

Inductive reasoning about chimeric creatures

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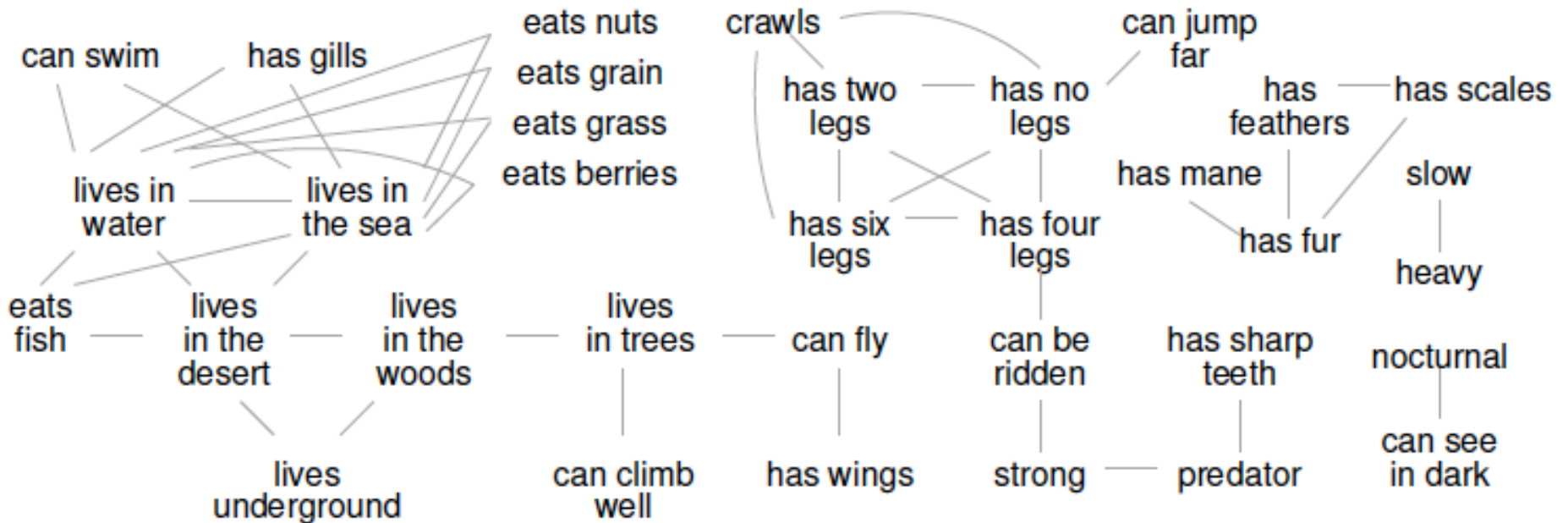




Inductive reasoning

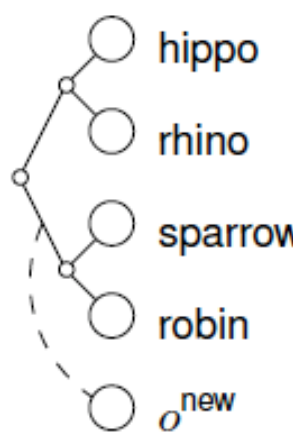
Animal X has no legs.
 Animal X can fly.

Animal X has wings.



(Osherson, Rips, Heit, ...)

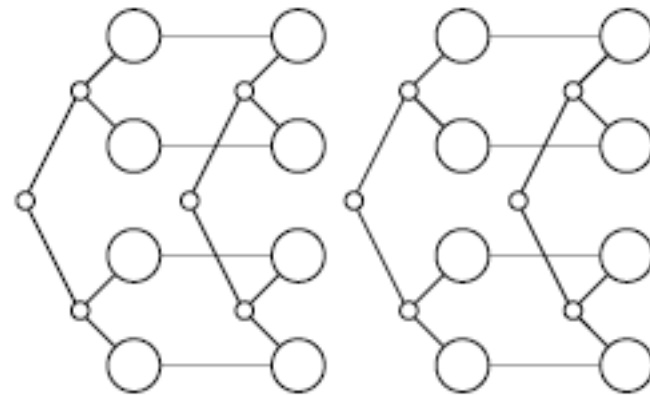
Modeling inductive reasoning



	slow	heavy	flies	wings
hippo	1	1	0	0
rhino	1	1	0	0
sparrow	0	0	1	1
robin	0	0	1	1
o^{new}	?	?	1	?

Observed entries taken from the Leuven Natural Concept Database (DeDeyne et al)

Structure combination model



An undirected graphical model

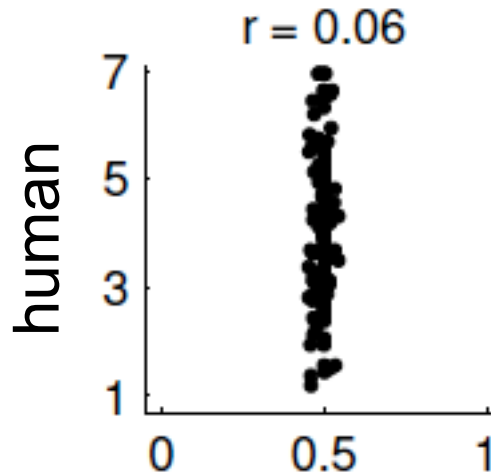
Experimental results

1) Chimeras

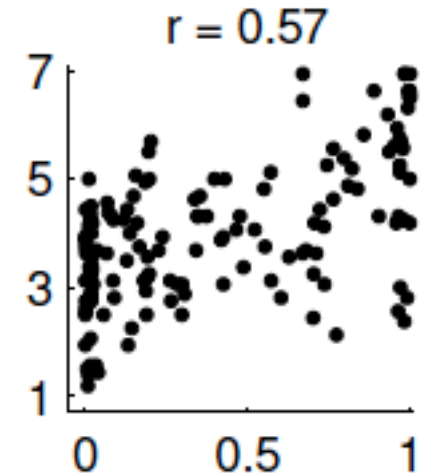
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Exemplar model
(case-based)



Structure combination
model



2) Non-chimeras

Animal X has no legs.

Animal X has wings.

model

