



01 Myth and Background

Do animals use human language-like systems to communicate?

Scientists investigated babbler birds and how their language uses meaningless segments to form calls for communication.



02 Methods

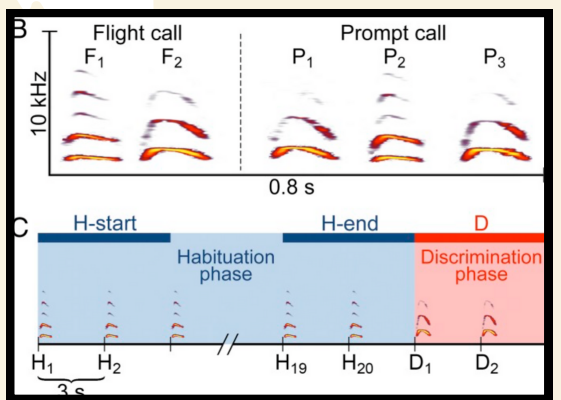
- Two babbler calls (flight and prompt) used in different contexts are made of shared elements
- Individual call segments led to varying responses from the birds but are essentially meaningless
- After playing one element to habituate the birds, a second element was played back to elicit a discrimination response
 - no response: elements are the same to the birds
 - change in behavior: elements are different to the birds

Key Points

* Call Elements

* Element Identification

* Discrimination



(Calls and their elements)

03 Conclusions

- Human language combines meaningless sound segments, called phonemes, to form words.
- This is akin to the birds using the same call elements to form distinct calls.
- Each call has a different meaning and context associated with it, while the individual segments are shared between them.
- For example, tap and pat have the same phonemens in English, but have distinct meanings to speakers.



04 Connection to Myth

Animals do use language to communicate, as shown by the birds responding in various ways to different sequences of calls. These calls are used by the birds to communicate with one another. The individual segments are not found in bird song alone because they have no meaning, but are rather used in combination to form songs.