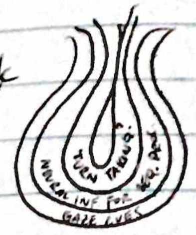
READING NOTES

PIKA ET AL. 2018 7 APRIL 2020

Peeling back the layers



(cooperation) Tomasello — (turn taking) Holler & Levinson

development of human language in evolution probably required the development of many sub/related abilities

- → what substrates were established already when language emerged?
- → what is uniquely demonstrated in human language?

Key concept: Similarity by...

- Homologous ↑ shared inheritance
- Analogous ↑ parallel evolution

⟶ functional bases & inter-relations of layered skills

Bigger question: What is the phylogenetic history of human language?

Review

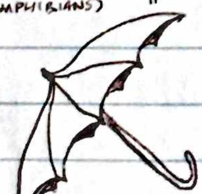
4 TAXA

BIRDS 360+ duetting species (& counting) 50-200 ms, ~1s for non-duetting exchanges, coord/intend overlap (→ more communal species) ↔ avoid overlap

MAMMALS duets & antiphony in all major primate branches, 200-5000 ms (varies a lot btwn species), <1s-5s in others (bats, cetaceans, elephants, mole rats), influenced by social relationships

INSECTS diversity of signals, always initiated by males, frequent change in modality across sexes, 15-850 ms

ANURANS (AMPHIBIANS) typically antiphonal female attraction calls, overlap avoidance, 2-10 s, some synchrony & some alternation



CONSIDERED HERE AS SORTS OF TURN-TAKING:

DUETTING
- loosely coordinated ↔ tightly
- typically between sex opposites
- can include precise synch/ovlp
- notes, tapping, biolum, & more

ANTIPHONAL SONG
- type of duetting
- one member starts and another finishes
- can take turns till song completion

ANTIPHONAL CALLING
- "call-and-response"
- sometimes only includes exchanges using the same call type in both positions

TURN-TAKING
- sometimes considered an extension of duetting
- traditionally restricted to human conv. (changing)
- characterized by spontaneous & collaborative use of floor to communicate

APPLYING SSJ74 TO PRIMATE INTERACTION
- turn allocation techniques
- adjacency pairs
- (conventionalized) time windows

data: Gestural exchanges, Mother-infant pairs, "leaving" scenarios, "in situ" (wild)

BONOBOS
- early anticipation w/ frequent overlapping response
- use of GAZE, closer together

CHIMPANZEES
- slower-paced negotiation w/ longer response latencies (→ WAITING)
- use of BODY ORIENTATION, farther apart

TURN-TAKING SEQUENCES EVIDENT IN BOTH BUT W/ DIFF STYLES

= THE COMPARATIVE TURN-TAKING FRAMEWORK =

Elements to assess in service of developing comparative analyses of turn-taking behavior

Ⓐ Do turns vary in size & order? How so?
Ⓑ (How) do participants know who is taking the next turn?
Ⓒ What is the normative timing of signal exchange?
Ⓓ (How) do participants know what the next turn should do?

} characterize the turn-taking phenotype across species

"is this <u>the small change that made a big difference?</u>"