

THE BRAIN, BIOLOGY AND COGNITION

Differences and similarities between human and animal communication

1

Language

- Consider the questions:
 - What is the definition of the word 'language'?
 - What do we mean by 'understanding' a language?
 - Could we operate without a *human* language?
 - What would be different without one?
 - What is the main *purpose* of language?

2

Language

Consider the debate:

- Human vs. animal communication
 - Do animals communicate?
 - Why is human language any more than communication?
 - Or, is it no different?
 - What limits animal communication?

3

Language

- Consider the hypothetical question:

Could we 'theoretically' teach the following to use language exactly as adult humans do?

1. Parrots
2. Monkeys/apes
3. An artificially intelligent computer
4. An artificially intelligent robot
5. A one-month old child

If not, then why not?

4

Language

- Consider a debate:

- What is/are the most important aspect(s) of *human* language definition:

- What aspect or aspects are most essential?
- How would it change language if not present?

5

Language

How do the Hauser et al. (2002) and the Pinker and Jackendoff (2005) papers differ?

Why did Pinker & Jackendoff find the assumptions put forward by Hauser et al. regarding which aspects of language were uniquely human as problematic.

6



Language

- Having now considered the questions, could you justify the following aspects of human communication in the definition of language:
 - Semanticity (mental representation)
 - Displacement (time and space)
 - Abstract thought and concepts
 - Syntax/structure
 - Creativity/flexibility
 - Novelty in representation
 - Quantity of representations (words)
 - Recursion (embedding meaning)
 - Control and definition of thought (Whorfian hypothesis)

7



SESSION CLOSE
Any final questions?

8
