MAX-PLANCK-GESELLSCHAFT

How norms can
generate conflict

Fabian Winter
MPI Jena

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Experiment 2

Discussion

How norms can generate conflict
A static and dynamic experimental analysis

Fabian Winter∗

Max-Planck-Institute of Economics, Jena

∗ in collaboration with Heiko Rauhut & Dirk Helbing

December 1, 2009

Overview

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- The classical perspective — Social norms generate coordination and cooperation
- I will challenge this claim by demonstrating how social norms can also generate conflict
- Exemplify my claim with experimental data on
  - the *existence* of normative conflict (Ultimatum Game, together with Heiko Rauhut and Dirk Helbing)
  - the *evolution* of normative conflict (bargaining in repeated interactions, together with Heiko Rauhut)

- Problem of **norm emergence** garnered lion's share of attention
  (Ullmann-Margalit, 1977; Bicchieri, 1990; Coleman, 1990; Voss, 2001, Posner 2000)

    - **Shadow of the future**
      (Taylor 1976; Axelrod, 1984, Fudenberg & Maskin, 1986, Ellickson, 1991)
    - **Altruistic punishment**
      (Yamagishi, 1986, Heckathon, 1989; Ostrom, 1992; Fehr & Gächter, 2002)

$\Rightarrow$ Social norms enhance cooperation

A perspective of normative conflict

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- All these routes to cooperation require necessary precondition

- Actors share similar social norms

- *However:* Numerous normative alternatives

- Actors can have the best intentions; nevertheless, behavior perceived as improper

- Definition: A *normative conflict* is a conflict which is caused *because* people adhere to social norms

⇒ Social norms can generate normative conflict
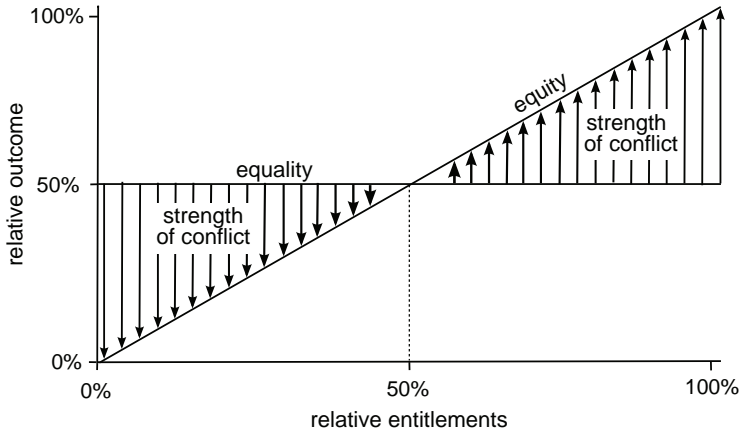
The existence of normative conflict

$\Rightarrow$ Can heterogeneity of norms be shown in the lab?

$\Rightarrow$ Does heterogeneity of norms lead to normative conflict?

Recruitment:

- Participants recieved a 7 pages long Wikipedia article about the Westminster Palace *five days in advance*
- Participants were informed that their chance to earn money also depends on how well they prepare this text

In the lab:

- 20 question quiz on the Westminster Palace
- 1 Euro for each question

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Design, cont'd

- 92 undergraduate students of University of Leipzig participated in 5 sessions
- two participants bargained over the money they earned in the quiz
- we used the Ultimatum Game (SPE: offering and accepting 0)
- decisions were elicited allying the "'**strategy vector method**'"
- the game was one-shot and anonymous (2 seperated PC-labs)
- one relevant offer is randomly implemented and is accepted if $offer_i \geq acceptance_j$

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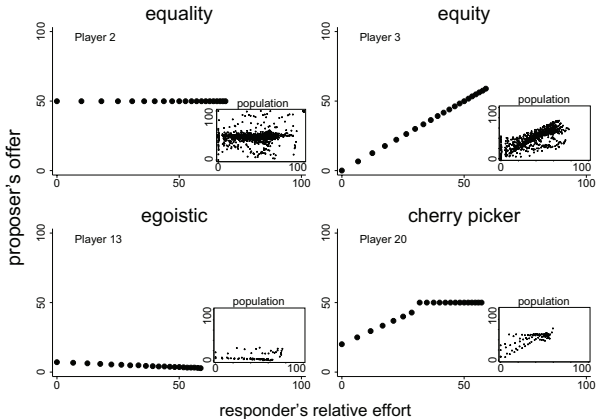MPI Jena

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The conflict due to different norms is more prevalent than the conflict due to a different norm/egoism weighting
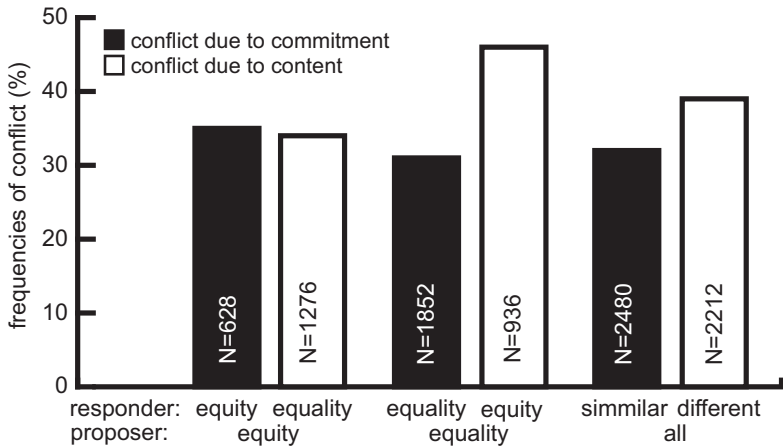
Discussion 1

- there is considerable heterogeneity in the adherence to social norms of justice
- there is a high magnitude of normative conflict

  $\Rightarrow$ compared to "normal" Ultimatum Games the rejection rates are remarkably high (see Güth, JEBO 1995)
- The conflict due to different norms is more prevalent than the conflict due to different contents

However:

- the ultimatum game is a static snap shot of an interaction
- usually, we have the chance to solve normative conflicts in repeated interactions
- thus, conflicts can diminish (or entrench) in repeated interactions
- the normative conflict has an important *dynamic* component

The evolution of normative conflict

$\Rightarrow$ Do more norms lead to more and longer conflicts?

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- Experiment 2 takes advantage of the findings in Experiment 1
- Now:
    - we extend the bargaining process
    - introduce costly delays
- we apply a variation of the Rubinstein alternating offers model (Econometrica, 1982) instead of the Ultimatum Game

- two player (1/2) bargain over a 'pie' of size 1 in several periods
  $T \in \{0, 1, \ldots, t, \ldots\}$
- at each t, both player offers some $x/y \in (0, 1)$
- both players accept or reject the other player's offer
- one offer is randomly implemented
- if the offer is accepted, the pie is split accordingly
  if the offer is rejected, we proceed to $t + 1$
- **Time is valuable:** The utility for the outcome of an additional period of bargaining is discounted by δ_i

$\Rightarrow$ There exists a SPE which dictates that agreement should be reached immediately $(t = 0)$ with players offering and accepting the fraction $\frac{\delta}{2}$

Design

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- 48 undergraduate students of University of Jena participated in 2 sessions
- subjects earn money in a real effort task (knowledge quiz on a previously received text)
- the players' outcomes of the quiz constitute the pie
- **part 1**: replicates the previous experiment with 3 normative cues
- **part 2**: five repetitions of simultaneous offers bargaining
    - every period, the pie is discounted $(\delta = 0.9)$
    - the game will be terminated if the pie is "too small" (less than 1 cent)
    - matching groups of 8 subjects
- both players give offers and acceptance thresholds in every period
- one offer is randomly implemented and is accepted if *offer$_i$* $\geq$ *acceptance$_j$*, otherwise we proceed to period $(t + 1)$

Experimental conditions

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Three treatments, implementing increasing numbers of normative cues

- *C* (control): the real effort task is not connected to the pie ("manna condition")
- *E* (effort): a real effort task is used to produce the pie
- outlook: *F* (efficiency): subjects are randomly assigned to different efficiency factors ϵ_i regarding the value of their contribution to the common pie ($\epsilon_1 = 1, \epsilon_2 = 3$)

$\Rightarrow$ **The more "normative cues", the stronger the normative conflict measured by bargaining periods.**

Preliminary Results

Exemplary Interactions

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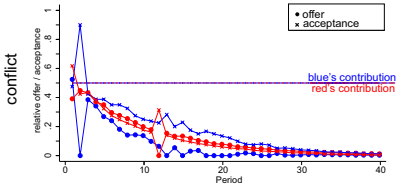
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C-Treatment (homogeneous endowments)

E-Treatment (heterogeneous endowments)

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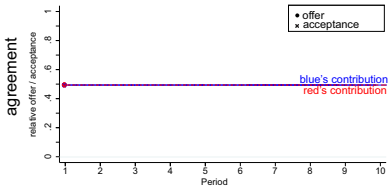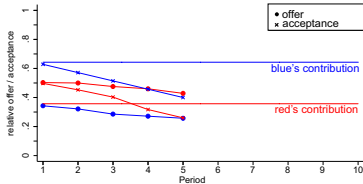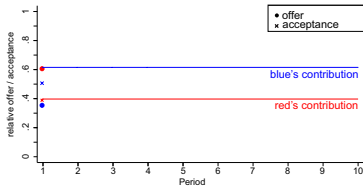Discussion

Discussion

Probability of severe conflict

	long bargaining (≥ 3)		long bargaining (≥ 3)	
	b	se	b	se
treat == E	.7832204*	.3788381	.8408002	.5278755
Experience			.1597971	.164084
Constant	-1.784478***	.320926	-2.264151***	.6018947
Level 1:				
Subject (N=48)				
Constant	.2186196	.849808	.0000173	1.831485
Level 2:				
Matching Group (N=6)				
Constant			.4303889	.3714095
Observations	192		192	

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- the existence of multiple, mutually exclusive norms significantly increases the magnitude of normative conflict

- once a tipping point is passed, conflict becomes very costly

- Positive aspects of cultural diversity
    - Adjustability to different situations and changing conditions
    - Potential for innovations
    - "Wisdom of crowds"
- Dark side of cultural diversity: Normative conflict
    - Conflict among holders of equality and equity norms in ultimatum and dynamic bargaining games
    - "Altruistic", costly punishment of holders of different norms can lead to steady conflicts

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Thank you for your attention!

winter@econ.mpg.de

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| | (1) | (2) | (3) | (4) |
	Conflict	Conflict	Conflict	Conflict
Fixed effects				
treat==E	0.0607	0.0619	0.273^{*}	0.273^{*}
	(0.32)	(0.33)	(2.06)	(2.06)
Constant	0.605^{***}	0.604^{***}	0.451^{***}	0.451^{***}
	(4.40)	(3.73)	(4.56)	(4.56)
Random effects				
Level 1: Subject	-0.602^{***}	-1.843^{*}	-1.323^{***}	-11.66
	(-4.72)	(-2.21)	(-4.91)	(-0.00)
Level 2: Matching Group		-0.645^{***}		-1.323^{***}
		(-4.73)		(-4.91)
LR-test	4.33e-34	8.90e-33	0.00612	0.0433
Observations	192	192	190	190

t statistics in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$