

# **Why people withhold information: Information exchange as social dilemma**

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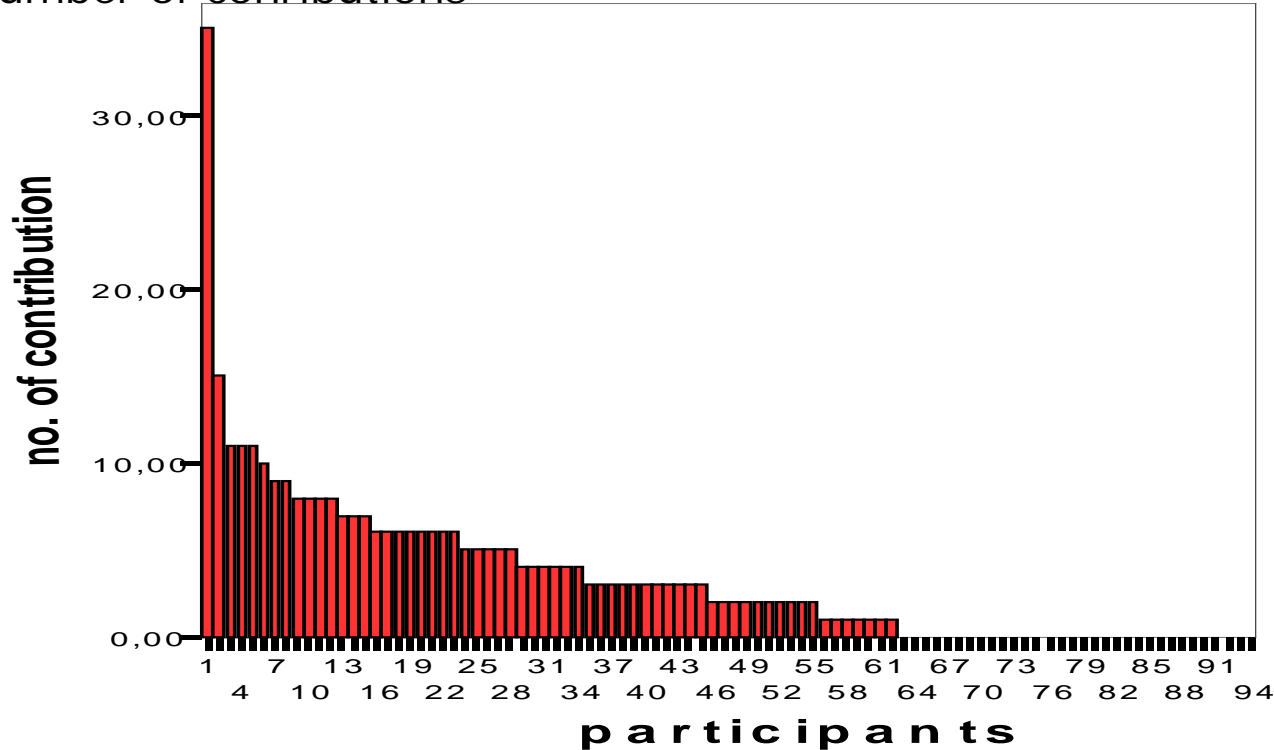


# Problem of Participation

Blog as means for supporting students in a lecture

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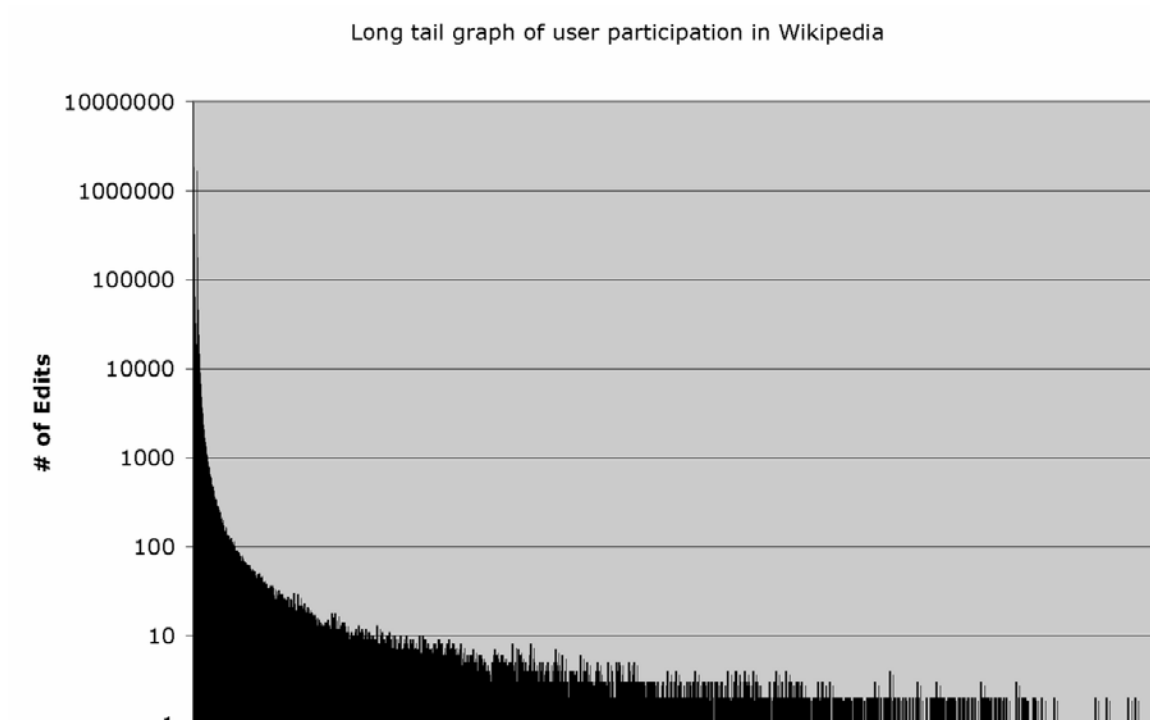
□ number of contributions





# Problem of Participation

Wikipedia contributors



Ed H. Chi , 2009: <http://ascparc.blogspot.com/2007/05/long-tail-and-power-law-graphs-of-user.html>



## Problem of Participation

Long tail of non-contributors in virtual collaboration

news groups (Sproull & Faray, 1997)

virtual seminars (Hesse & Giovis, 1997)

knowledge management (Ardichvili, Page, & Wentling, 2003)

### Reasons

- knowledge exchange itself is not perceived as motivating
- contributing is laborious, takes time and effort
- people want to save their own costs
- the own interests contradict to the group's interests



## Social Dilemma

A situation in which each member of a group has a clear and unambiguous incentive to make a choice that – when made by all members – provides poorer outcomes for all than they would have received if none had made the choice.

(Dawes, 2000)



# Information-exchange Dilemma

Individual level:

Each individual saves costs if s/he withholds information

Group level:

everybody has additional costs if no information was contributed

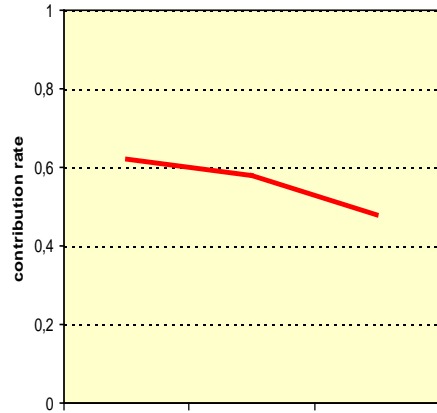


# Experimental setting

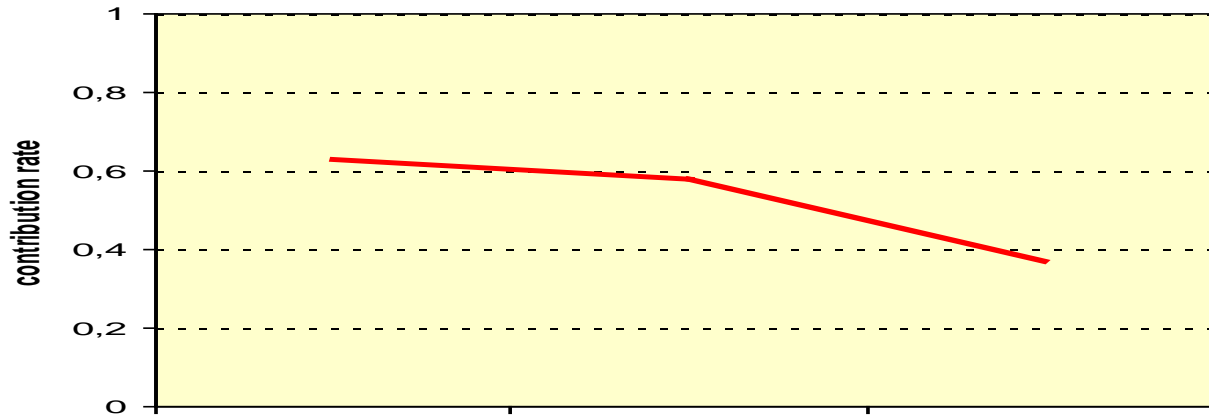
- Groups of people
- Each person has information, which is potentially useful for others
- Each individual has a higher benefit, if he contributes nothing
- Each individual has a higher benefit if the other group members contribute



# Contribution Behavior: Temporal development

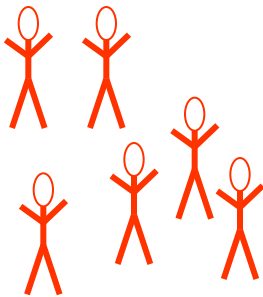


20 min.



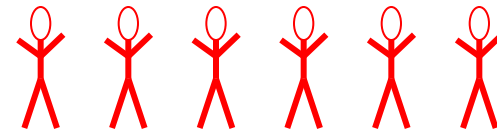
60 min.

synchronous



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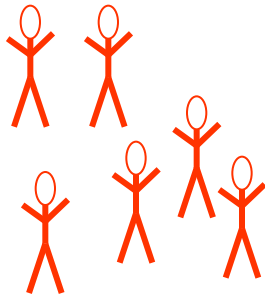
asynchronous





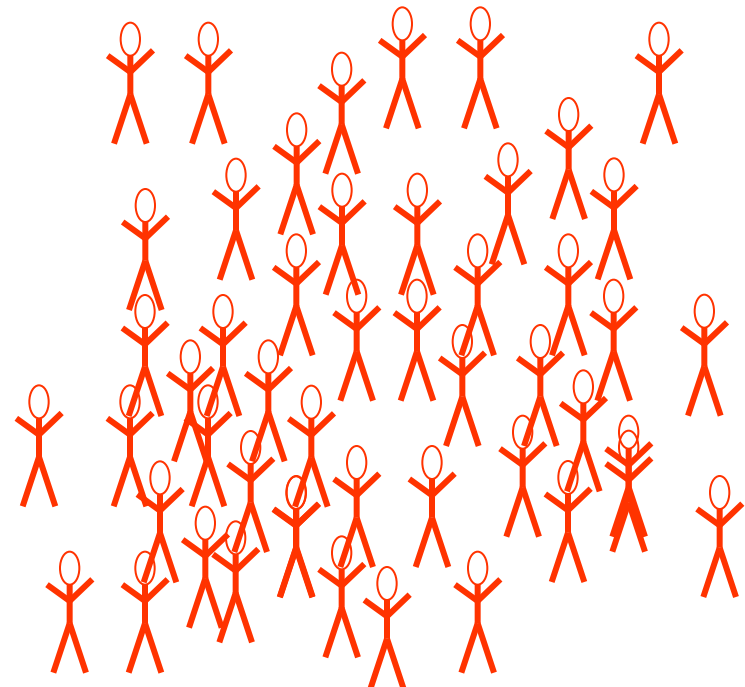
# Group size in asynchronous settings

6 persons



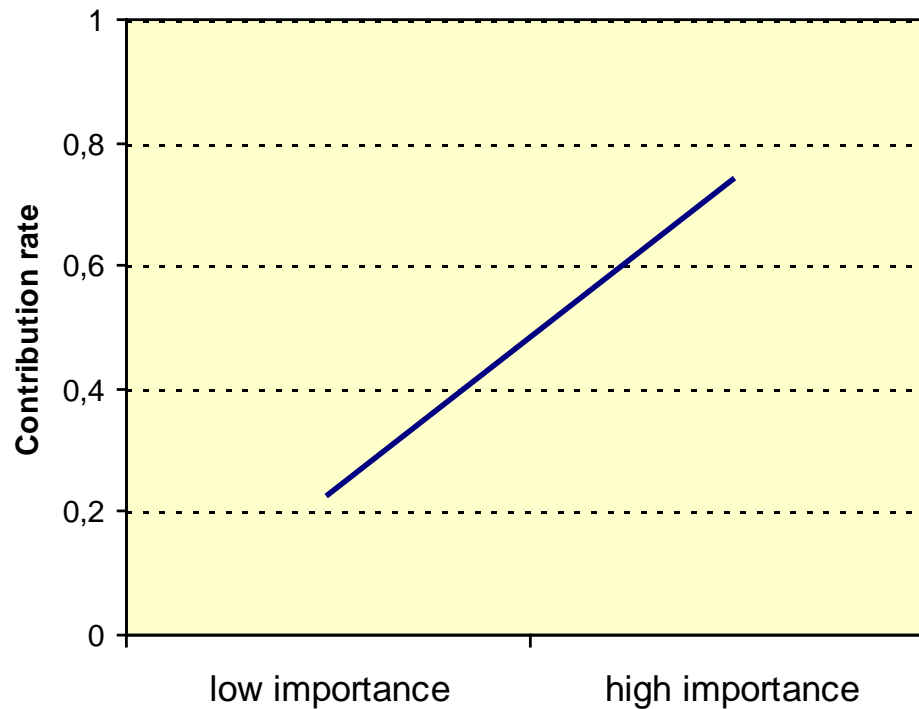
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50 persons





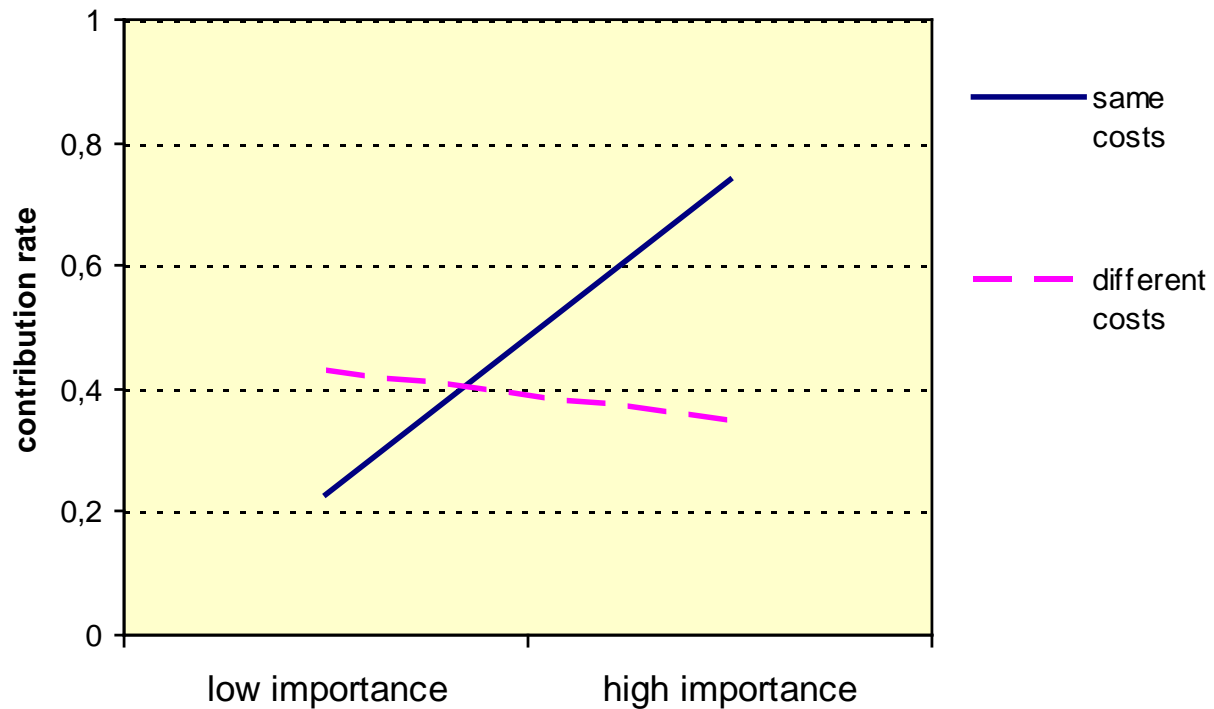
# Importance of Information



Cress, Kimmerle & Hesse (2006). Communication Research



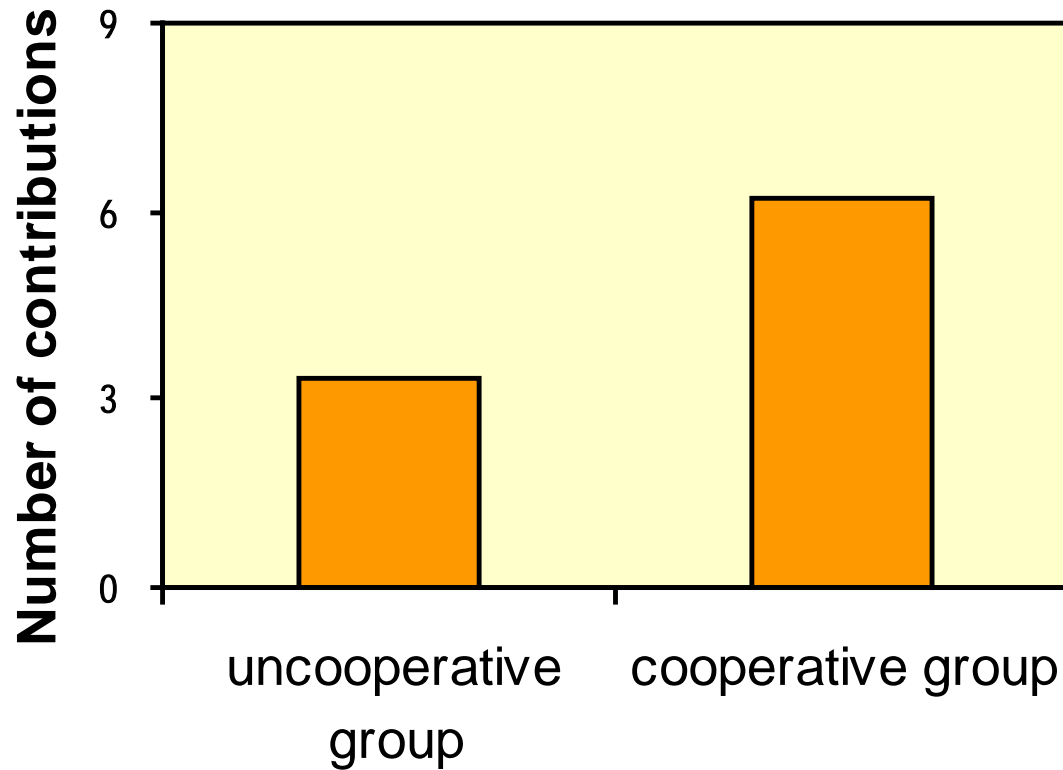
# Importance x Costs



Cress, Kimmerle & Hesse (2006). Communication Research



# Feedback



Cress & Kimmerle (2006). Group dynamics

# Member visualization

Visualizing each group members by the same avatar



V

Visualizing group members by different avatars



Kimmerle, Wodzicki, Jarodska & Cress (in press). Group dynamics



# What do these results mean?

More realistic view of users' motivation to participate in knowledge exchange

Fit of task and group structure

Interdependency, reciprocity; knowledge of importance

Social situation

salience of the group, "cooperation awareness"



Thank you for your attention!