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Animal Language

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Biologists, Linguists and Philosophers Have Said That Animals Are Not Capable of Language

“The relationship between language and thought must be so close that it is … senseless to conjecture that animals *may* have thoughts.”

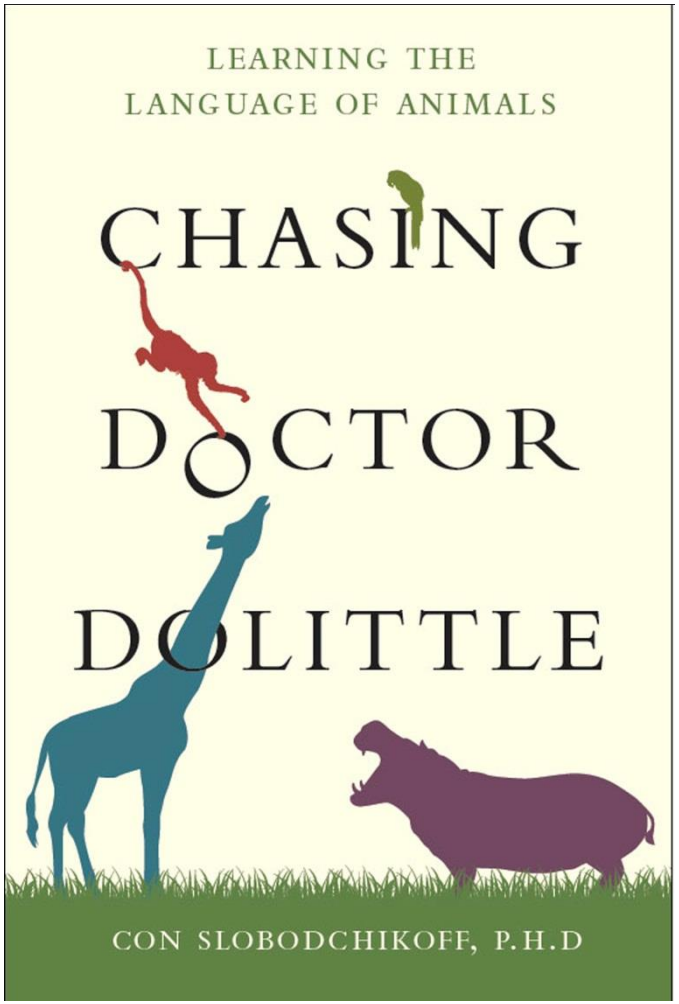
Norman Malcolm, 1973

View of Linguists

Only Humans Have Language: Because of a Biological Mutation

There Is a Gap Between Us and the Rest of the Animals

Chasing Doctor Dolittle Shows That Animals Have Language



What Is Language?

What Is Communication?

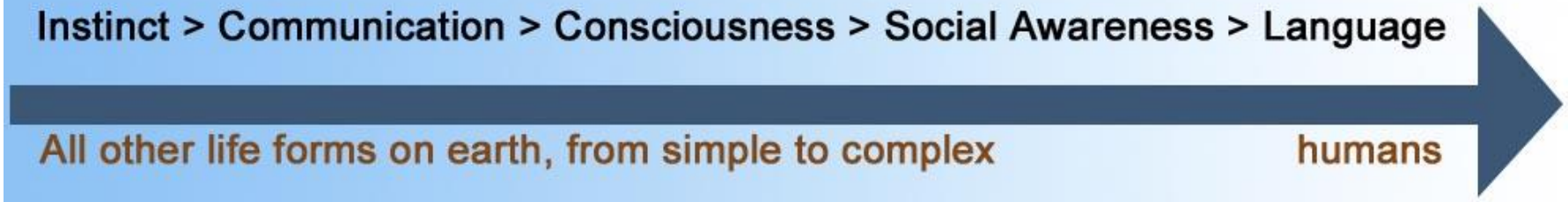
Communication Is A System Of Hard-wired Stimulus-Response Behaviors

Language Involves

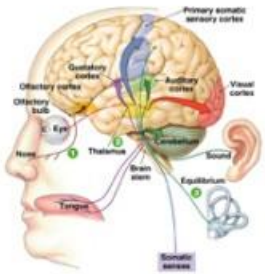
- Flexibility
- Intentionality
- Novelty
- Structure

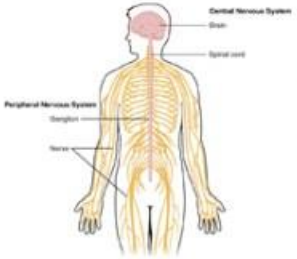
The Evolutionary..uh...Continuum?
...The traditional view:

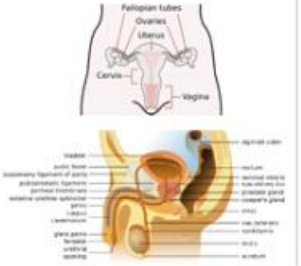
...vs. the revolutionary view:

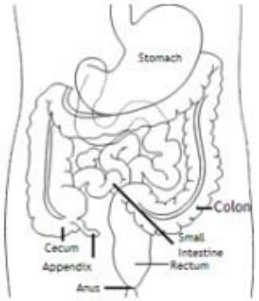


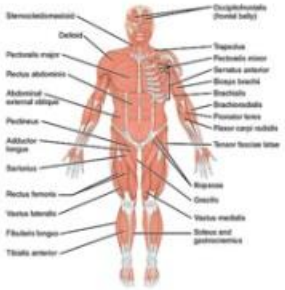
The Discourse System Removes the Gap and Restores Evolutionary Continuity of Language











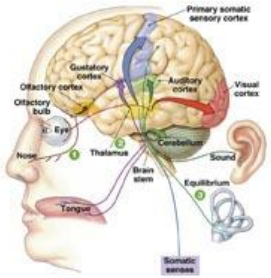
Sensory Nervous Endocrine Reproductive Digestive Muscular/Skeletal

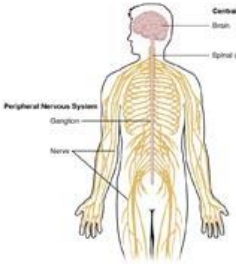
The Hidden System: The Discourse System

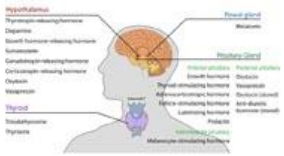
Slobodchikoff, 2012

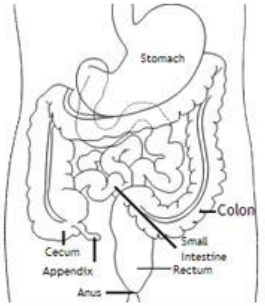
--shared in common with most multicellular organisms
--designed to receive, evaluate, and respond to signals
--evolved in conjunction with other physiological systems
--uses components of other systems
--responds to selective pressures
--results in development of specialized structures
for receiving and producing signals

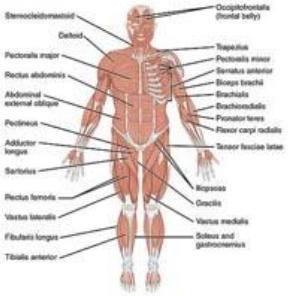
Images Courtesy of Wikipedia











Sensory | Nervous | Endocrine | Reproductive | Digestive | Muscular/Skeletal

1. Incoming signals are picked up by senses

2. The brain receives and decodes these signals mitigated by internal cues

3. Muscular movements create response signals, often using:

Evaluation and response can be:

--completely hard-wired (stereotypical behavior)
--involving choice ("behavioral toolbox")
--partially novel (toolbox + a new application)
--completely novel

Specialized Structures for the reception and production of signals

How the Discourse System works

Images courtesy of Wikipedia

Bottom Line:
There Is No Gap
Between Us And Other Species

We All Share Components Of
The Discourse System

Challenge:
How To Get This To Change Our Policies Towards Animals

Scientific Studies Are Very Lengthy

But We Have A Lot Of Anecdotal Evidence

Why Not Collect It And Put It To Work?

Animal Behavior Observation

Instructions

Please fill out this form to the best of your ability. If you're not sure of the answer to a question, just leave it BLANK. We only want information that you definitely witnessed.

Your Name:_____ [Type your name or code name]

Your e-mail: _____[To contact you if we have further questions]

Part A: General Description

Location of behavior: _____

Month and Year(s) behavior was observed: _____

In a couple of sentences, briefly describe what you saw. If the context (terrain, weather conditions, presence of others, etc.) might have played a big role in the behavior, mention that as well:

_____

_____

_____

This next part of the questionnaire collects specific information that will be used to build a database of information collected from all over the world about the behavior you witnessed, and the animal species you watched. Therefore, it's crucial that your answers be truthful and accurate. If you don't know the answer, or if what you would answer doesn't match one of the options, leave it blank. You'll have a chance at the end to add information that these questions might not cover.

Part B: Who Was Involved?

1) Type of Animal

- Domesticated (pet or farm animal) [Answer Question 2 next]
- Wild [Go to Question 5]
- Zoo [Go to Question 5]

Part C: What Did They Do?

12) What is your guess as to the kind of behavior the animal was performing?

- Grooming or cleaning itself or another animal
- Eating or finding food
- Courtship (Includes any display to attract the opposite sex)
- Exploring
- Play
- Aggressive (threatening, fighting, barking, attacking, scary display, etc).
- Territorial Advertisement (marking territorial boundaries, singing, etc.)
- Caring for young
- Trying to communicate something
- Expressing an internal feeling or emotion (such as pain, happiness, loneliness, etc.)
- Trying to learn something
- Other (or a combination of the above):_____

13) How many different times did you see the animal engage in this behavior?

- The animal only did this one time.
- The animal did this repeatedly but only during one period of time.
- I've witnessed this behavior more than once, but only under the following conditions:

  _____

- The animal does this every time I see it.
- The animal does this randomly; I can't predict when it will happen.

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14) If other animals were watching this behavior, how did they respond?

- They seemed to ignore it.
- They responded by doing : _____
- They left the area.
- I wasn't able to observe the other animal(s) clearly, so I can't say for sure.

Three Conclusions:

1. Animals Have Language
So This Is Not A Barrier
To Animal Thinking

2. Discourse System Shows:

The Continuity Of Language In Animals

3. Let’s Capture Novel Animal Behaviors – And Evidence For Animal Language And Thinking – By Using Polled Anecdotes

We Are Not That Different After All