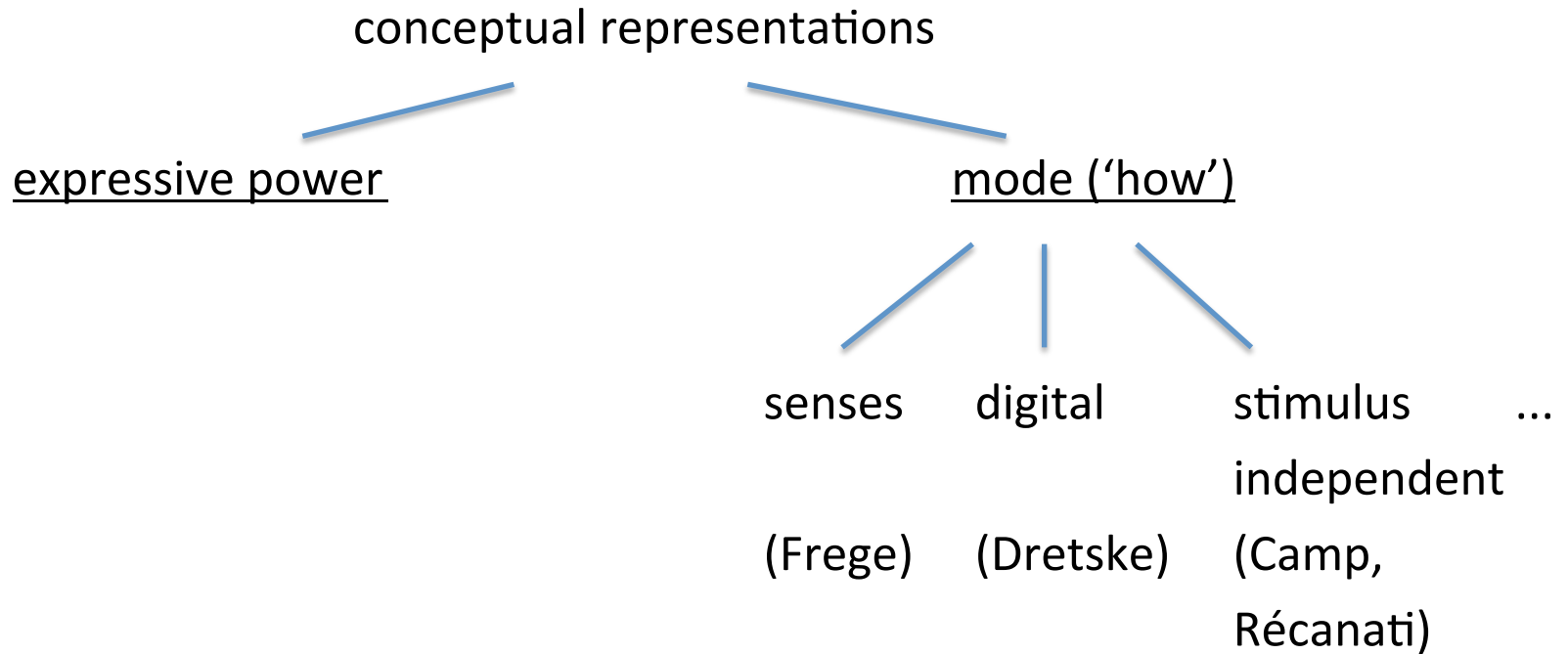
## **Overview**

- 1 The essence of conceptual representation: kinds of approaches**
- 2 Orthodox generality: horizontal generality**
- 3 Semantic roles**
- 4 A new proposal: vertical generality**

# 1 The essence of conceptual representation: kinds of approaches



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conceptual representations

expressive power

entities  
represent-  
ed

generality  
constraint  
(G. Evans)

semantic  
role  
(Fodor)

...

mode ('how')

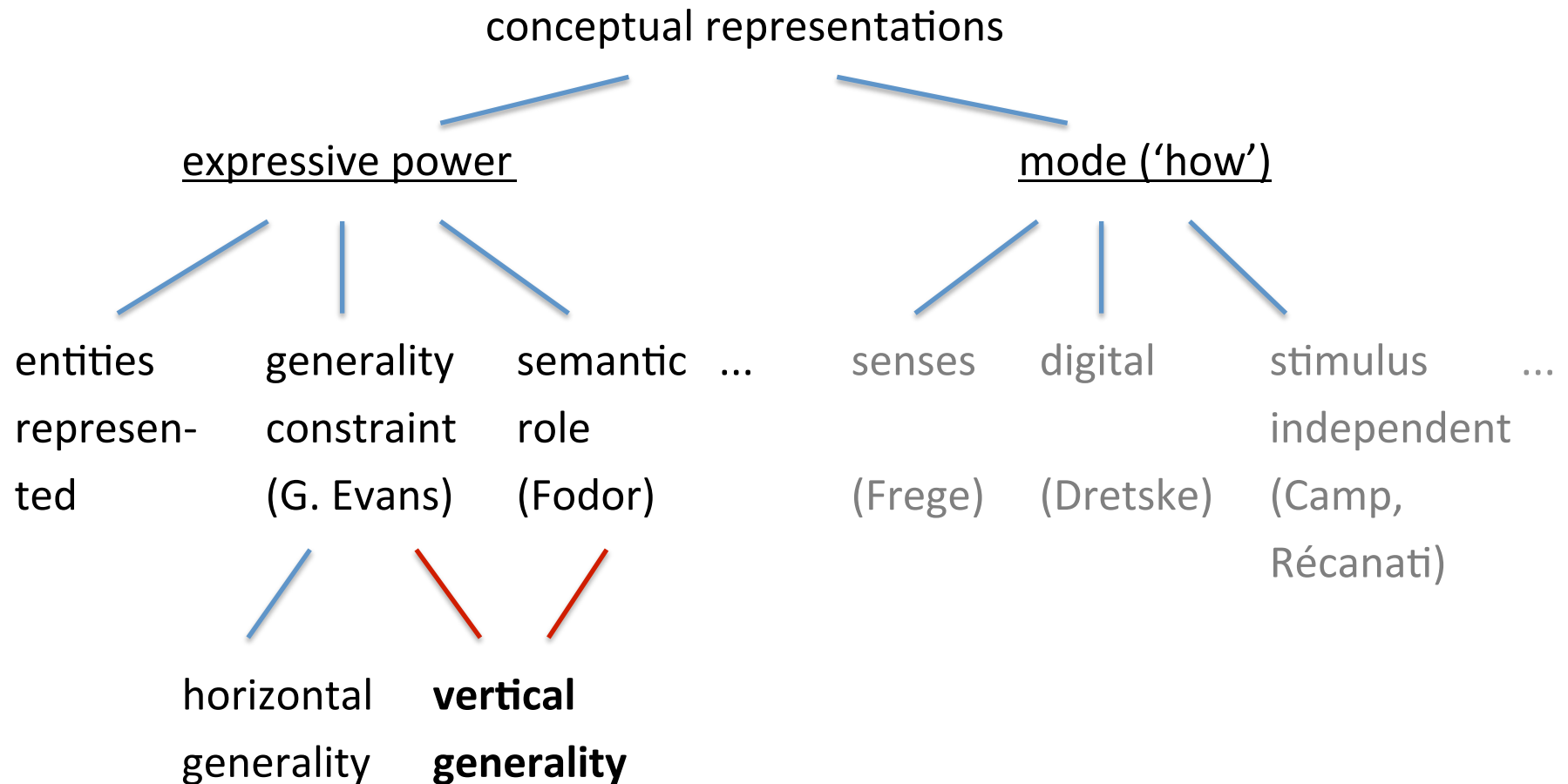
senses  
(Frege)

digital  
(Dretske)

stimulus  
independent  
(Camp,  
Récanati)

...

# 1 The essence of conceptual representation: kinds of approaches



## 2 Orthodox generality: horizontal generality

### The generality constraint

- in Evans, a condition on thoughts: distinct conceptual abilities are exercised
- a common, 'orthodox' characterization of the GC:

(CR) ,**structure + closure under recombination**':

A system of representations is conceptual  $\Leftrightarrow$   
if there is a state representing a as F and a state  
representing b as G, then there is also a state  
representing a as G (and one representing b as F).

J. Prinz:

„A system of representations has generality if having a predicative representation  $F$  and two nominal concepts [representations,  $FH$ ]  $a$  and  $b$  endows one with the ability to form the representation  $Fa$  and the representation  $Fb$ . Perhaps perceptual representational systems lack this property.“ (Prinz, *Furnishing the Mind*, p. 111)



## 2

So, essentially we get two related ideas

*structure*

*closure under recombination*

say: = ,*horizontal generality*'.

## 2

### Problem:

#### *Why not true of perceptual representations?*

presupposed by the GC: a division into singular and predicative representational elements

→ singular elements in perception?!

- i referential
- ii truly sing. representation  
(singular object representation,  
representation with the function of referring to an object)

## 2

### Problem:

but both readings yield the wrong verdict:

ad i      referential: no problem.

If S can see object x as F and can see object y as G,  
then S can see object x as G.

[The ‚as-locution‘ here is not  
to read conceptually, of course.]

## 2

### Problem:

- ad ii truly singular:  
→ **perceptual demonstratives**, most likely  
(,visual indexes', Pylyshyn 2007)  
no problem either.

If S can see <this>\_x as F  
and can see <this>\_y as G,  
then S can see <this>\_x as G.

=>

Perceptual representation is general in this – horizontal – sense.  
Thus, horizontal generality does not capture the essence of concepts.

## 2

### perceptual demonstratives

- there are singular representations of objects,
- perceptual indexicals
- in itself, a perceptual indexical is without any 'information' – it's empty  
= a pure perceptual indexical, a mere perceptual index
- it is existence-independent  
(function to refer, but in bad conditions may fail to refer)
- teleological theory, as an explanation
- use the 'mental file metaphor'  
(Perry, Récanati) – without the implication that files are concepts!

### 3 Semantic roles

Fodor: **discursive – iconic representation**

representations can be decomposed -> parts

the parts have all the **same** semantic function/role

predicative (attributive) -> **iconic**

the parts have **different** semantic functions/roles

some predicative, some singular -> **discursive**

### 3

## Problem

There are elements with *different* semantic roles *in perception*:

- predicative role                      attribution of perc. features  
(color, shape, ...)
- singular/subject role                **perceptual demonstratives**  
(,visual indexes', Pylyshyn)

(It's unclear whether a conceptual system requires more than these two semantic roles.)

=>

Fodor's criterion does not work.

## 4 A new proposal: vertical generality

Idea

**vertical generality (VG)**

transformations of semantic roles:

in a conceptual repr. system, semantic roles can be switched, in particular, predicative representations can be turned into singular representations;

in a non-conceptual repr. system,  
the semantic roles are fixed.



## 4

then

- The structure of the underlying representational capacities must be very different.
- Perceptual representation is clearly non-conceptual ✓
  - existence of perc. demonstratives      no problem
  - no transformations of semantic roles      no vertical generality

## 4

in other words,

- concepts have a built-in **duality** of representational content (,root') and semantic role concepts allow for the switching of semantic role
- percepts have **fixed** semantic roles

## Illustration

by using the mental files metaphor

4

conceptual / non-conceptual:

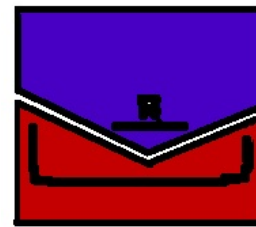
as a 'mental file'



information attached



semantic structure ✓



predicative role

subject role

4

conceptual, only:

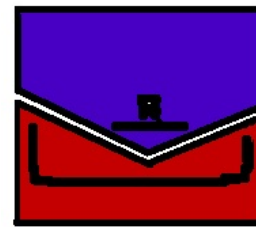
as a 'mental file'



information attached



semantic structure ✓



switch in  
semantic role !

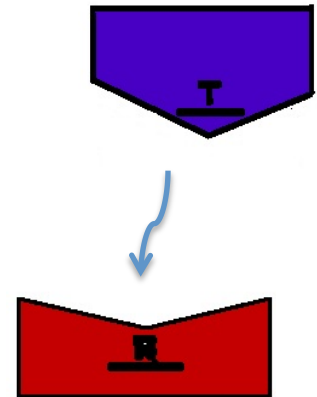
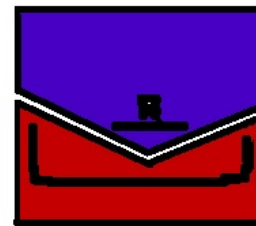
4

conceptual, only:

as a 'mental file'

information attached

semantic structure ✓



new semantic role

## Arguments:

### A1 *the unboundedness of thought*

VG is a truly new dimension,  
genuine creativity → unbounded thinking

### A2 possibility of *incoherent thoughts*

Transformations of semantic roles may lead us into incoherence.  
,Red is green'  
,Existence exists' (Grossmann)

A3 a strong, structural ***analogy to language***

semantic transformation in public language + LOT-hypothesis →  
semantic transformations in thought, too.

(and the other way round, too:  
mental resources for understanding public lang.  
must be rich enough ...  
So the two should be the same in this respect.)

END