recognise
Legal Reasoning
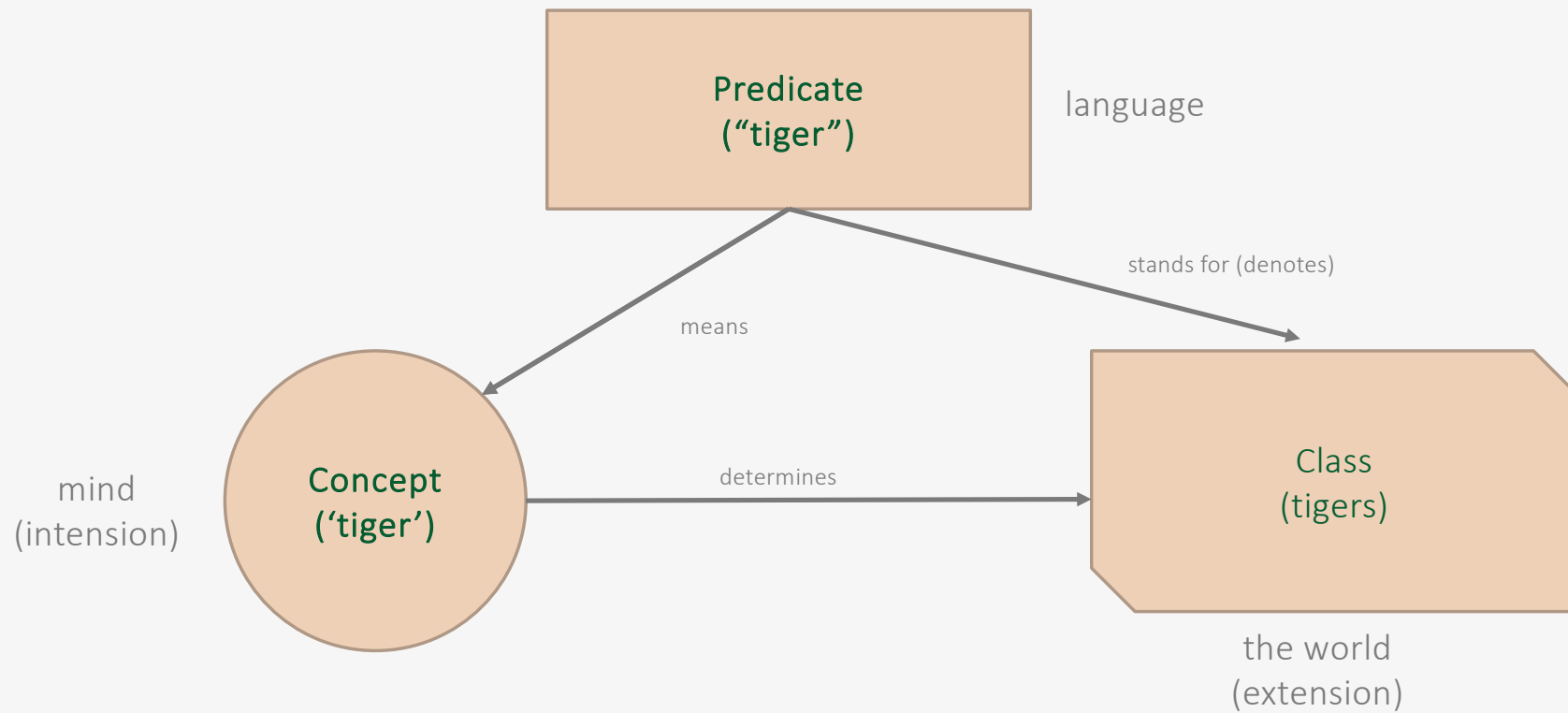& Cognitive Science

Materials from Recognise Video-Lectures
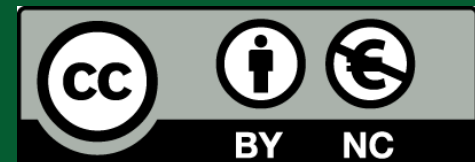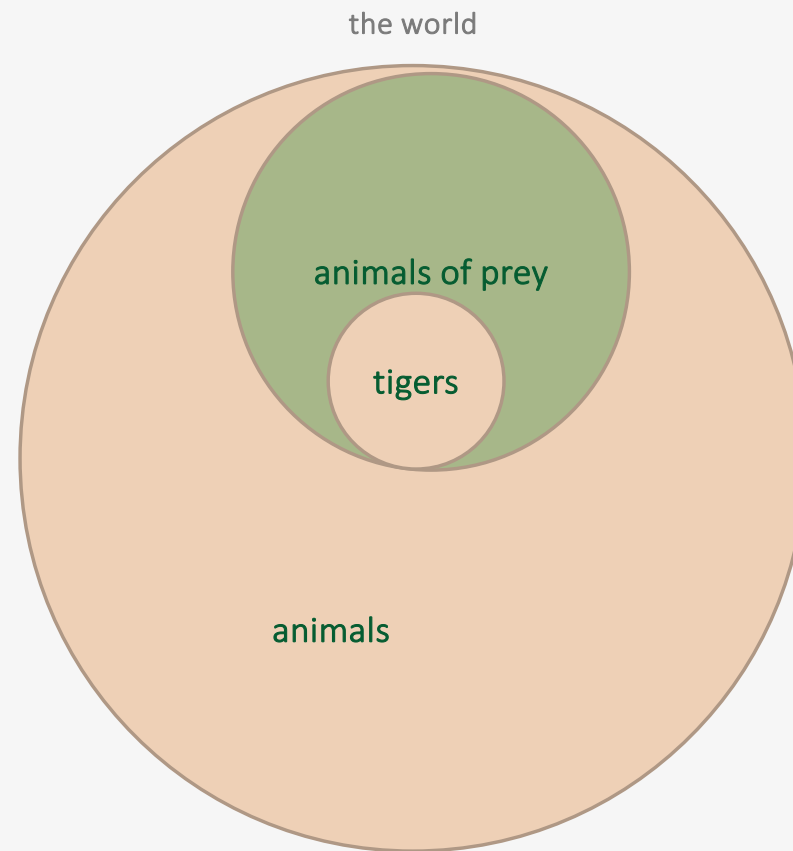
Of concepts

Why concepts are important

- Analogy
  - If you had a bad experience with a dangerous animal, it is useful to know that similar animals may also be dangerous. Having a concept for that class of animals makes it easier to treat similar animals in similar ways.
- Scientific laws
  - Scientific laws deal with *kinds of situations* (e.g. dropping a heavy object), rather than with individual cases (e.g. this apple that fell from a tree).
- Rules
  - Mandatory legal rules deal with *types of agents* (e.g. car drivers) rather than with individual persons (e.g. Jane).
- Systematization of knowledge
  - The structure of law is determined by concepts such as 'crime', 'obligation', or 'power'.

recognise

Concepts, classes and predicates

Abstract and concrete

concepts

the world

more abstract

'animal'

'animal of prey'

'tiger'

more concrete

animals of prey

tigers

animals

recognise

Synonymy and ambiguity

Predicate
"bank"

Concept 1
'financial institution'

Concept 2
'piece of furniture
to sit on with more
than one person'

AMBIGUITY

Predicate 1
"prison"

Predicate 2
"jail"

Concept
'institution for punishment'

SYNONYMY

Composition

Tiger = (Animal of prey + Feline) = (Animal + Eats other animals) = (Living being + Can move autonomously)
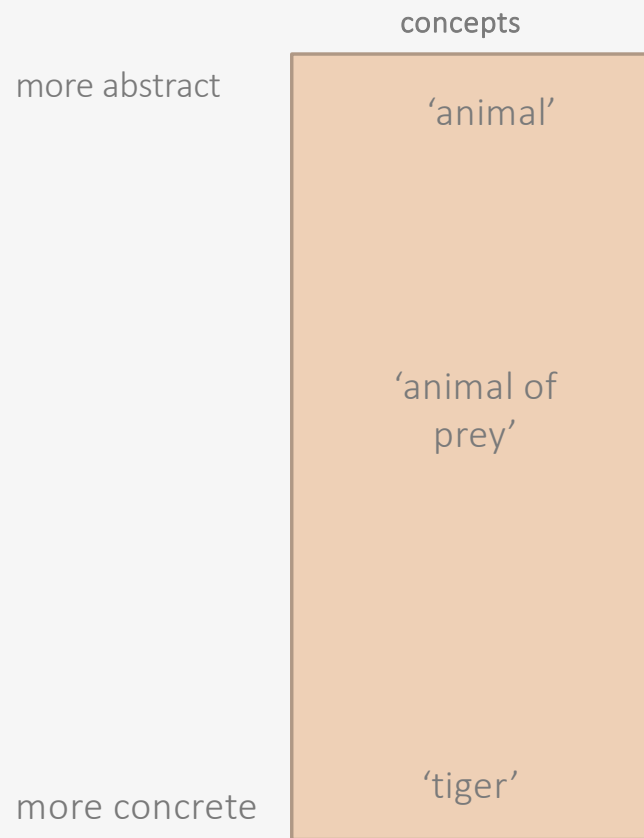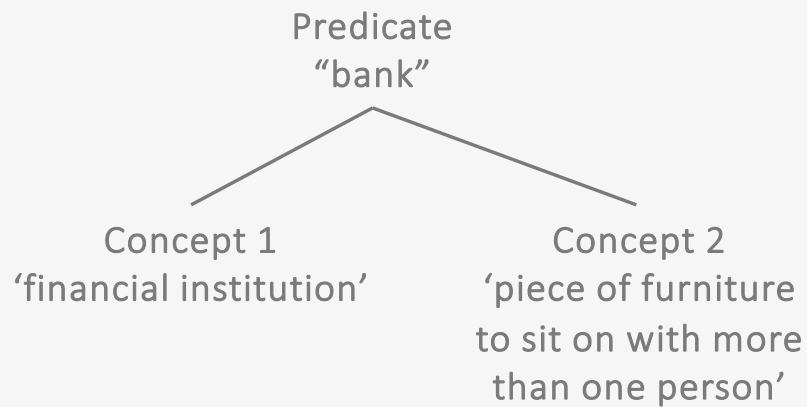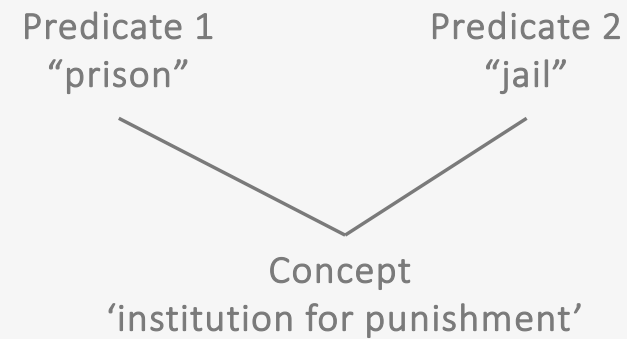
Tautologies, contradictions and contingent judgments

- A tiger is a feline living being that can move autonomously and which feeds on other animals
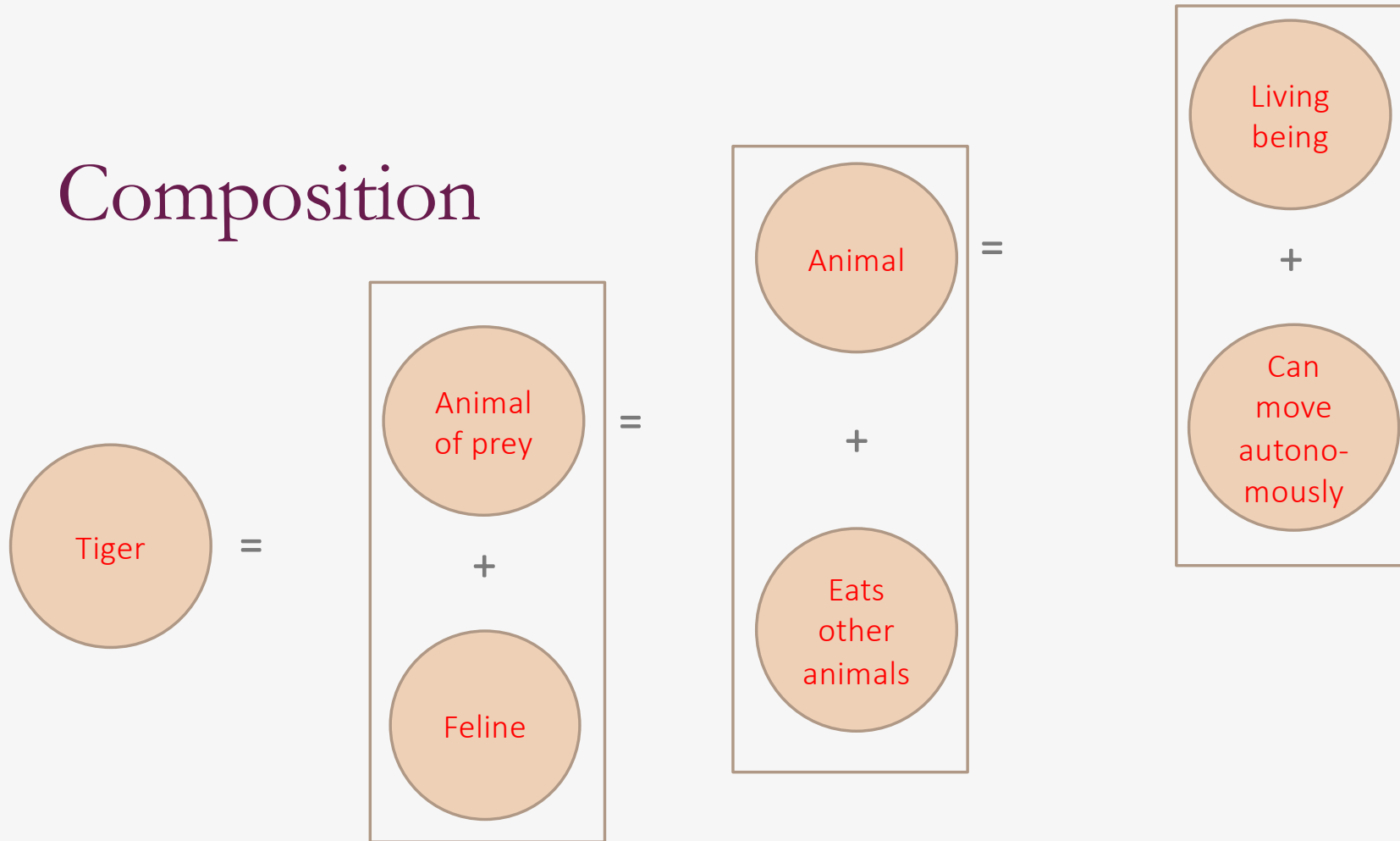 - What facts make this statement true?
    - This is a tautology which gives only information about our concepts, but not about the world.

- Clarence is a tiger which is not an animal
  - Why can this statement not be true?
    - This is a contradiction because the concept of a lion includes the concept of an animal.

- The cat is on the mat
  - What facts make this statement true?
    - This is a contingent judgement which gives information about the world, but not on our concepts.

recognise

Problematic cases

- Borderline cases
  - Suppose that a dog is defined as a four-legged animal that barks. Is a dog with only three legs still a dog?
  - Is a 'car' in a museum still a car?

- Family resemblance
  - Do all members of a class have a set of common characteristics? What is the common characteristic of games?

- Gradual concepts
  - Is the applicability of a concept an all-or-nothing matter? When is a man bald?

- Basic concepts
  - If concepts are defined in terms of other concepts, how are the most basic concepts defined? When is something 'living'?

- Value judgments
  - Is it possible that two persons agree on all ordinary characteristics of a football match, can they disagree on whether the match was a good one? What are the characteristics of goodness?

- Theoretical concepts
  - What are the characteristics of ownership? Are such abstract concepts comparable to more down to earth concepts?

recognise

Prototypes and deviations

- Concepts are the result of clustering entities together in a class and developing a **theory** of what these entities have in common.
  - For instance, some things are (belong to the class of) fruits. What are the common characteristics of fruits?

- Some entities are typical examples (prototypes) of a class; other things are marginal.
  - For instance, apples and pears are prototypical fruits. Tomatoes are less typical, and nuts are at best marginal instances of a fruit.

- Concepts are developed as a theory of what defines a class, and not the other way around.
  - Biologists develop theories about what is a fish. Are dolphins fishes?
  - Are viruses living 'animals'?
  - Are exoplanets 'real' planets?
  - Jurisprudence may develop a theory of what defines a property right. Are mortgages property rights? The right to privacy?

recognise

Break

recognise