## Collegium Helveticum

Prof. Dr. Paco Calvo

Freitag, 2. Oktober 2020, 16:15-18:00

## Fleck Lecture 2020 **Understanding the Challenges** of Plant Science: Reflections

from the Outside-In

The lecture will be recorded at ETH Zurich and streamed live. The link is: https://youtu.be/Aw2Y3sxfAWs.











The investigation of plant intelligence and sentience is here to stay. And yet, despite the growing body of literature on the subject, we appear not to be making headway. Controversies over plant intelligent behavior and consciousness are part of a long botanical tradition. But things are only getting worse in today's academic culture of "fast science." The result is a lack of a common language and subsequent misunderstandings and misdiagnoses. Many findings that have gripped the public's imagination are proving difficult to replicate. I will illustrate how the experimental evidence on plant perception and learning brings a mixed bag of both supportive and inconclusive results.

Doing better calls for placing the discussion outside of old and sterile battles, allowing for alternative frameworks of thinking. Doing better calls for the inclusion of counterarguments and adversarial collaboration; for respecting the guiding role that complementary, rather than competing, models and theoretical frameworks can play. Doing better calls for "slow science" and, echoing Ludwik Fleck, for the nourishment of social interactions in both the plant and cognitive science communities.

The goal of this talk is not to claim that plants are intelligent or that plant sentience (if it exists) is of the same kind as human consciousness. Neither taking for granted that plants are intelligent and/or sentient, nor dismissing the possibility that they are, I shall argue that the time is ripe to cast the problem in a scientifically tractable manner. The goal is to invite constructive debate, and to scrutinize established objections and thinking vetoes to better understand the challenges of plant science.

Paco Calvo is a Professor of Philosophy of Science, and Principal Investigator of MINTLab (Minimal Intelligence Lab) at the University of Murcia (Spain). He specialized in the philosophy of cognitive science courtesy of a Fulbright scholarship in the late 1990s (University of California, San Diego), and received a PhD in Philosophy from the University of Glasgow (UK) in 2000. His research interests range broadly within the cognitive sciences, with special emphasis on ecological psychology, embodied cognitive science, and plant intelligence.



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