

# Appraisal in Human-Robot Collaboration

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## Abstract

Don't know yet!

## Introduction

- SharedPlans theory.
- Appraisal theory and social context.
- The necessity for identifying underlying processes of the collaboration.

## Example Scenario

Two short interactions of the robot and the astronaut (to be used throughout the paper).

## Affective Motivational Collaboration Theory

General Theory Here and the figure with highlighted appraisal.

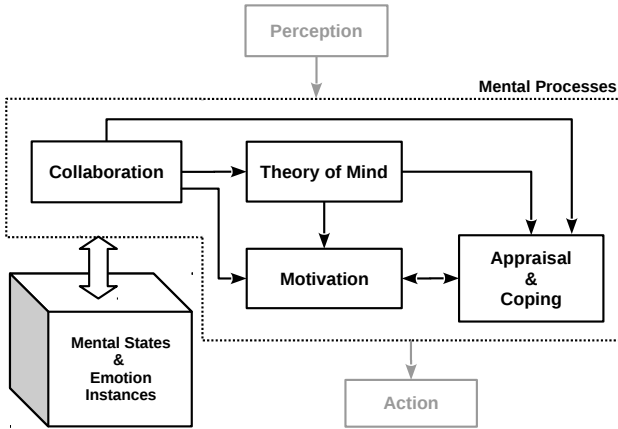


Figure 1: Computational framework based on Affective Motivational Collaboration Theory (arrows indicate primary influences between mechanisms).

## Mental States

General description of mental states.

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**Belief:** Our description and the definition of attributes.

**Motive:** Our description and the definition of attributes.

**Intention:** Our description and the definition of attributes.

**Goal:** Our description and the definition of attributes.

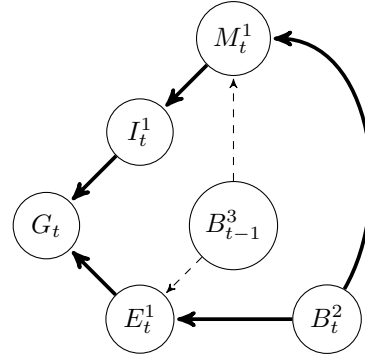
**Emotion Instance:** Our description and one or two examples.

## Appraisal Mechanism

Short paragraph to describe appraisal mechanism and its role in overall system.

## Mental Graph

A graph illustration of mental state and a clear short and descriptive walkthrough example.



## Appraisal Processes

A short paragraph to describe what variable we have chosen and why.

## Relevance

Description + Algorithm + Example

## Desirability

Description + Algorithm + Example

## Expectedness

Description + Algorithm + Example

## **Controllability**

Description + Algorithm + Example

## **Conclusion**

Discussion about the application of the appraisal process in different mechanisms in our computational theory including Motivation mechanism.