

Automated Social Perception for Aiding Human-Human Cooperation In Dynamic Settings

Bernd Dudzik

Delft University of Technology

OVERVIEW

GOALS

- ★ Predict human impressions of situations (relevant for partner selection and collaborative behavior) from multimodal behavioral data.
- ★ Generate “explanations/insights” into indicative behavioral cues

RELEVANCE FOR HYBRID INTELLIGENCE

- ★ Provide interpretable feedback for humans to better understand how interactions with them are perceived by potential collaboration partners
- ★ Enable AI to understand how its own social actions are perceived by humans

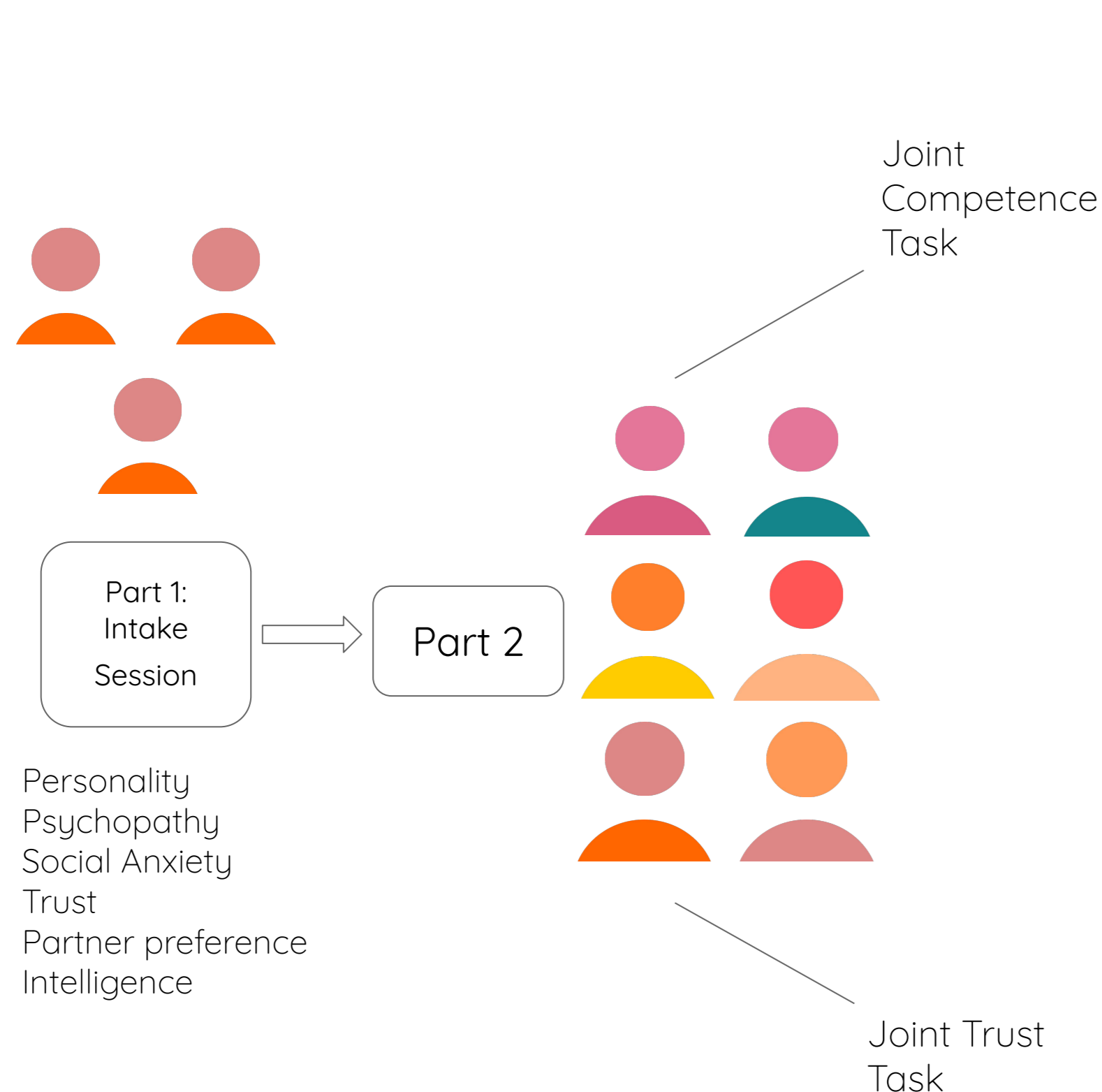
BACKGROUND/MOTIVATION

- ★ The ability of individuals to identify and establish **collaborative relationships** with others is a vital ingredient for a successful and productive life.
- ★ In everyday life, decisions to embark on joint enterprises are **often based on impressions made during direct interactions** with potential partners, such as meetings and conversations.
- ★ However, our selections can be based on unwarranted biases, potentially leading us to make **suboptimal choices**.

RESULTS

1.PACO: A Large-scale Dataset of Partner Selection and Social Perception in Collaborative Interactions

PROTOCOL

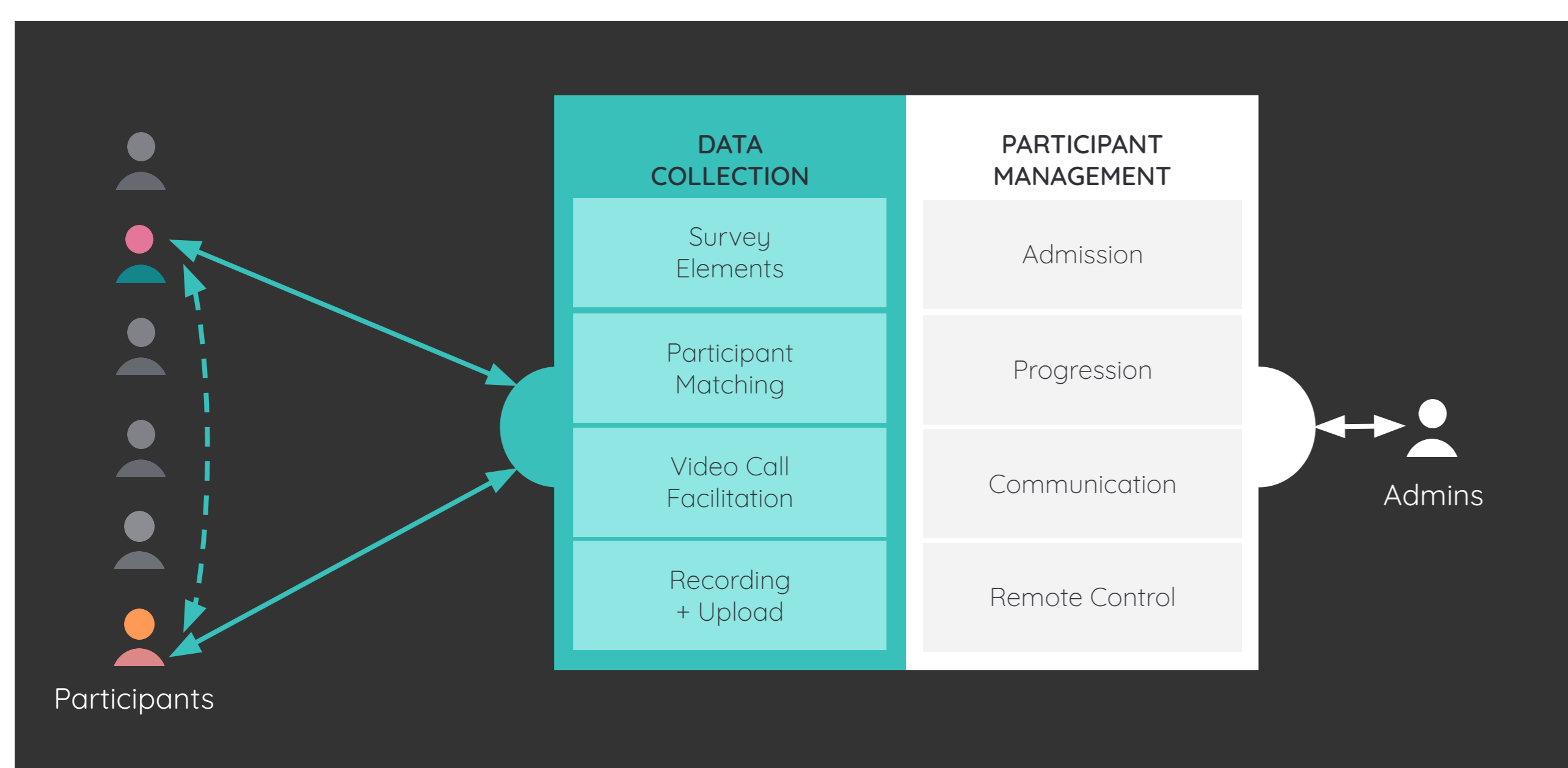


CONTENTS

- Recordings of video calls (i.e., first conversations & collaborations)
- Contextual/Prior Information (i.e., personality, mood)
- Person, Situation and Team perceptions (i.e. Cohesion, Warmth, Interdependence)
- Partner Selections, Collaborative and Cooperative Behavior

2.DAMO-VID: A Data Collection and Monitoring Platform for Video-based Online Interactions (WIP)

- ★ Development of an open-source platform for video-call experiments/data collection



3.Recognizing Perceived Interdependence in Face-to-Face Negotiations

- ★ Approach for the automatic recognition of interdependence perceptions from nonverbal behavior in dyadic settings from video.
- ★ Empirical exploration of the feasibility to recognize specific Interdependence Perceptions (e.g. Power, Mutual Dependence, ...) from self/other behavior.

