

Stingy, Greedy, or Bad Lannister?

Selection for Specialized Cheater Detection Mechanisms in Humans

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Why exchange resources?

Division of Labor



What Makes Someone a Cheater?

Not paying a debt



Debt not Paid (Bad Lannister)

Wason Selection Task

(Cosmides & Tooby, 1992)

Rule: If someone gives you an eggshell, then you give them meat that same day.

Each card represents one day.

Which cards must be turned over to determine whether Tyrion cheated on any of these four days?

You gave
Tyrion nothing

Tyrion gave
you nothing

Tyrion gave
you meat

You gave
your
eggshell
to Tyrion

Why exchange resources?

Insurance policy



What Makes Someone a Cheater?

Being greedy



You

Tyrion has enough water

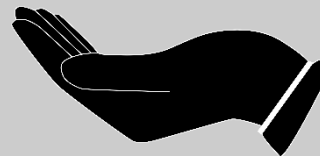


Tyrion



You

Tyrion asks you for water



Tyrion

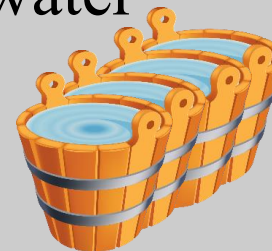
What Makes Someone a Cheater?

Being stingy



You

Tyrion has a surplus of water



Tyrion



You

Tyrion doesn't give you water



Tyrion

Greediness Wason Selection Task

Rule: If someone is successful at hunting on a particular day, then they don't ask for meat on that day.

Each card represents one day.

Which cards must be turned over to determine whether Tyrion cheated on any of these four days?

Tyrion was
successful
at hunting

Tyrion was
unsuccessful
at hunting

Tyrion asked
you for
meat

Tyrion didn't
ask you
for meat

Stinginess Wason Selection Task

Rule: If someone is successful at hunting on a particular day, then they give some of their meat to someone who asks for meat on that day.

You are unsuccessful at hunting on four different days, so you ask Tyrion for some meat on each of these days.

Each card represents one day.

Which cards must be turned over to determine whether Tyrion cheated on any of these four days?

Tyrion was
unsuccessful
at hunting

Tyrion was
successful
at hunting

Tyrion gave
you meat

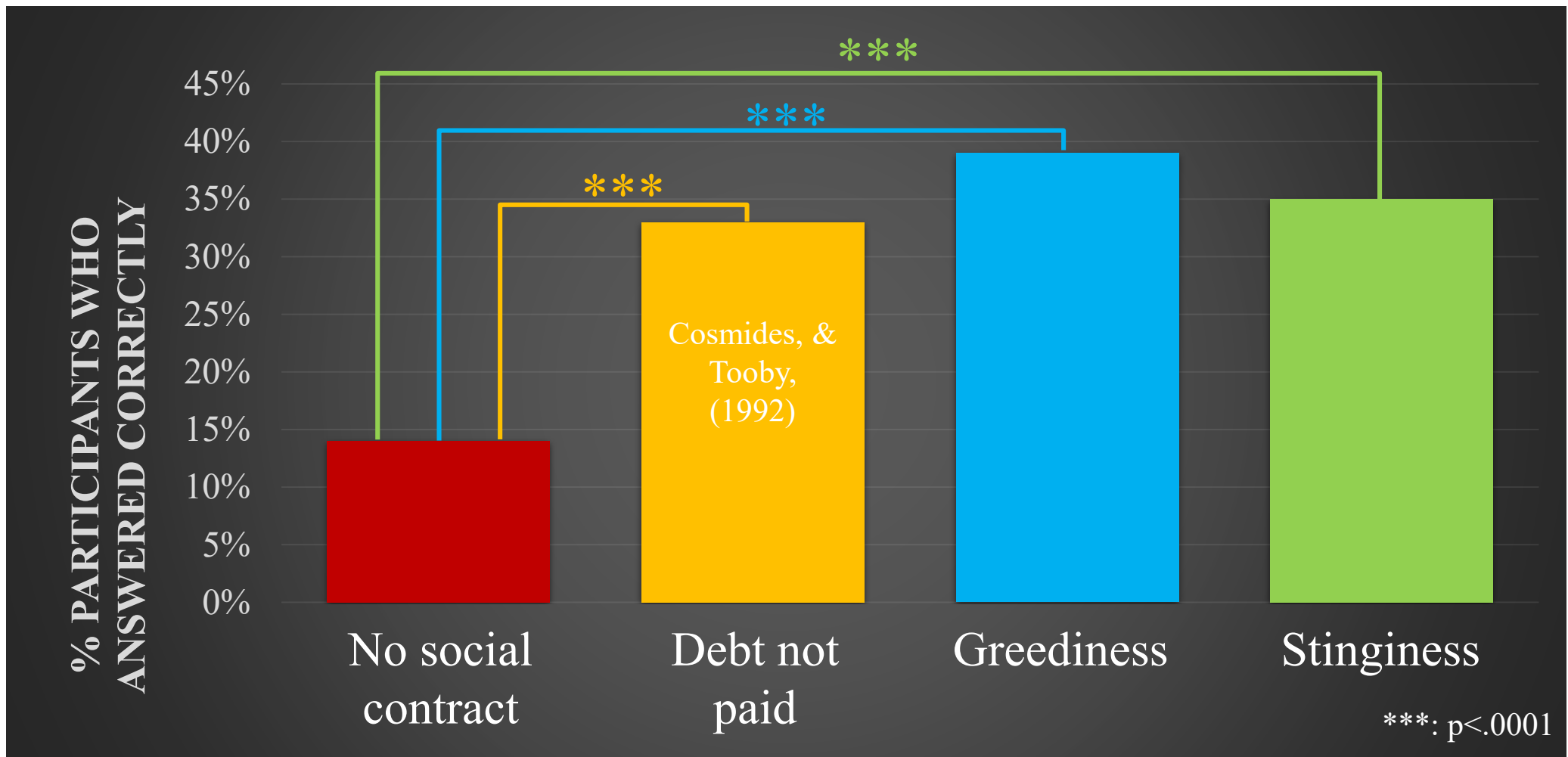
Tyrion didn't
give you
meat

Study 1

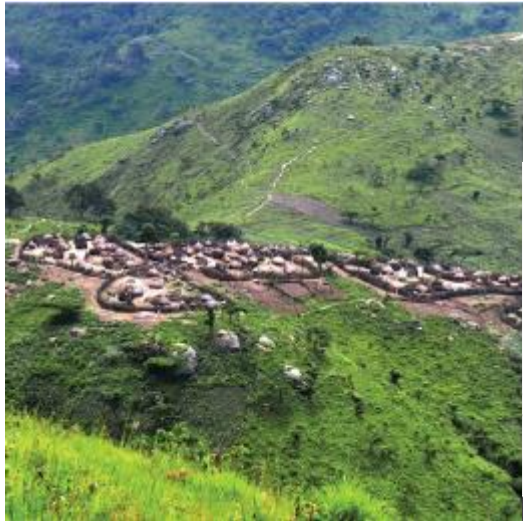
- Within-subjects study
 - US Mturk participants
- 4 Wason selection task rules:
 - No social contract →
 - Debt not paid →
 - Greediness
 - Stinginess

Cosmides,
& Tooby,
(1992)

% Strict Correct Responses (selecting both correct cards and no others)



Are Greediness and Stinginess Detection Unique to Western Society?



Ik, Uganda (Cathryn Townsend)
Hunter-gatherers/sometimes also rely on farming
Reputation for not helping each other



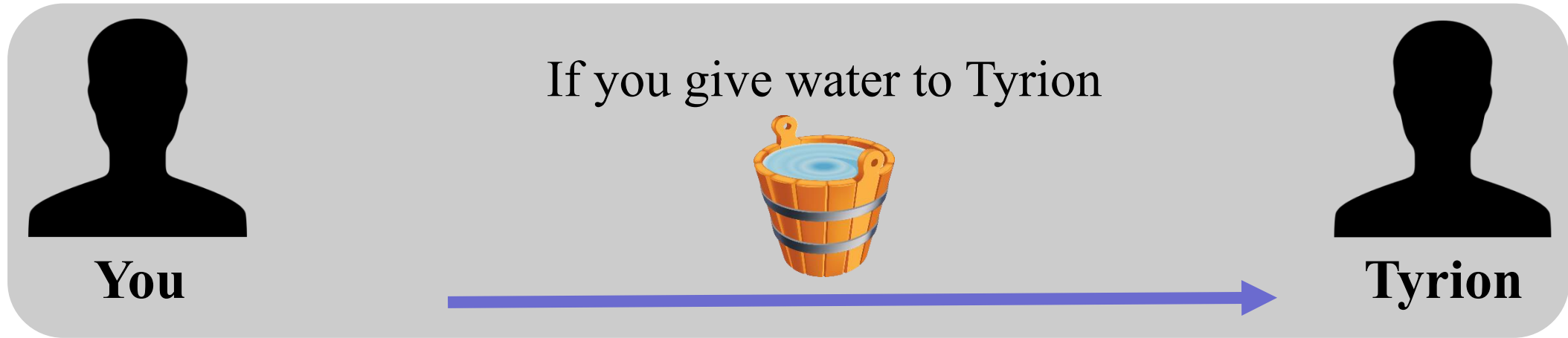
Hadza, Tanzania (Colette Berbesque)
Hunter-gatherers

Pictorial Detection Task

Designed a cheater detection task that:

- Apt for non-literate populations (Sugiyama et al., 2002)
 - Reduce cognitive load
 - Make it sufficiently engaging
 - Picture-based
- Avoid confounding curiosity with incorrect answers

You want to find out whether the following rule has been violated:



Rule: “if you give water to Tyrion, then Tyrion gives you meat”



You

You gave water to Tyrion on this day



Tyrion

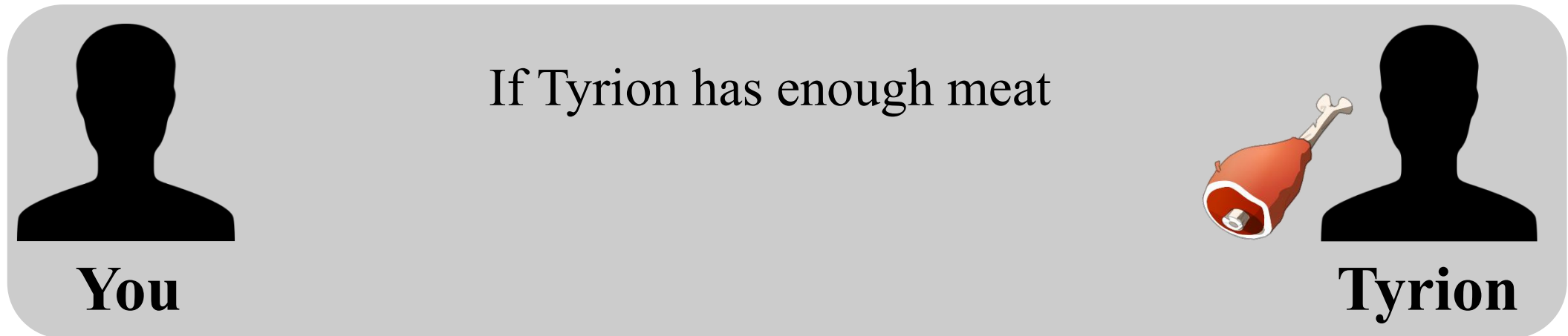
Did Tyrion violate the rule on this day?

Yes

Maybe

No

You want to find out whether the following rule has been violated:



Rule: *“if Tyrion has enough meat, then Tyrion doesn’t ask you for meat”*



Did Tyrion violate the rule on this day?

Yes

Maybe

No

Study 2

- Within-subjects study
 - US Mturk participants
- 4 Pictorial Detection Tasks:
 - No social contract →
 - Debt not paid →
 - Greediness
 - Stinginess

Cosmides,
& Tooby,
(1992)

% Strict Correct Responses (getting all questions correct)



Conclusions and Future Directions

- Cognitive mechanisms for detection of:
 - Debt not paid (Cosmides & Tooby, 1992)
 - Greediness
 - Stinginess
- Are these different specialized detection mechanisms?
 - Different resources
 - Different targets

Thank you



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You want to find out whether the following rule has been violated:



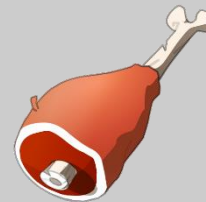
You

If you leave water by a tree



You

Then you find meat



You want to find out whether the following rule has been violated:

