**Call Combinations in Chimpanzees?**

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**Abstract:** A key feature of language argued to distinguish it from other animal communication systems is its compositionality: meaningful words are combined into larger structures with a derived meaning (Hurford, 2011). By searching for core features of language in the communication systems of our closest-living relatives, particularly the apes, it is possible to elucidate whether these are de novo-evolved traits in humans or whether they have their origins rooted in the primate lineage. Using a high-density data approach, we are currently investigating candidate compositional structures in chimpanzees. Preliminary data collected in the Budongo forest, Uganda, indicate combinations of pant-hoots with food calls might represent a potential relevant candidate with compositional-like structure. A three level investigation involving collocation, acoustic and socio-ecological analyses explored this call combination further, highlighting its underlying structure and the contexts accompanying its production, probing for its potential functions. Moreover, predator presentations suggest chimpanzees combine calls (alarm-hoos + waa-barks) when encountering snakes, specifically when other individuals are present, potentially to recruit group members in a dangerous situation. Ongoing playback experiments aim to further investigate the meaning and function of this call combination and test whether chimpanzees process it as a compositional-like structure. Preliminary analyses of playback responses suggest the alarm-hoo-waa-bark combination is meaningful to receivers and, critically, is related to the individual meaning of the comprising calls. Ultimately, this work will help clarify whether one of the core building-blocks of language, compositionality, also exists in the communication systems of our closest relative and therefore is evolutionarily more ancient.