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COGNITION IN THE WILD: EXPLORING ANIMAL MINDS WITH OBSERVATIONAL EVIDENCE

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Where a natural phenomenon can be brought under experimental control, either in the lab or the field, greater power of analysis is always achieved. But what of the phenomena that (so far) have not proved amenable to experiment? The answer often given in animal cognition is these constitute mere natural history; cognitive science will have to wait until, somehow, the crucial experiments can be done. We believe that this attitude is missing an important stream of evidence: carefully measured observations from the field can be used to build and test theories, which can subsequently inform the design of appropriate, ecologically-valid experiments. In this symposium, we shall explore how observation and analysis of naturally occurring behaviours is contributing to our understanding of animal cognition in primates and other species, and discuss why observational data is useful not only in analysis of primate cognition but can be critical when studying cognition in some non-primates, such as elephants. We shall hear how novel recording, statistical, and analytical methods have led to advances in understanding topics that cannot yet be fully understood with experiments alone, specifically: the planning of travel routes and foraging decisions (in lemurs, baboons, and chimpanzees); gestural communication (in chimpanzees and orangutans); the complex manual skills involved in tool use (in chimpanzees); food sharing (in great apes); and networks of alliances (in dolphins).

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