

Can any other animals use language?

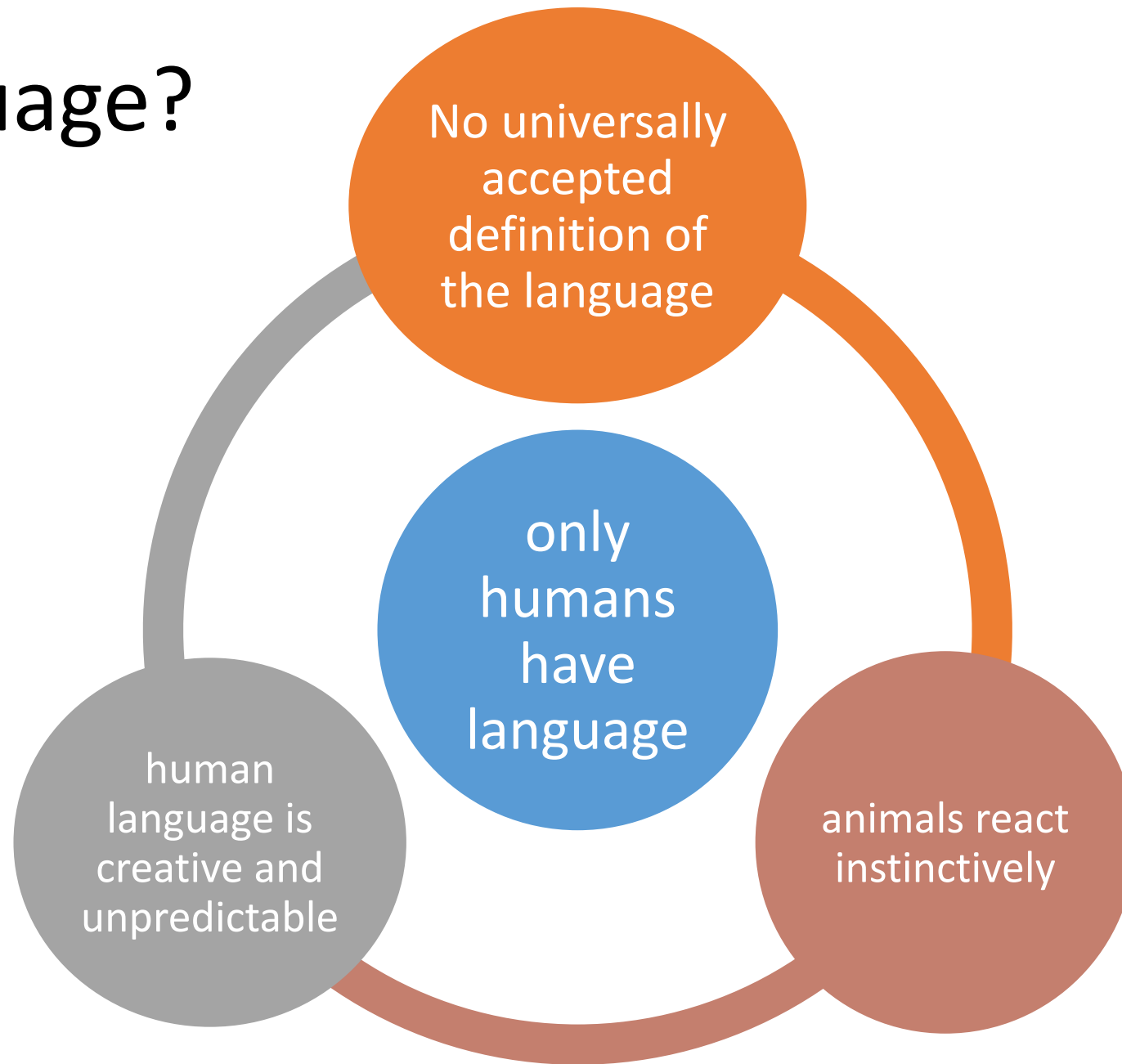
By Kseniya Rodionova,

ПЯПП 161М

Introduction

- Humans differ from animals in their use of language is a subject of much discussion
- Researches have taught apes, dolphins, and parrots various systems of human-like communication

What is language?

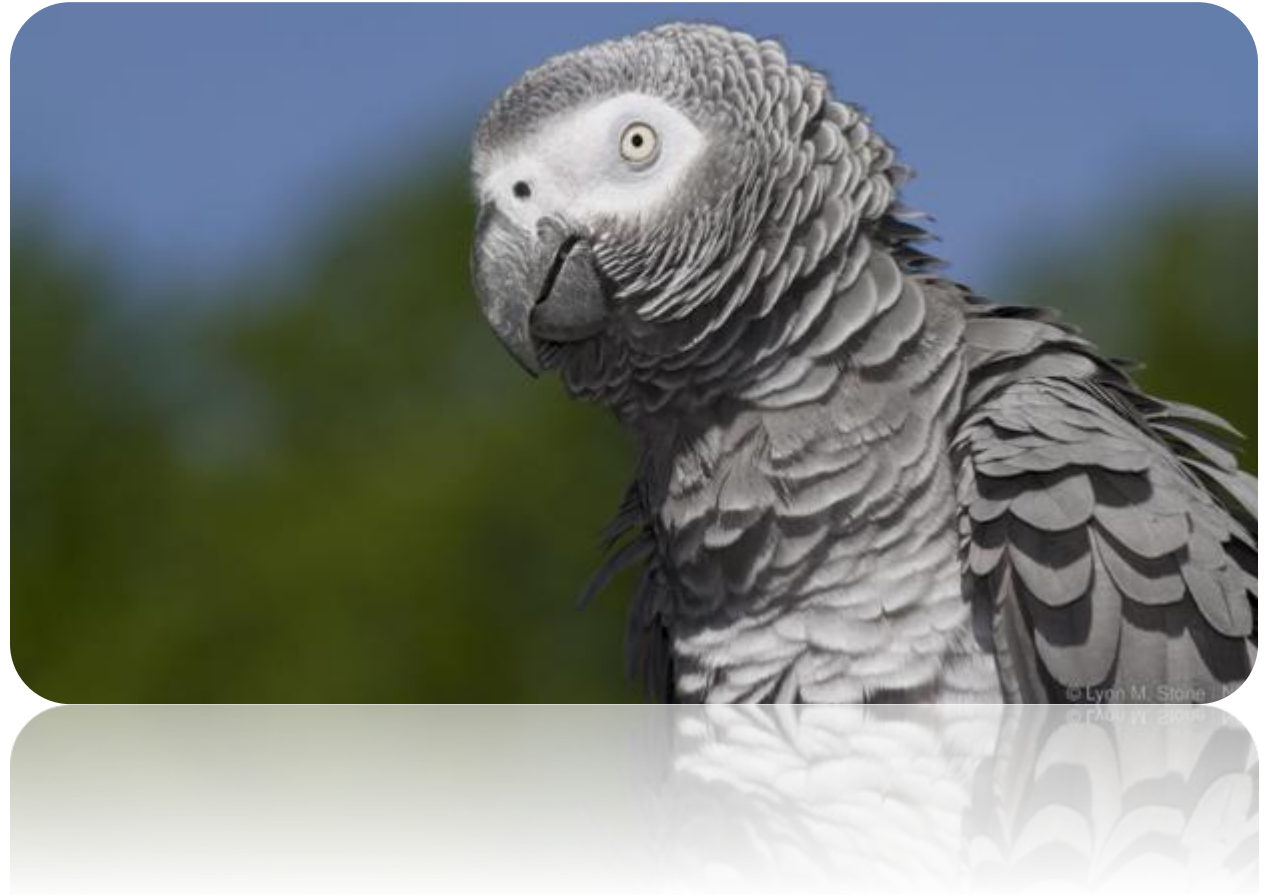


LANGUAGE IN NON-HUMAN SPECIES. BIRDS

- **Birdsong** appears to have much in common with human language. Birds have **an innate system of calls**, but their songs mostly involve learning and develop by later experience (Aitchison 1996:7-9).
- Young birds have a period of **sub-song** before their songs are fully developed, and they also appear to have **a sensitive period** in which **they learn their songs**.



- The **African grey parrot ALEX**, studied by Irene Pepperberg, **imitates human utterances** and seems to relate these sounds with meanings, but his ability to imitate sounds similar to those produced by humans is quite **different from** the acquisition of syntax (Fromkin and Rodman 1998:23-24).



Whales and Dolphins

- Studies of communication among **whales** are limited in scope, but their **sounds** seem to **be motivated by a need** to communicate.
- Researchers have tried to teach **dolphins** forms of language, e.g. acoustic computer-generated whistles in the water, but so far investigation **has not revealed** whether they use their calls for any kind of human-like conversation



- **Bottle-nosed dolphins** have an impressive **auditory memory system**, capacities for rule-governed behaviour, and for imitative learning.
- Investigations of **their whistles** have **revealed different patterns**, which have been identified by the pitch contour, e.g. downward glide = distress, upward glide = search, rise- fall-rise-fall = excitement or irritation (Bonner 1980:128-129). Also, **dolphins use vocalizations for echo-location** (navigation, food location, object identification, etc.).



APES

- Many researchers have tried to teach apes to communicate with humans and even with one another.
- chimpanzees were **not physically capable of producing** articulated speech (Wardhaugh 1993:43-45) although **they did understand many spoken words**.
- Some researchers (R.A. and B.T. Gardner and H.S. Terrace) taught the apes **American Sign Language (ASL)**.
- **None** of the trained animals seem to **assimilate grammatical morphemes**. The best translation of a chimpanzee phrase corresponding to '**Give me the orange**' is '**give Washoe/me orange**', where *Washoe/me* is the hand pointing back at the signer.





- Among themselves **primates use a wide variety of communication** (e.g. olfactory, auditory, tactile, visual, and vocal).
- Apparently, the brains of chimpanzees **do not lack the structures necessary for language development**, but they may lack the structures responsible for syntax.
- The language of trained apes represents **an early stage of language development, a protolanguage similar to that of very young children and speakers of pidgins**. Conclusively, we may regard human language as a further development of communication systems also found among other species rather than being uniquely human.

List of references

- <http://www.alphadictionary.com/articles/ling002.html>
- <http://www.bbc.com/earth/story/20150216-can-any-animals-talk-like-humans>
- http://www.columbia.edu/~rmk7/HC/HC_Readings/AnimalComm.pdf