



## Methods

- $N=75$  persons (50F, 24M, 1 NA,  $M_{Age} = 28.27$ ) rated 54 pictures of cinematic depictions of ETs on different scales (1-5)
- Prediction of *trustworthiness* as central outcome
- Prior  $\mu = 0, SD = 1$

## Findings

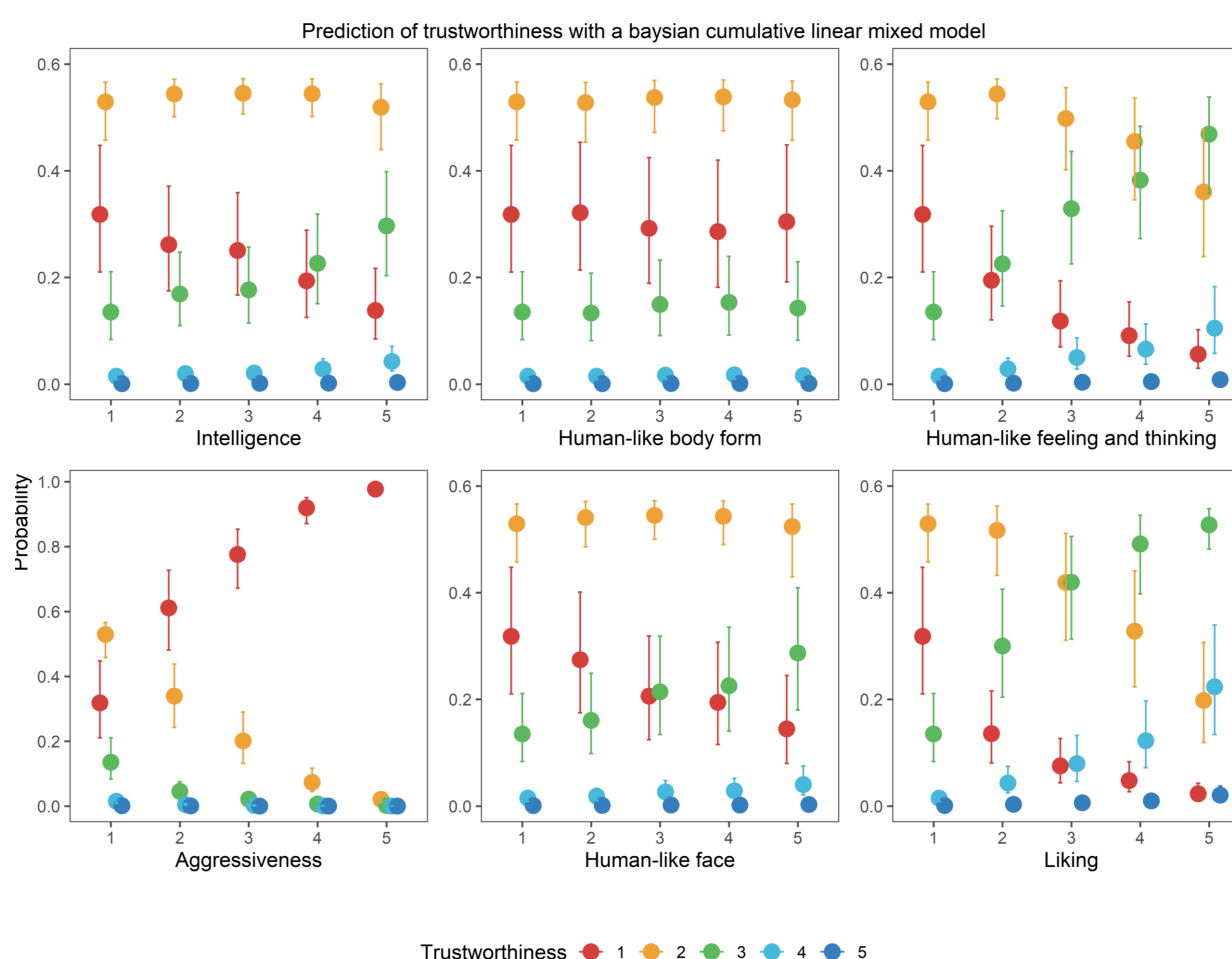
- Psychological similarity is more important than physical human-likeness
- Liking as strong positive, aggressiveness as strong negative predictor
- Intelligence plays subordinate role

## Limitations

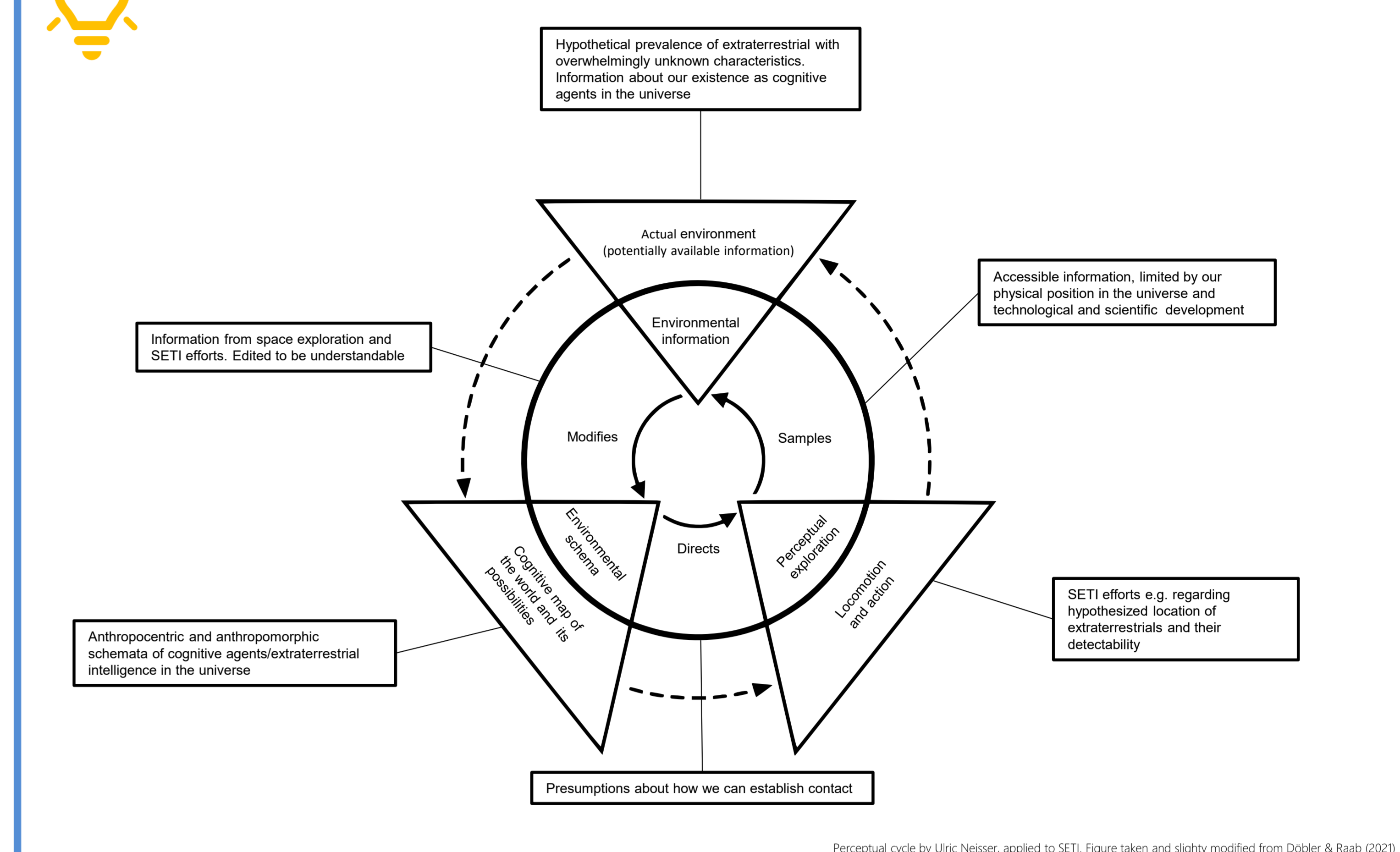
- Comparability between images
- Missing values due to decision not to answer ( $M = 5.30\%, SD = 0.54$ )

## Results

- 49/75 (65%) participants considered the existence of extraterrestrial intelligence as likely or very likely



## SETI underlies the same cyclic process as everyday perception



## How we think about them...

Further research on how we think about ET



Kwon et al. (2018): Hypothetical reaction on discovery of microbial ETI tends to be positive	Bains & Petrowski (2021): Astrobiologist adjust probability assessment of ETI but not in a Bayesian way	Routledge et al. (2017): Paranormal belief in ET satisfy the search for meaning
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# Exopsychology

How do *we* think extraterrestrials?

→ Empirical focus on **human** beliefs, attitudes, and representations

# EXOBZΛCμO|OΔλ

How do *extraterrestrials* think?

→ Theoretically investigating cognition, behavior, affects, and motives of **extraterrestrial agents**

...carves the modalities of contact

- **Exopsychology** rejects the notion of intelligence due to the concept's inadmissible anthropocentric normativity. Yet, it acknowledges the importance of it when thinking and talking SETI and extraterrestrials
- Employs *admissible* over *inadmissible* anthropocentrism to generalize our condition to the stars but trades definitional acuity for applicability

Extraterrestrial intelligence → Extraterrestrials seen as:

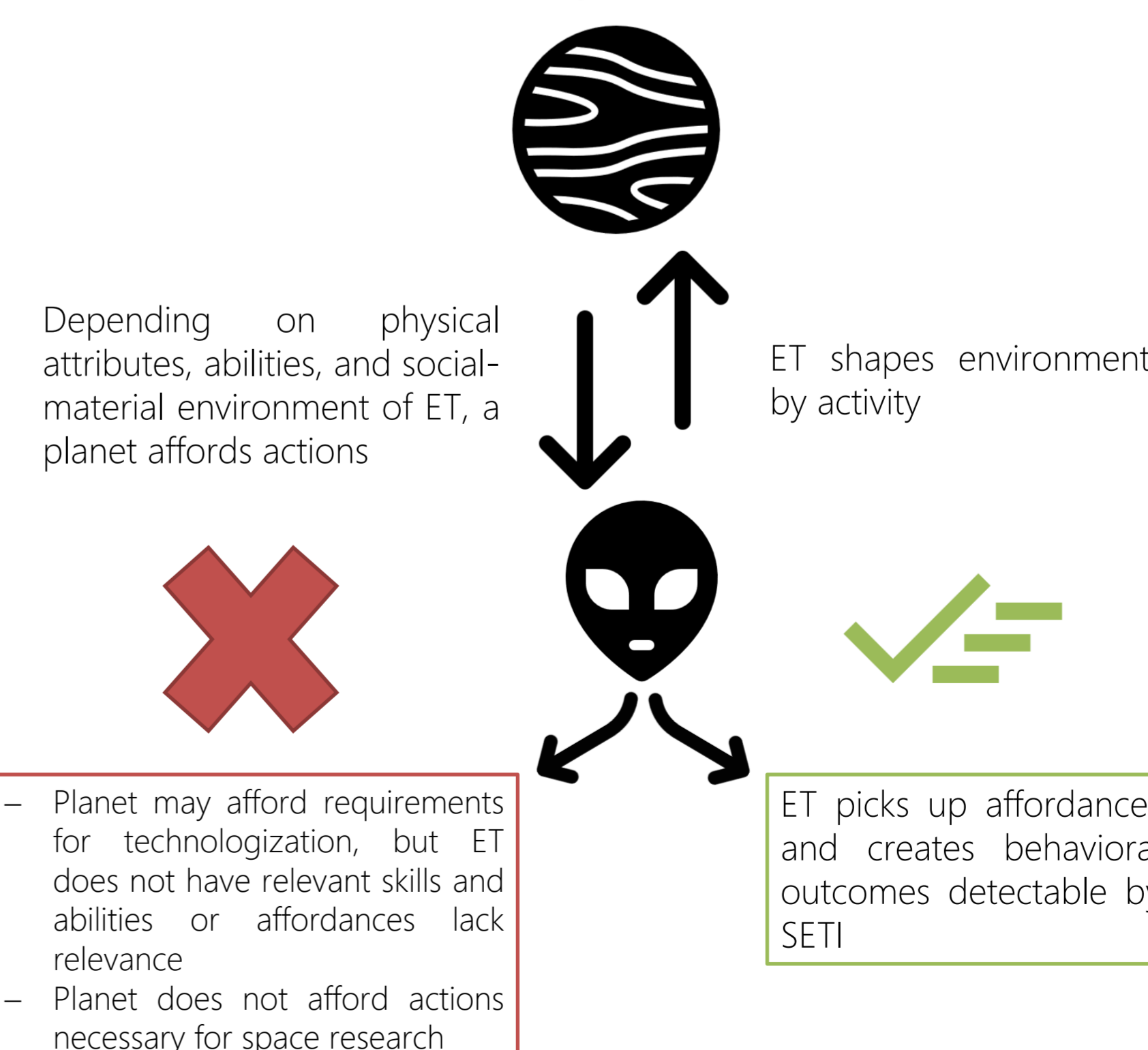
High-cognitive	Agents
<ul style="list-style-type: none"> <li>- Cognition as basic mental processes to organize, employ and utilize knowledge</li> <li>- Continuum, inherent to every instance of life</li> <li>- „Higher“ cognition: Thinking about thinking</li> <li>- Meta-cognitive execution of behavioral and mental protocols and monitoring the outcomes</li> </ul>	<ul style="list-style-type: none"> <li>- „Behavior governed by thought“<sup>[2]</sup></li> <li>- Purposefully interact and engage with the environment</li> </ul>

## CENTRAL PREMISES

### Implications

- SETI is first and foremost looking for higher cognition and agency – not plain intelligence
- Responsible for any technosignature, extraterrestrials must utilize their knowledge to purposefully adapt the environment to their demands
- Success of any first contact requires reciprocal psychological compatibility

## One small step further



- Mere engagement is not enough. Necessary skills and abilities, depending on socio-material and individual characteristics to exploit multiple relevant affordances must be present to engage with space research
- Organisms respond to relevant affordances to improve their grip on the situation and reduce an internal disequilibrium<sup>[3]</sup>
- Open questions:
  - Which environmental and individual features bring forth relevant affordances for technology and space research?
  - How can METI create a relevant affordance and evoke action readiness to respond?
  - Which quality has the internal disequilibrium?
- Think about yourself. Why are you interested in space and its inhabitants?
- What do you need to pursue your research?