



Generosity and Forgiveness:
Their Functional Value in a “Noisy” World

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Behavioral definitions
(based on the “games” literature):

Generosity: Behaving more cooperatively than the other did.

(Forgiveness: Behaving cooperatively in response to a partner’s noncooperative behavior.)

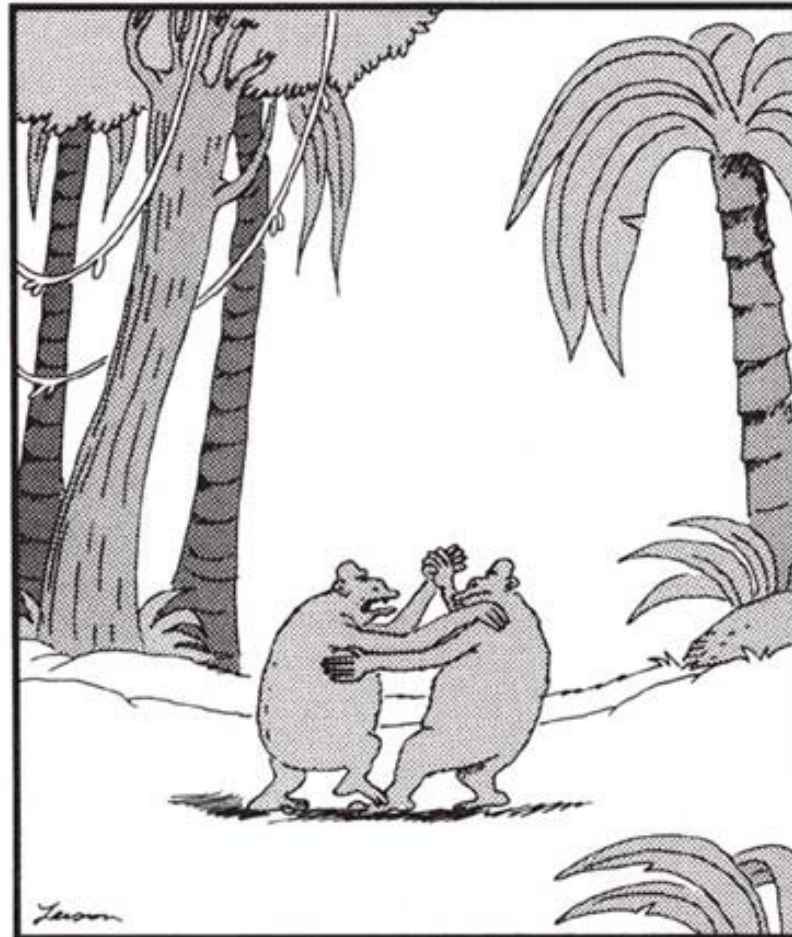


Noise refers to unintended errors that affect interaction outcomes.

Noisy relationships are relationships that are prone to unintended errors in interaction.

As such, noisy relationships may often give rise to *misunderstanding* and *distrust* – especially when one provides the partner with outcomes that are more negative than intended.

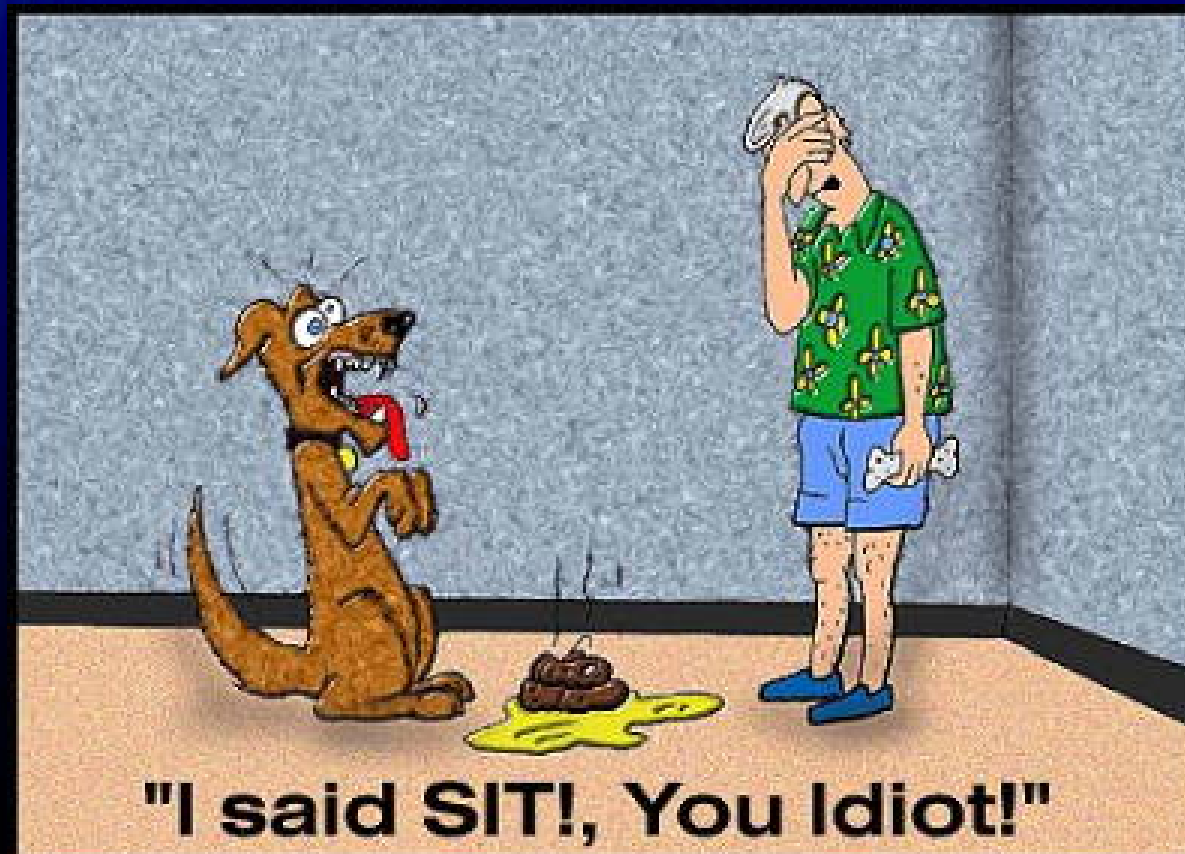
Outcomes for the other are perhaps less good than intended



"I'm afraid you misunderstood. ... I said I'd like a mango."



Outcomes for the other are certainly less good than intended: negative noise





Goal of this presentation

(1) to illustrate the importance of **noise** – which is strongly linked to uncertainty

(2) to illustrate the importance of “**representatives**” as decision makers: do they think as individuals?

Both issues have hardly been examined!



Interdependence Theory (Kelley et al., 2003) assumes that:

Understanding situations is essential to understanding interaction and relationships...



To understand situations, one needs to understand at least:

[a] dependence (and mutuality of dependence)

[b] interests (corresponding versus conflicting)

[c] information availability



[c] information availability

Imperfect information re' the partner's preferences
("I thought you'd like a tango")

Imperfect information re' discrepancies between
intentions and outcomes
("why doesn't he respond to my email?")

How much generosity is good?



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What is the optimal balance of

- reciprocity** (doing exactly as much as the partner)
- generosity** (doing more than the partner)
- stinginess** (doing less than the partner)





Evolution of Cooperation (“classic”)

Tit-For-Tat (Axelrod, 1984)

- Nice
- Forgiving
- Retaliatory
- Clear

But Tit-For-Tat does not repair....



Noise: Unintended errors that affect interaction outcomes

Valence: Positive versus negative

Frequency: How often?

Intensity: How strongly?



Potential effects of (negative) noise:

- Confusion and misunderstanding:

“why didn’t she answer my email?”

- Distrust: “she does not care about me!”

- Negative Reciprocity:

“next time, I make her wait as well”



How do we examine the effects of noise?

Two paradigms – coins, parcel delivery

Noise = you want to give 5 coins but the computer changed your decision by subtracting 2 coins

Other's "strategy: Gives exactly as much as s/he received (reciprocity) or gives a bit more (generosity)



You have given the other 7 blue coins.

The other has given you 5 grey coins.

0	1	2	3	4	5	6	7	8	9	10
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OK

Parcel Paradigm: Part A



The other is delivering your parcel. It depends on the other how much time this will take. A moment please!



Elapsed time:	2 seconds	(Total time is 25 seconds).
Earned by OTHER	1,20 euro	
Lost by YOU	2,80 euro	(Total budget of this round is 35,00 euro)

Parcel Paradigm: Part B



Click on the red arrows to move through the city

Seconds: 8

Earned by YOU 4,80 euro
Lost by OTHER 11,20 euro

Manipulation of Partner's Strategy

- TFT+1 behaves just a bit more cooperatively than the partner did (i.e., reciprocity with a bit of generosity) (or delivers on average 4 seconds quicker than the participants does)
- TFT reciprocates perfectly (no generosity).



Manipulation of Noise

Noise (absent versus present)

(Noise means that the computer is accidentally changing your decision; the actor is informed about noise, the recipient is not)

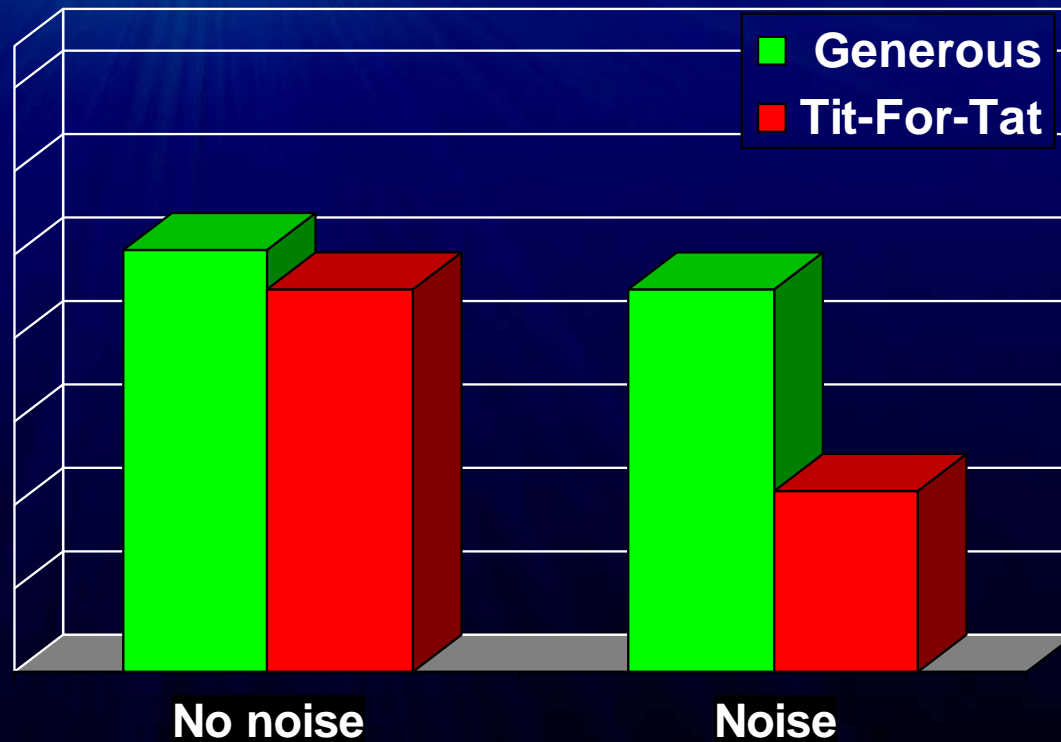
Noise valence (negative noise)

Noise intensity (minus 2 coins)

Noise frequency (8 of 53 trials, 15%)



What we find – in several studies



- Cooperation
- Trust
(Benign intent)

Klapwijk & Van Lange (in press, *Journal of Personality and Social Psychology, JPSP*)

Tazelaar, Van Lange, Ouwerkerk (2004, *JPSP*); Van Lange, Ouwerkerk & Tazelaar (2002, *JPSP*)

Does Retaliation Work?

- Only two choices: Cooperate vs Not Cooperate
- 50 interaction trials
- At trial 9, the preprogrammed partner always made a noncooperative choice
- Noise was not introduced – “trembling hand.”

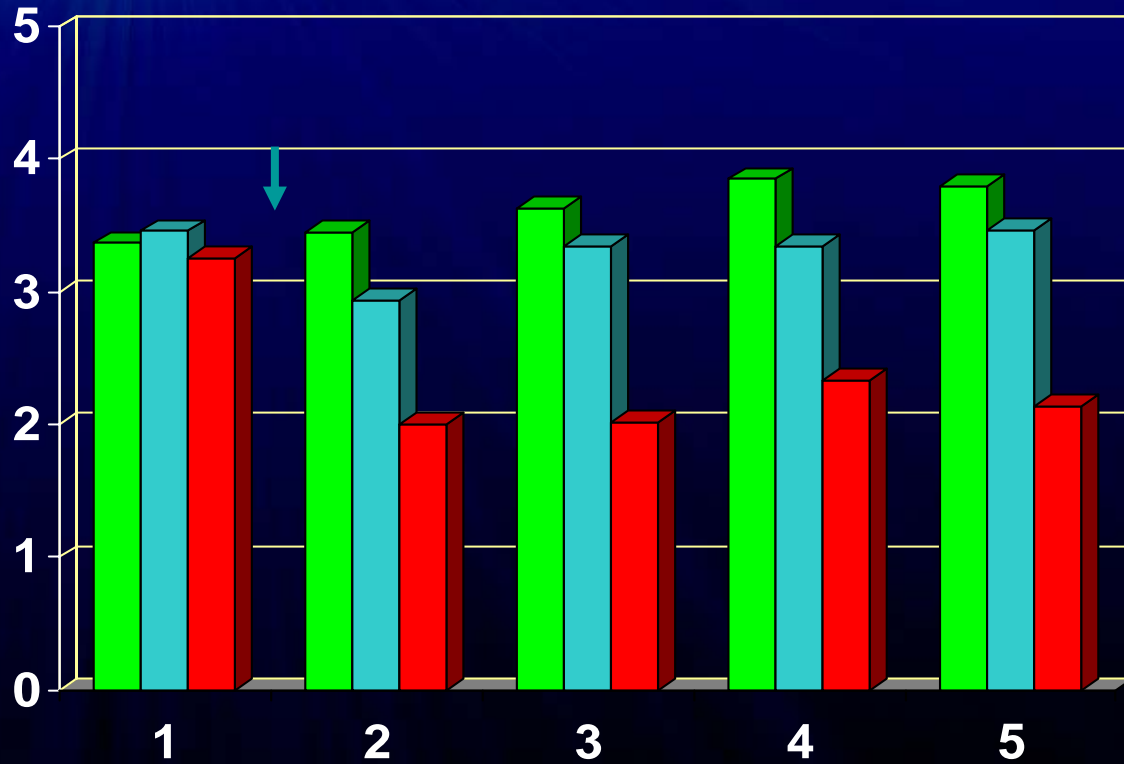


Forgive versus Retaliate



- Forgiving Tit-For-Tat:
responds noncooperatively only when the partner has made two noncooperative choices in a row
- Normal Tit-For-Tat:
responds noncooperatively after each noncooperative choice
- Retaliatory Tit-For-Tat:
responds noncooperatively twice after only one noncooperative choice by the partner

Cooperation



↓ Noise

■ Forgiving

■ Normal

■ Retaliatory



Noise is everywhere

But often the relevant actors
are not just individuals,
but representatives of groups

What kind of mindset do representatives have?

(This question has hardly been examined!)





Competitive mindset hypothesis

(1) reps hold stronger self-regarding and competitive goals

(2) reps believe that other reps hold stronger self-regarding and competitive goals



Manipulated “*social role*”

between representatives (VU vs UvA), individuals,
group members (VU vs UvA; control).

DVs: *interaction goals*

(MaxOwn, MaxRel, MaxJoint, MaxOther, MinDiff)

Interaction goals



Ring measure of social values:

24 choices
between two
divisions of
valuable points
between **self**
and **other**





Interaction goals (or social decision rules)

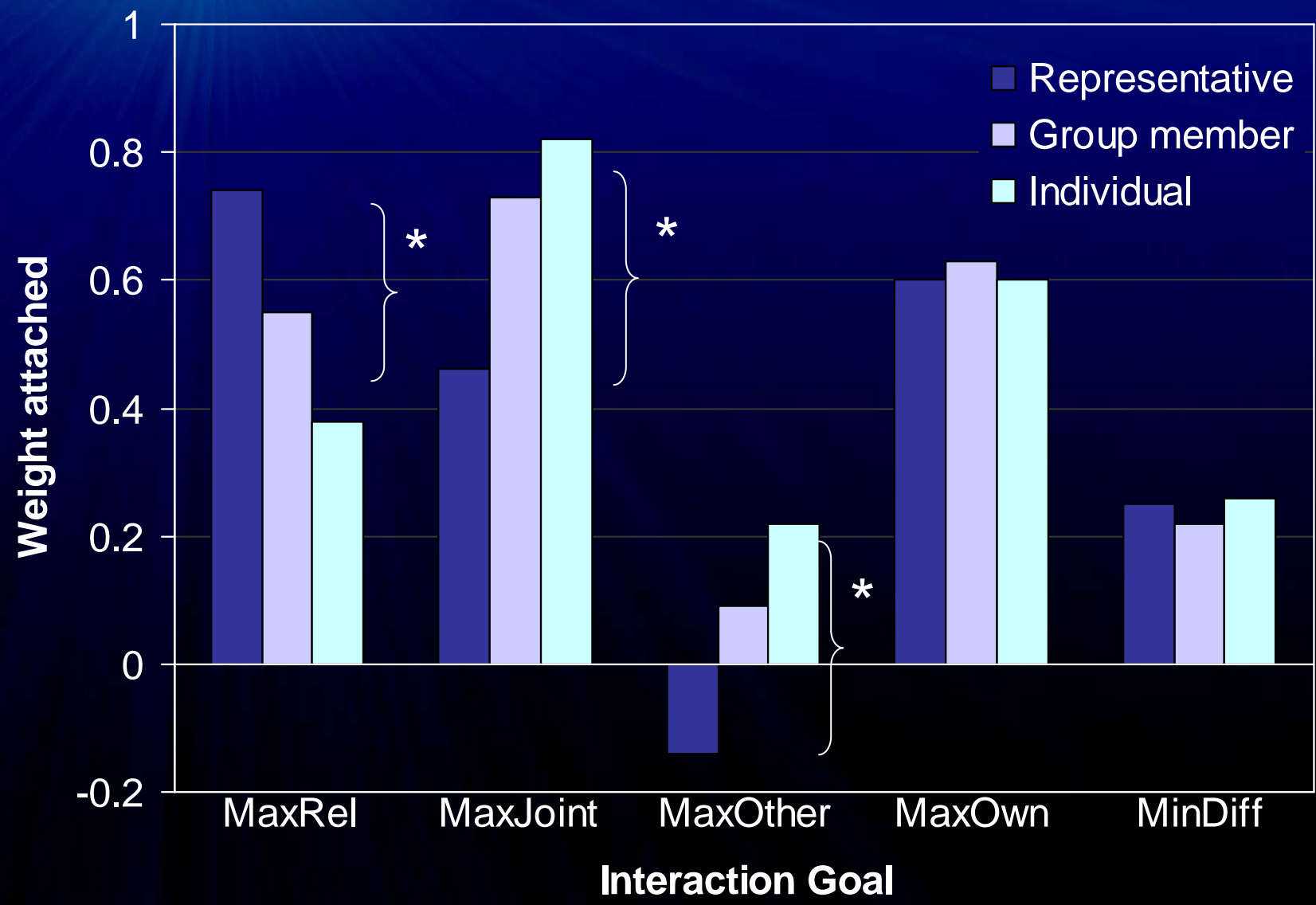
MaxOwn = weight assigned to OWN outcomes

MaxOther = weight assigned to OTHER's outcomes

MinDiff = weight assigned to equality in outcomes
(MINimization of absolute DIFFerences)

MaxJoint = weight assigned to JOINT outcomes
(MaxOwn + MaxOther)

MaxRel = weight assigned to RELative advantage over others
(MaxOwn – MaxOther)



Expectations

Do representatives hold more competitive expectations of one another?



Expectations

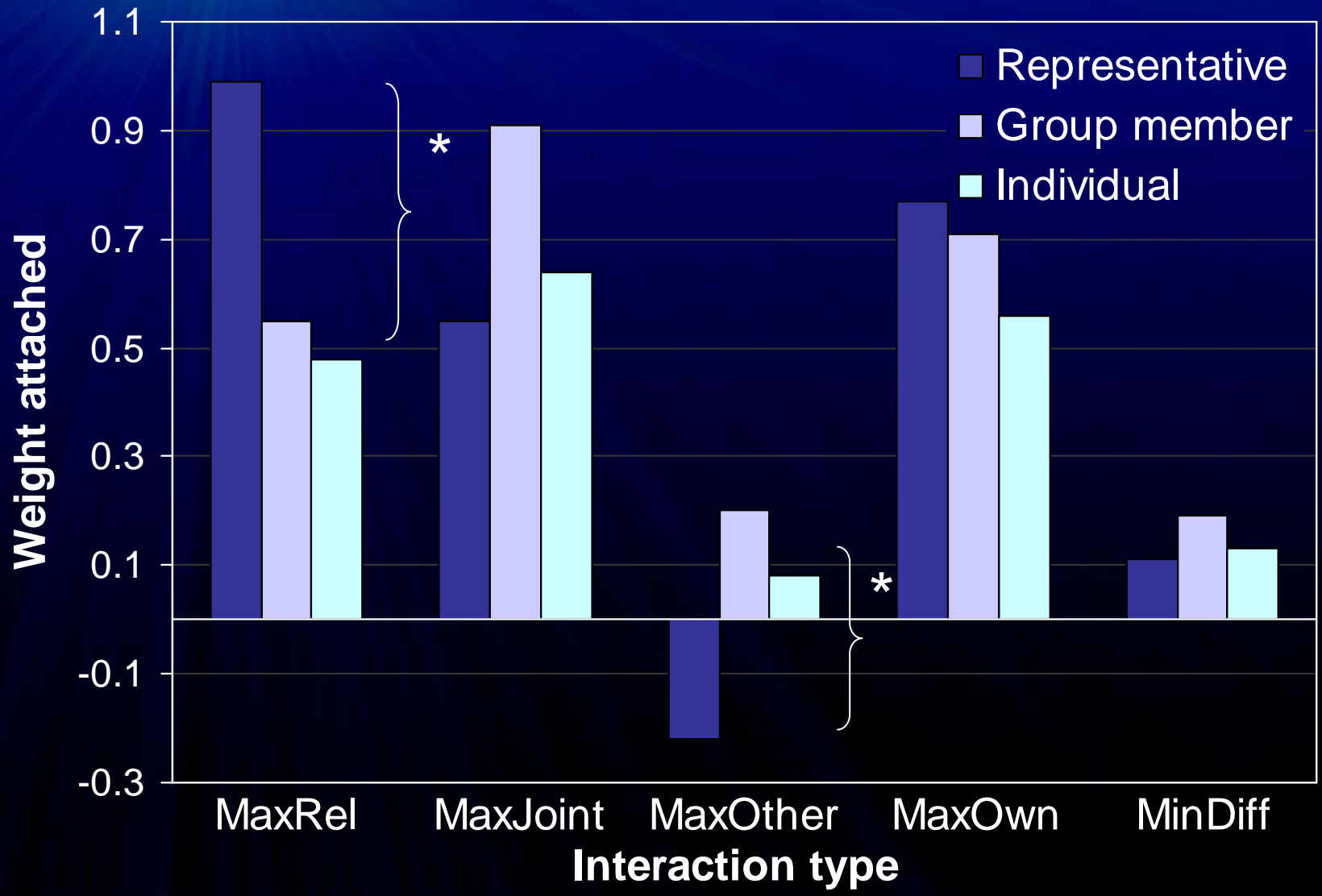
Adapted ring measure of social values

24 choices
between two
divisions of
valuable points
between **self**
and **other**



Participants choose the alternative they would expect their partner to choose in this situation





Interactions between representatives:
climate of distrust, competitive interactions?

Manipulated
social role

between representatives (minimal
group), individuals

Noise (present, absent)

DV: *level of cooperation*

35-round social dilemma task

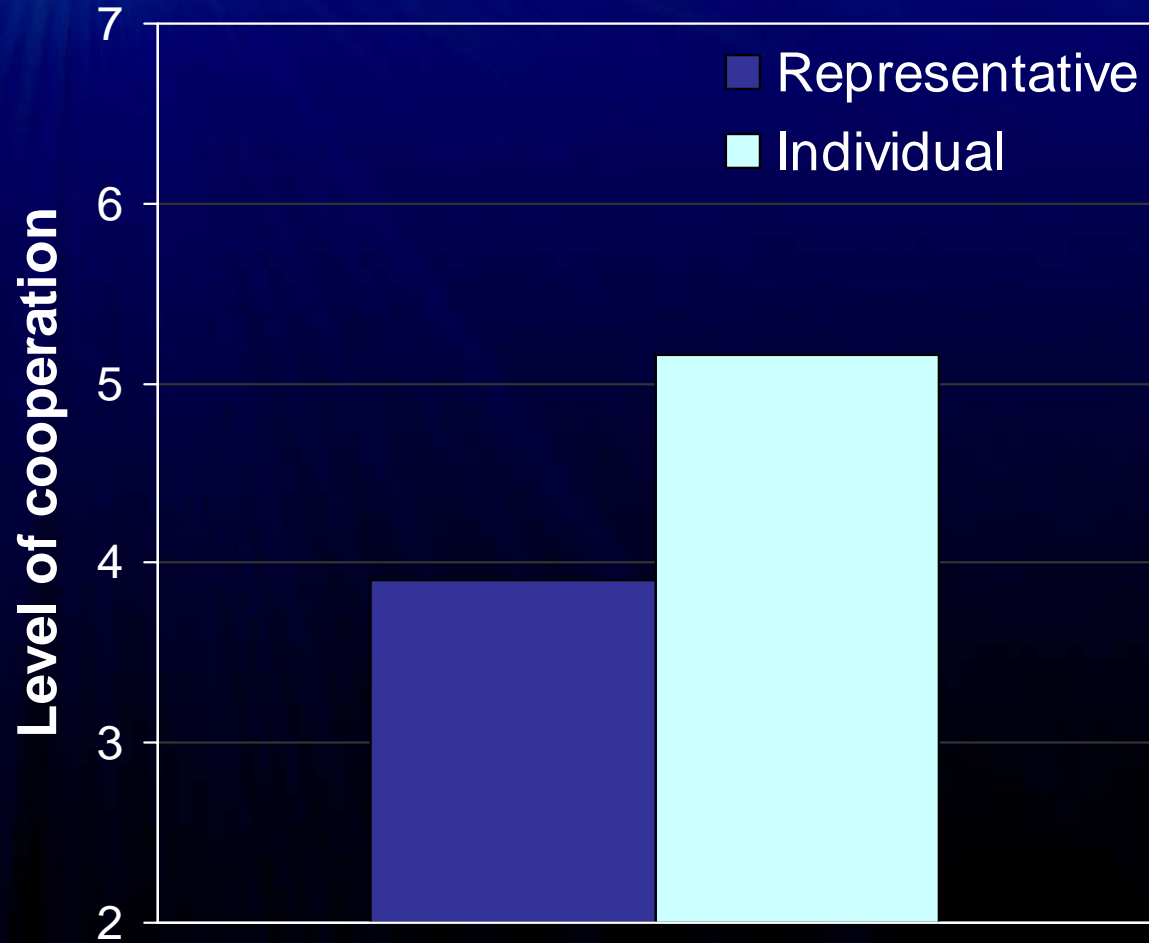




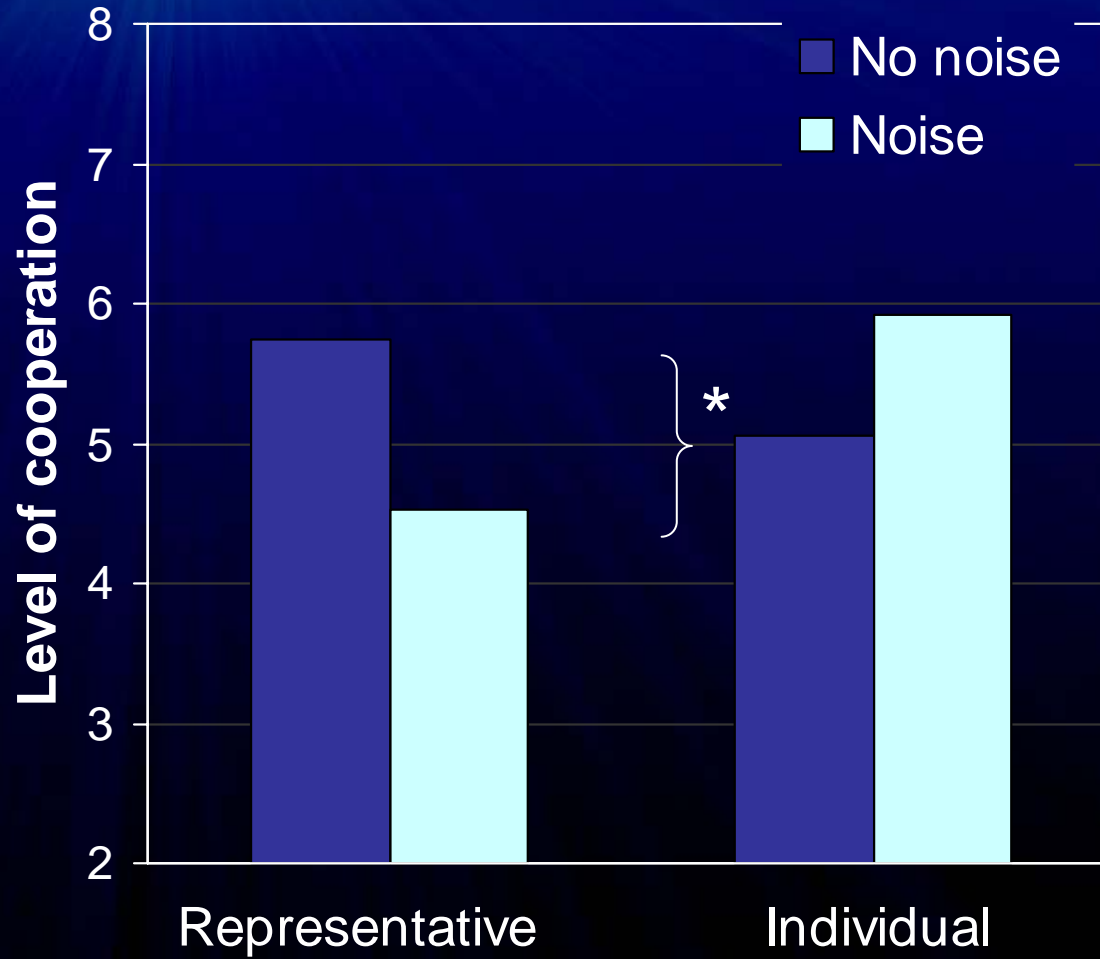
Level of cooperation in first choice
(in the absence of noise and in the absence of
information about the other's choices).

Level of cooperation across the 35 trials as a
function of noise (versus no noise)

First round – indicator of “trust”



Level of cooperation across 35 rounds





Conclusions

1. Establishing stable forms of cooperation is complicated by noise (and uncertainty): noise undermines cooperation.
2. Generosity works – not only through reciprocity (“what goes around, comes around”), but also through trust-building to cope with noise.
3. The undermining effect of noise is particularly relevant for representatives – who often make decisions “for us”.



Conclusions (continued)

4. Representatives are prone to hold a competitive mindset: I want to compete with the other rep., who is out to compete with me.

Potential mechanisms:

Accountability

Responsibility

Intergroup motivation/beliefs/morality

Major Challenge:

How can we enhance trust and cooperative motivation in representatives?

Competitive mindset may well be quite persistent.



Two Recommendations

1. Optimize clarity (open exchange of information) as it may reduce noise.

(sometimes informal, “unusual” settings may help)





Two Recommendations (continued)

2. Competitive mindset sometimes can be “used” to the benefit of the society.

Install the Cleanest City Award!



Thank you!



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