

Intentionality in the gestural communication of semi-wild chimpanzees

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In 1957, the linguist Paul Grice proposed that the key distinction between natural and linguistic meaning is intentionality. Natural meaning is related to the association between things of the world that are naturally occurring together (e.g., when the sun is out, it means that it is daytime). Linguistic meaning, on the other hand, involves a symbolic convention and is detached from naturalistic associations (e.g., a red traffic light means you should not cross the street). The latter requires voluntary control over the produced signal and the intention to trigger a specific response in the receiver. This theory was largely influential and led scholars to consider the lack of intentionality in animal signals as potentially one of the main differences between human language and non-human animal communication (Dennett, 1983). Subsequently, animal communication researchers were soon prompted to assess whether their study species possess volitional control over the signals they produce and are aware of their impact on receivers. Initial investigative efforts in this direction were focused on primate gestural communication, with Liebal et al. (2004) introducing three criteria to determine intentional signal production: (i) audience checking, (ii) response waiting, and (iii) persistence. Since then, these criteria have been widely used, and consensus was reached on the intentionality of gestural communication in great apes. However, the majority of gestural studies have employed these criteria as a prerequisite to recognize any hand/foot/body movement as a gesture. This approach prevented researchers from delving into the potential flexibility of intentional behaviour across gestural production and from assessing whether gestures consistently show intentionality or rather vary in response to different factors. This project aims to fill in this gap: given a dataset of gestures identified solely based on their lack of mechanical efficacy, we would like to investigate their level of intentionality through the application of a set of the above-mentioned intentionality criteria.

Specifically, the three main points of this MSc Thesis Project would be:

- The reading of literature on the topic and development of theoretical framework to introduce the research question [Theoretikum]
- The coding of a set of intentionality criteria on an existing dataset of chimpanzees gestures [Praktikum]
- The analysis of the distribution of such intentionality criteria (e.g., percentage of intentional gestures), and the potential addition of a personally developed research question (e.g.: Are gestures more likely to be intentional in some contexts rather than others? Are gesture more likely to be intentional in one demographic group (e.g. age, sex) than another?) [Praktikum]