



Externalities, Social Networks and the Emergence of Norms.

**A Critical Analysis and Extension of James S.
Coleman's Theory**

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Introduction

Most theories about norms deal with their **effects**.
Only few theories address their **origins**.

James Coleman's theory is one of the most important theories that explains the emergence of norms. Major source is:

- Coleman, James S. 1990a. *Foundations of Social Theory*. Cambridge, Mass., and London: Belknap Press of Harvard University Press, chapter 10 and 11 – 266-299.
- —. 1990b. "The Emergence of Norms." Pp. 35-60 in *Social Institutions. Their Emergence, Maintenance and Effects*, edited by Michael Hechter, Karl-Dieter Opp, and Reinhard Wippler. New York: Aldine de Gruyter. THIS IS A SUMMARY OF THE PREVIOUS CHAPTERS AND TO A LARGE EXTENT IDENTICAL.



The theory is still **widely discussed**, see in particular:

Berger 1998; Braun and Voss 2014, 82–89; Cherkaoui 2007; Elster 2003; Ermakoff 2017, 176–78; Frank 1992, 148–52; Horne 2009; Lüdemann 2000; Opp 2001, 2002, 2015b; Voss 1998, 2000, 2001, 2017. Voss and Vieth 2015. See also a recent empirical test by Piskorski and Gorbatâi 2017.

DETAILED REFERENCES ARE AT THE END OF THIS PRESENTATION

In what follows I will first **present the theory** and then **discuss some issues** which suggests a **modification** of the theory and **open questions**.



Definitions of Basic Concepts

Coleman intends to explain **social norms**: “They specify what actions are regarded by a set of persons as proper or correct, or what actions are improper or incorrect” (242). (= **oughtness**)

NGR4 :

Furthermore, Coleman defines **sanctioning** as an action on the part of a norm beneficiary that is intended to influence the action of a third person (more precisely 242-243).

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SKIP – for limitations of time

This is not quite correct. Here is the quotation:

Furthermore, Coleman defines **sanctioning**: "The terms 'sanction' and 'effective sanction' will be used interchangeably, indicating ... an action on the part of a norm beneficiary that has some effect in moving the focal action in the direction intended by the sanctioner" (242-243).

NOTE: Sanctioning is used in the theory as an **independent variable to explain behavior**. It is thus preferable to define sanctions as behaviors that **intend** to change others' actions. This definition is adopted in what follows.




SKIP – for limitations of time

The concept of sanctioning in Coleman's theory

Sanctioning means **reactions to norms**. „Norms are ordinarily enforced by sanctions, which are either rewards for carrying out those actions regarded as correct or punishments for carrying out those actions regarded as incorrect” (1990b: 242).

But in explaining sanctioning in connection with the second-order public good there are not yet norms. Here sanctioning seems to mean **rewarding or punishing a desirable or undesirable behavior**. This does not need to be a normatively regulated behavior.

It seems **preferable to use the latter wider term.**



Externalities are behaviors of (individual or collective) actors that are costly or beneficial to other actors.

Costly actions for others = **negative** externalities

Beneficial actions for others = **positive** externalities

Examples: Firms **pollute** a river which leads to dying of fish and, thus, to damages of the local fishing industry (**negative externality**). A **shopping center** is built next to a residential area which leads to an increases of property values (**positive externality**).

In what follows **I will concentrate on negative externalities** (as Coleman himself does).



The Explanatory Strategy

Coleman uses the following **explanatory strategy**. The first question he addresses is the explanation of the **demand for norms**.

Demand for a norm: This refers to the extent to which there is a regulatory interest, i.e. a wish that a norm comes into being.

In a second step he tries to explain the **realization of norms**.

Realization of a norm means the extent to which a **norm and the respective sanction are accepted**. The demand is „realized by bringing into being a norm and sanction,“ i.e. the „actual existence of a norm backed by sanctions“ (266, emphases added).




Conditions for the Demand of a Norm

Coleman's first "principle" reads:

"The condition under which ... **demands** for a norm, arise is that an action has **similar externalities** for a set of others, yet **markets in rights of control** of the action cannot easily be established, and **no single actor** can profitably engage in an exchange to gain rights of control" (250-251, emphases not in the original).



Coleman emphasizes: **externalities “create a basis for a norm, a demand for a norm on the part of those experiencing certain externalities”** (251, emphasis added). There is thus no guarantee that a norm really emerges.



In case of **negative externalities** (example: a non-smoker sits next to a smoker), the social problem is “how to limit the action which is hamring them (and howmuch to limit it)”(249).

In case of **positive externalities** (example: passers-by who benefit from the householder’s cleaning snow from his sidewalk), the problem is “how to encourage and increase the action” (41). In addition, from the perspective of the householder, the interest is to get some compensation for his effort (41).



Let us look at the conditions in detail – here is the quotation again:

“The condition under which **interests** in a norm, and thus demands for a norm, arise is that an action has **similar externalities** for a set of others, yet **markets in rights of control** cannot be established and **no single actor** can profitably engage in an exchange to gain rights of control.

Why need there be **SIMILAR externalities** for a set of others?

Perhaps the idea is that only if many persons are affected, a joint interest (or a particularly strong joint interest) in the norm will be brought about.

NGR65

A **right of control of an action** refers to a consensus in a group that it is allowed (i.e., that there is a right) „to apply sanctions“ (243).

Iroh#

NGR65#

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Meaning of “when **markets in rights of control of the action cannot easily be established ...”.**

It is possible that actors reduce externalities by “wholly individualistic means” (41): an actor who suffers from externalities may offer something to eliminate the externality. Thus, “rights of control” may be purchased and, thus sanctioning is purchased as well. But this is often not possible (=high transaction costs). NGR68

Smoking example: One could pay a smoker to stop smoking. But this is not common and frowned upon (and, thus, costly).

Problem: One could earn a lot of money by starting to smoke and then ask the nonsmoker who suffers from one’s smoking to pay for refraining from smoking! Anyway, there is actually no market where this happens, i.e. no market for control rights.

Implication: „no single actor can profitably engage in an exchange to gain rights of control.”

Iroh#

NGR68#

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Conditions for the Realization of a Norm

Coleman's "second principle" explaining the realization of norms is based on the **theory of collective action** (basic reference: Olson 1965).

This **theory** addresses the **question** under what conditions a group acts in order to **achieve a common goal**. E.g. a community wishes to reduce pollution caused by a group of factories. When will the residents act to achieve this common goal?

The common goal is a preference for a **public good**. This is defined as any good that, if it is provided, can be consumed by every member of a group, regardless of his or her contribution. There is thus no possibility of exclusion. This leads to the free-rider problem.



SKIP – for limitations of time

Examples: the householder's cleaning of the sidewalk provides a public good (as Coleman notes). Other examples: pollution, noise, overgrazing of the commons (Coleman 41) provide public goods with negative utility and are called public bads.

Question: What are public goods in a shared apartment, in this lecture?



Coleman applies the theory in the following way:

Externalities are public goods or public bads.
Example pollution.

The provision or reduction of these goods is the **major goal** of members of a group. These externalities are thus called **first-order public goods**.



Norms are **public goods** as well.

If a norm to sanction or not to pollute exists this holds for every member of a group.

Sanctioning is a public good: If A punishes B because B does not contribute, this is likely to benefit the others because it increases the likelihood of B's contribution and, thus, of the provision of the first order public good (271).

Actors are **not primarily interested** in these goods. These goods are **instrumental** for bringing about the first order public goods. Therefore, they are called **second-order public goods**.

Because the provision of norms and sanctions are public goods, the **free-rider problem** exists here as well.



SKIP – for limitations of time

Example: Aesop's fable "The Mice in Council" (270-271, emphasizes not in the original):

“The council meeting was called to discuss a problem faced by the mouse society, that of **how to control the cat** who was slowly decimating the population. ... the cat's action was imposing severe **externalities** on the mice and constituted, in effect, a public bad, creating constant danger for each mouse. This is the **first-order public good** (or in this case public bad) **problem.**”

The second-order public goods problem is sanctioning the mice to put the bell around the neck of the cat.



BASIC IDEA of Coleman:

If the second-order free rider problem can be solved, then this makes the solution of the first-order free rider problem more likely (but does not guarantee it – if the sanctions are not effective!).

Next question:

How can the second-order public goods problem be solved?



This is Coleman's “**second principle**” (1990b: 53):

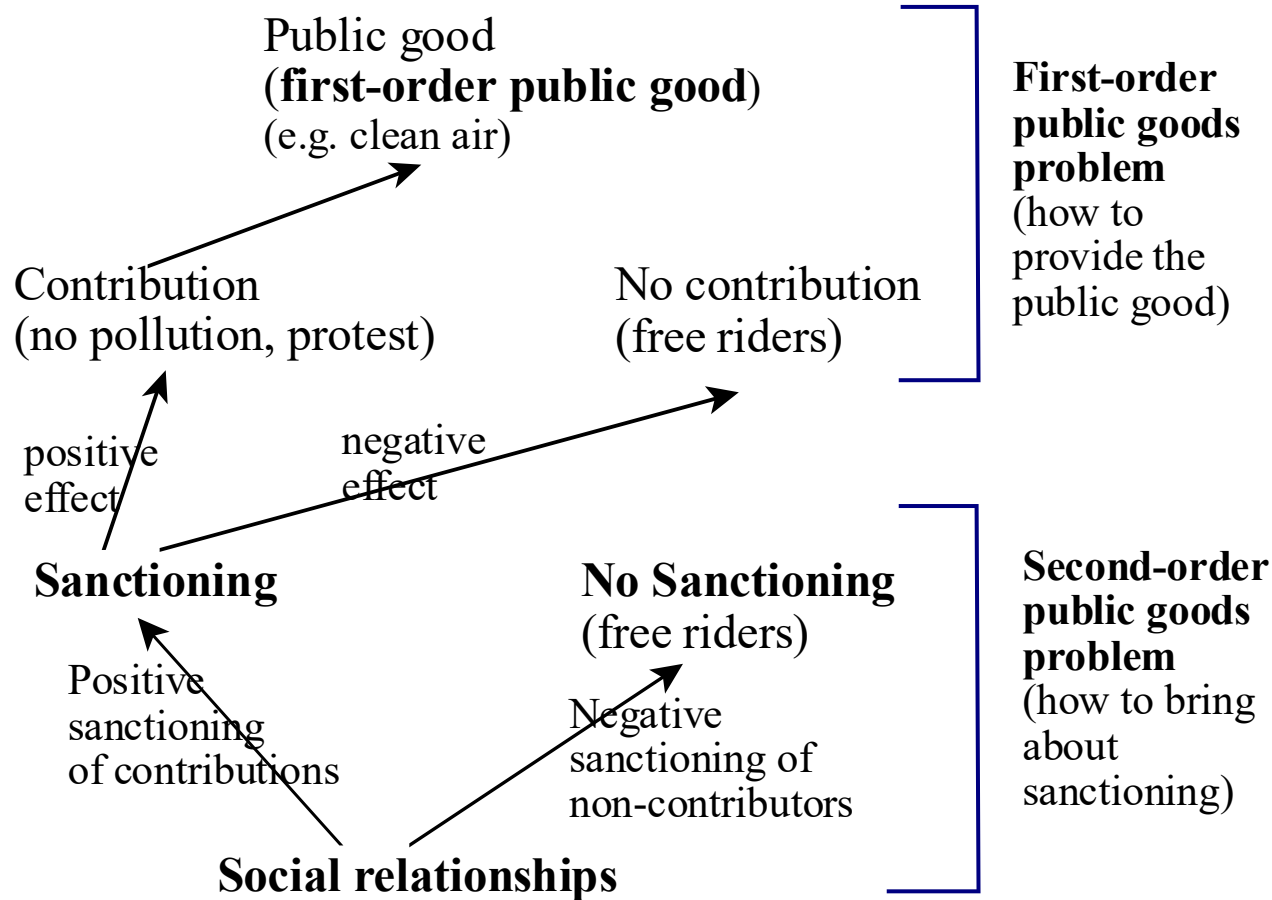
Sanctioning of contributors or non-contributors becomes likely if there are close social relationships between the members of a group.

“If there is a social relationship between actors, ... then this overcomes the second-order free rider problem” (1990b: 53).

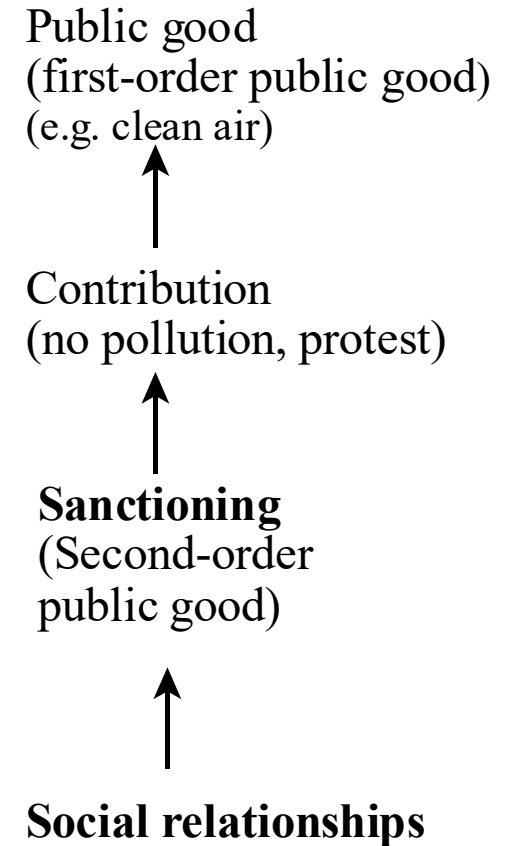
Why? Idea: if two persons A and B have social relationships, they can **jointly sanction** a third person C to contribute. Sanctioning thus becomes more effective. (See also Ellickson 1991 – Order without law).

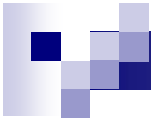
Summary

The two public goods problems



The solution

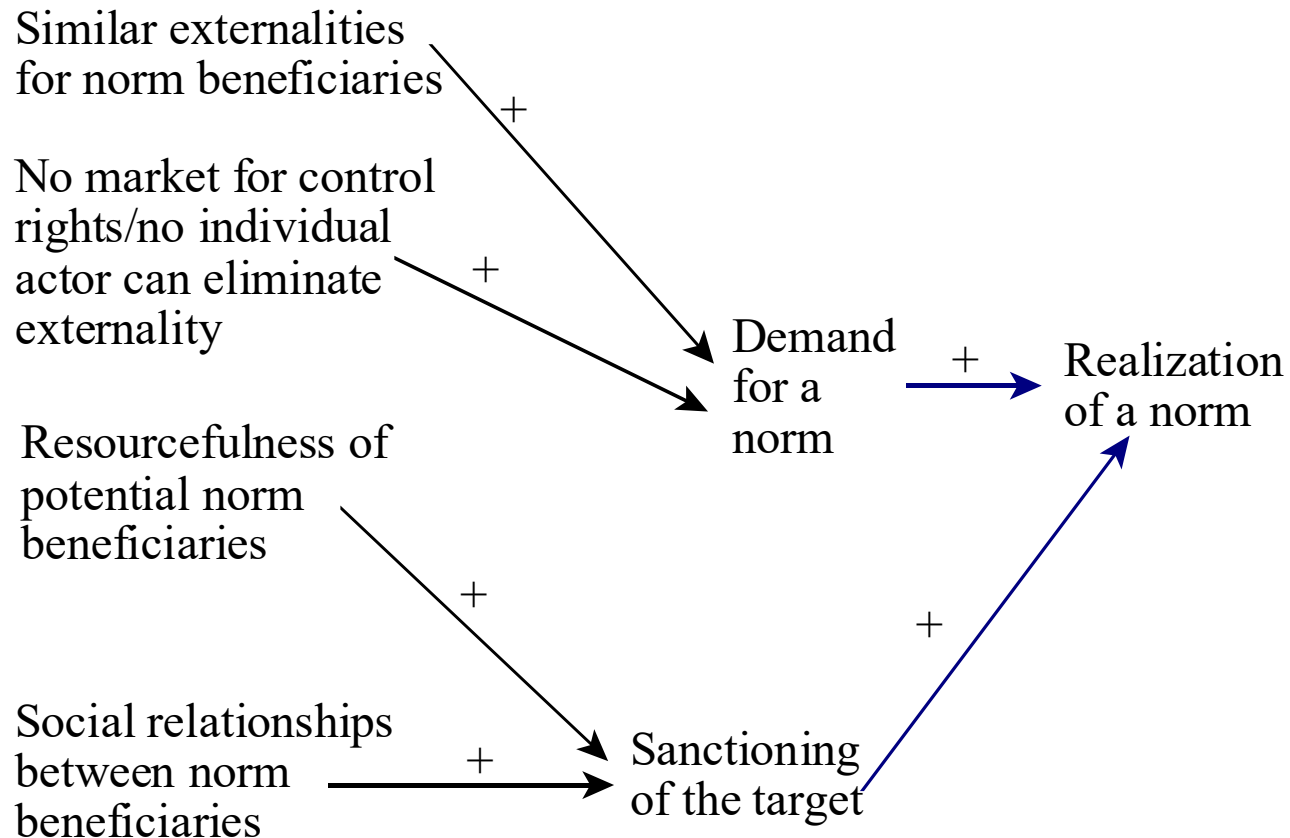




There are other hypotheses in the text mentioned in passing. One is that the **resourcefulness of the potential norm beneficiaries** is important for the effectiveness of sanctioning. Example: time and money to stage protests, employing lawyers, or advertizing in newspapers.

Coleman's causal model can be reconstructed in the following way:

A Reconstruction of James S. Coleman's Theory of Norm Emergence



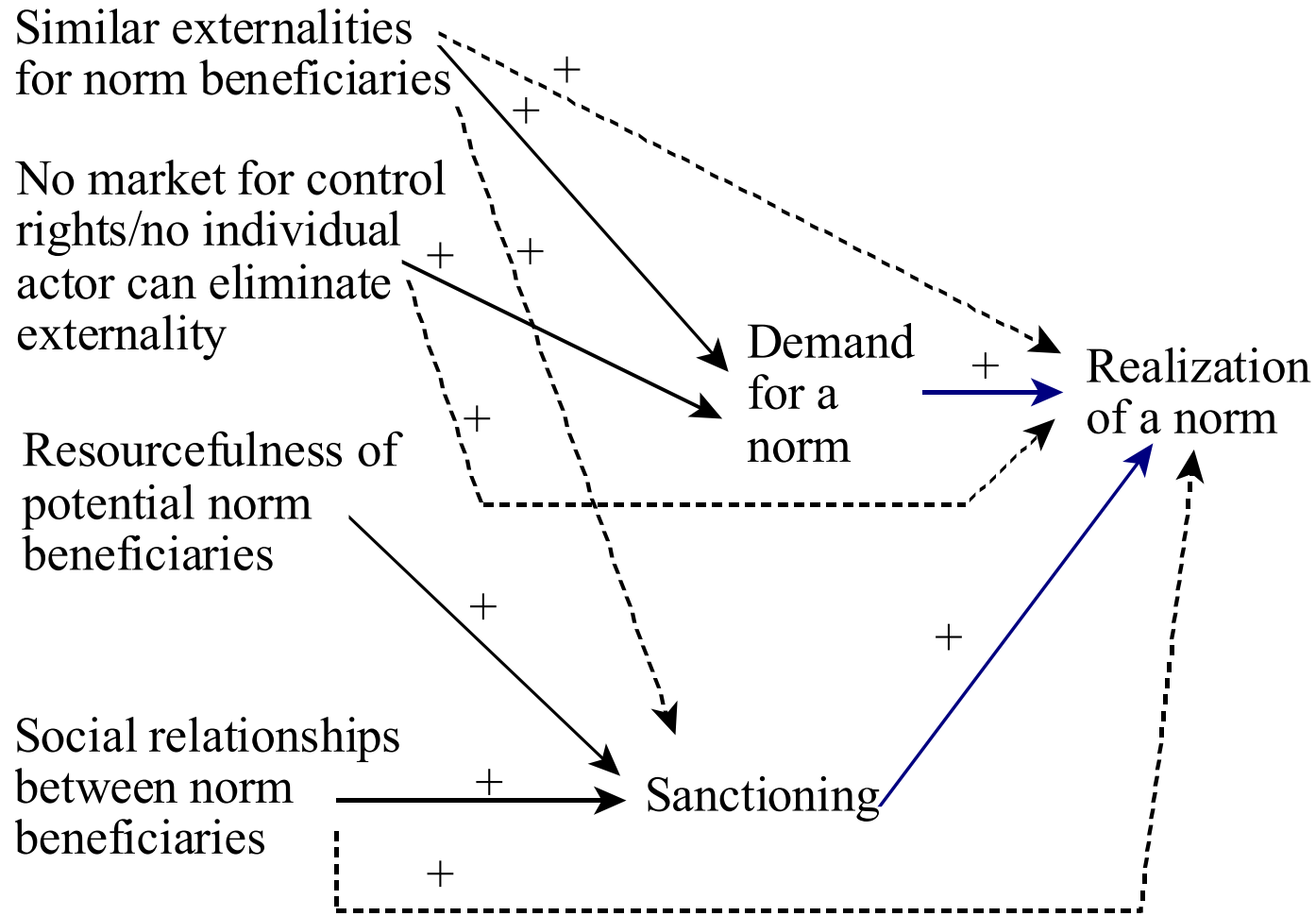


Some Problems of the Theory

Problems of the Causal Model

There are **other plausible relationships** between the variables,
e.g.: all exogenous variables affect “realization of a norm”:

Note that the causal model is a **reconstruction**, it is not formulated by Coleman.



Further research needed!



Do all externalities lead to the demand for a norm?

If externalities are regarded as **minor**, there is no interest in a norm. Examples: noise of a neighbor, noisy people in a train compartment, crying children, ringing cellphones in trains, ... this is tolerated, unless this is very strong and frequent. There are even **norms that externalities must be tolerated** (crying children!). See decision of the “Bundesgerichtshof” that practicing the trumpet is allowed to some extent.



BGH-Urteil zum Musizieren

Trompeten ja - aber nur in Grenzen

Stand: 26.10.2018 14:16 Uhr

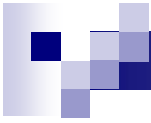
Ein bisschen Tröten muss erlaubt sein: In gewissen Grenzen darf man zu Hause musizieren, so urteilte der BGH. Es komme immer auf den Einzelfall an. Geklagt hatte der Nachbar eines Berufstrompeters in Augsburg.

Idea: only if externalities exceed a certain **threshold, an interest in (or demand for) a norm arises.**



Coleman explains sanctioning and not norms

Here is again the graph with Colemans solution:



**Where
are
the
norms?**

Public good
(**first-order public good**)
(e.g. clean air)

Contribution to first-order public good
(e.g. refrain from polluting, protest)

Sanctioning
(**second-order public good**)

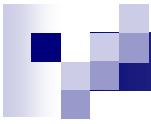
Social relationships

**First-order
public goods
problem**
(how to
provide the
public good)

**Second-order
public goods
problem**
(how to bring
about
sanctioning)



How could norms be added to the model?



First possibility

Public good
(**first-order public good**)
(e.g. clean air)

First-order public goods problem

Contribution to first-order public good
(e.g. refrain from polluting, protest)

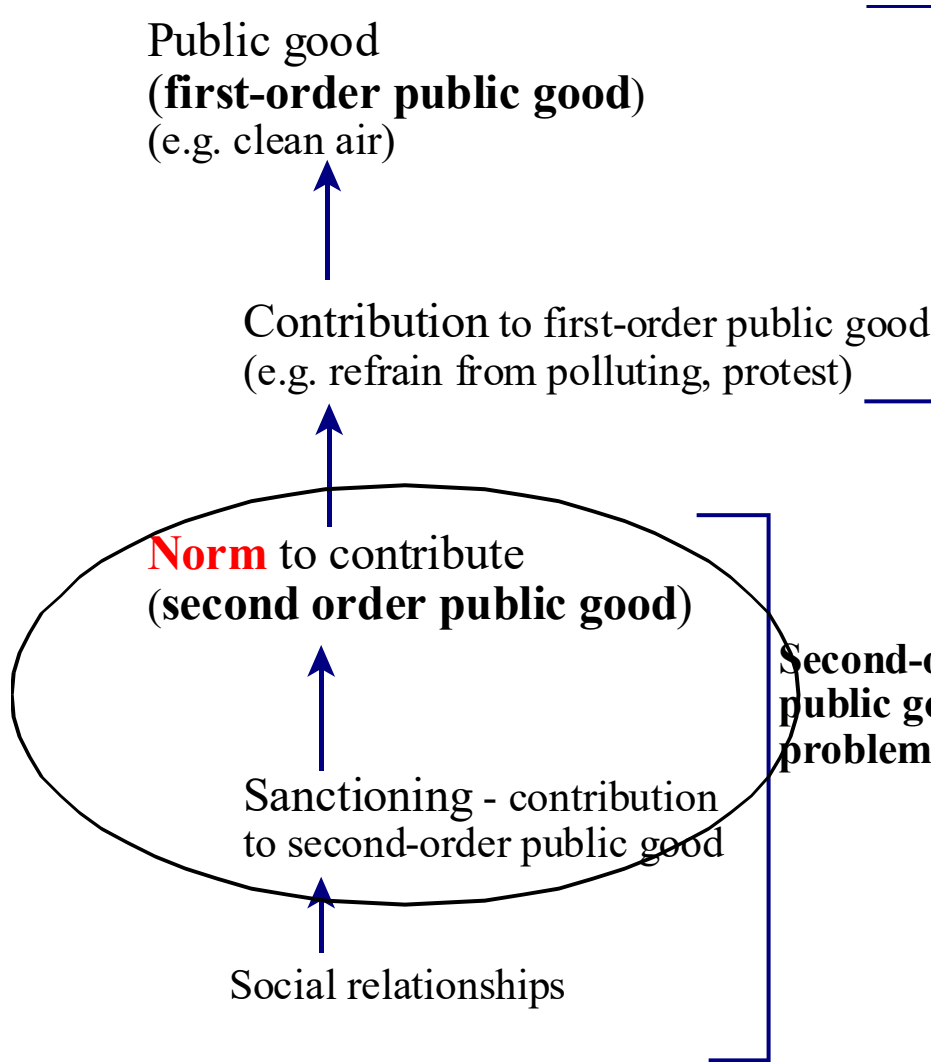
Sanctioning leads to norm

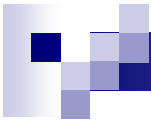
Norm to contribute
(**second order public good**)

Second-order public goods problem

Sanctioning - contribution to second-order public good

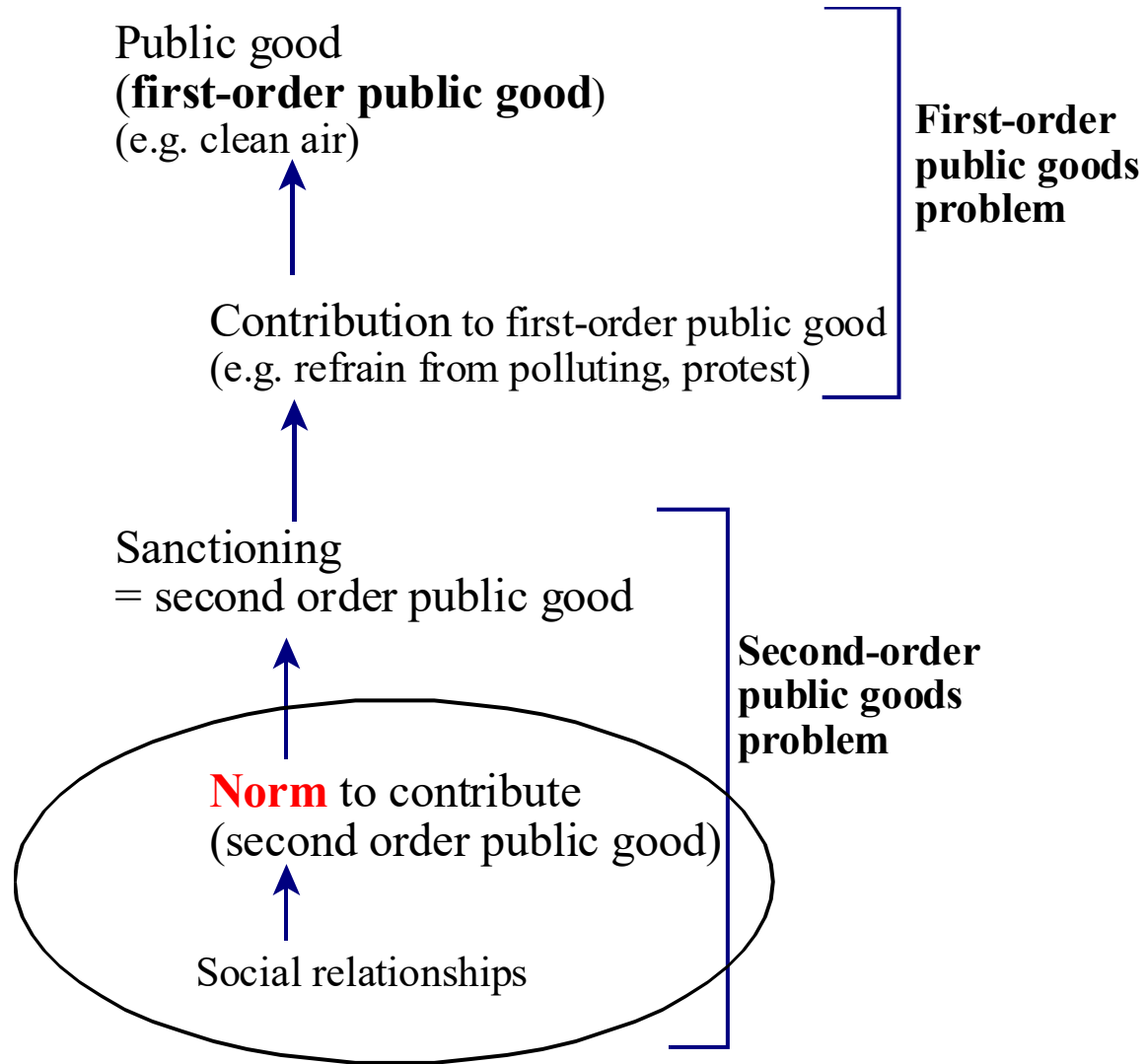
Social relationships

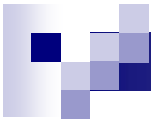




Second possibility

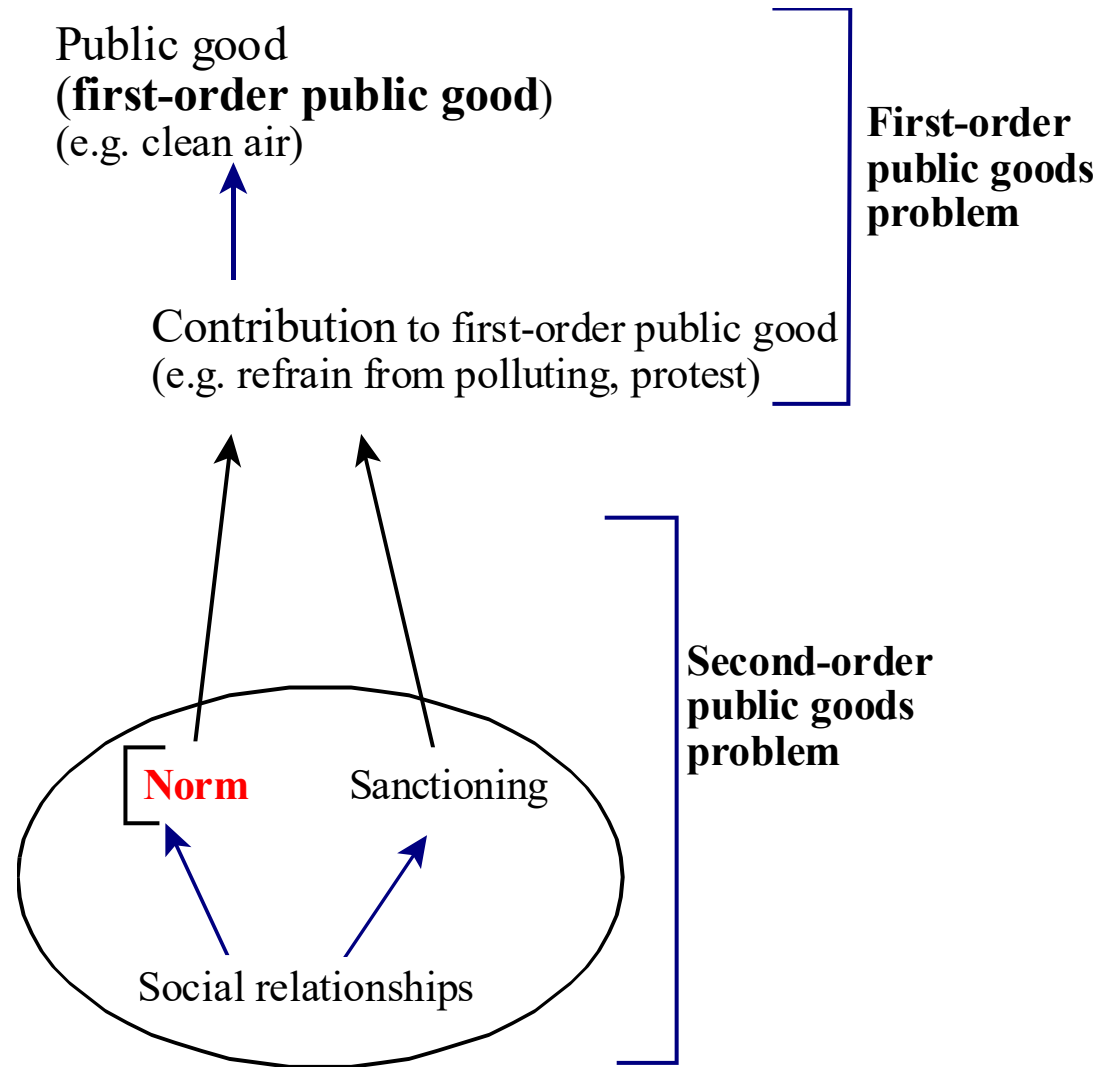
Norm leads to sanctioning



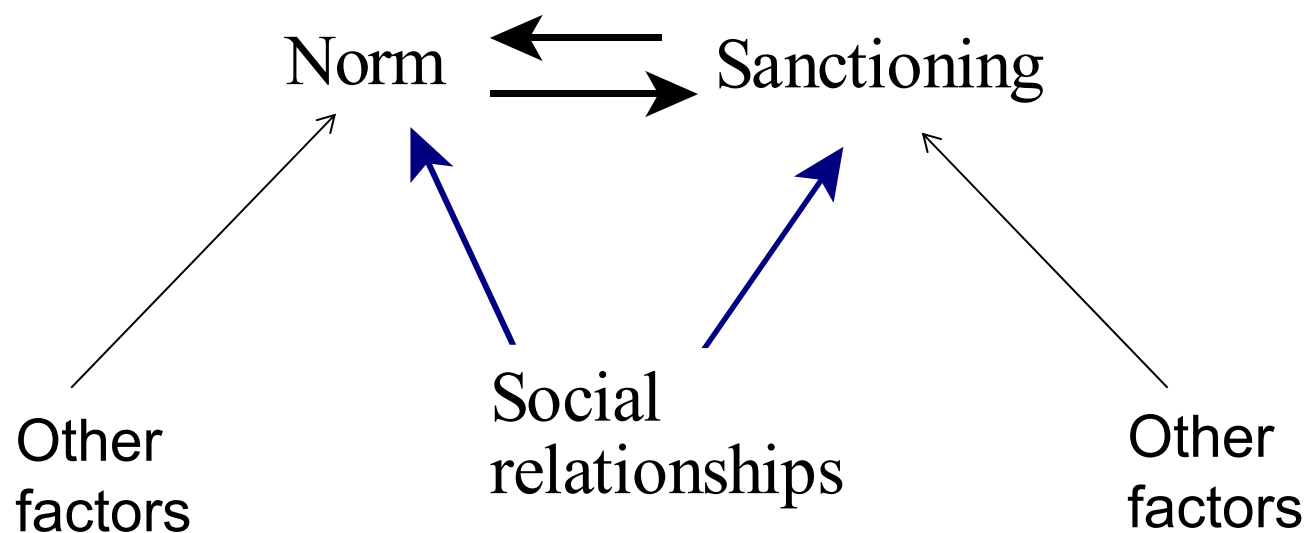


Third possibility

Social relationships lead to norm and sanctioning



Norms, sanctioning and social relationships:
possible models



Specification of the model is **task for future research!**

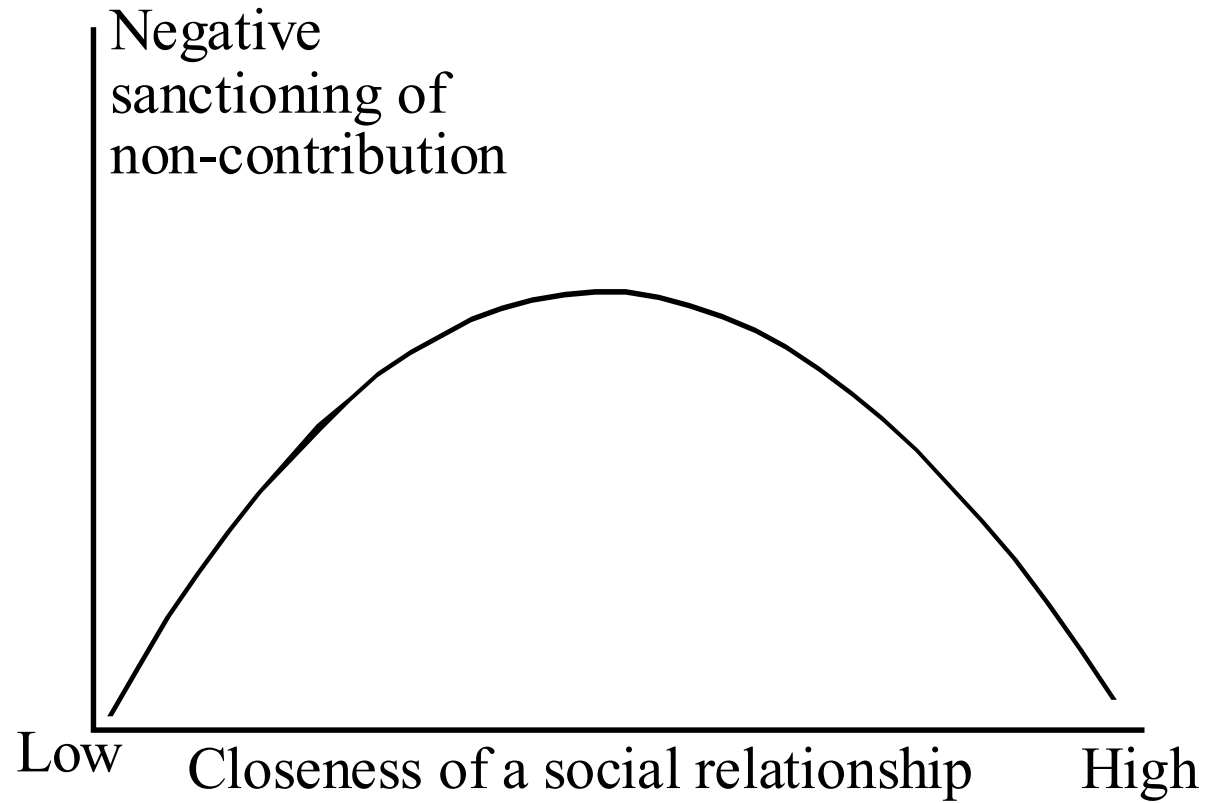
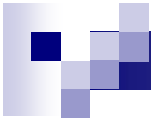


What are the conditions under which social relationships affect sanctioning?

(1) The intensity of social relationships affects sanctioning.

Do I **sanction a close friend** as severely as somebody I do not know so well? What about a norm of “**tolerance**” in regard to the behavior of a close friend? Strong expected counter-sanctions?

The stronger emotional bonds, the lower is the likelihood of sanctioning. Perhaps there is an inverse u-curve: increase of bonds (x-axis) first raise sanctioning (y-axis) and then reduce it.





SKIP – for limitations of time

The more inclusive networks are, the more effective they promote sanctioning. Coleman assumes that networks exist between norm beneficiaries (those affected by an externality). But inclusive networks including targets (smokers) would still be more effective, because the targets could be sanctioned as well (Piskorski and Gorbatâi 2017).

Networks are the more conducive to sanctioning, the more visible contributions to the first-order public good are.

Examples: smoking is visible, separation of trash in the household or voting are less visible.



(2) Assume there are high costs of contributions to the first-order public good and/or high costs of sanctioning (contribution to providing the second-order public good).

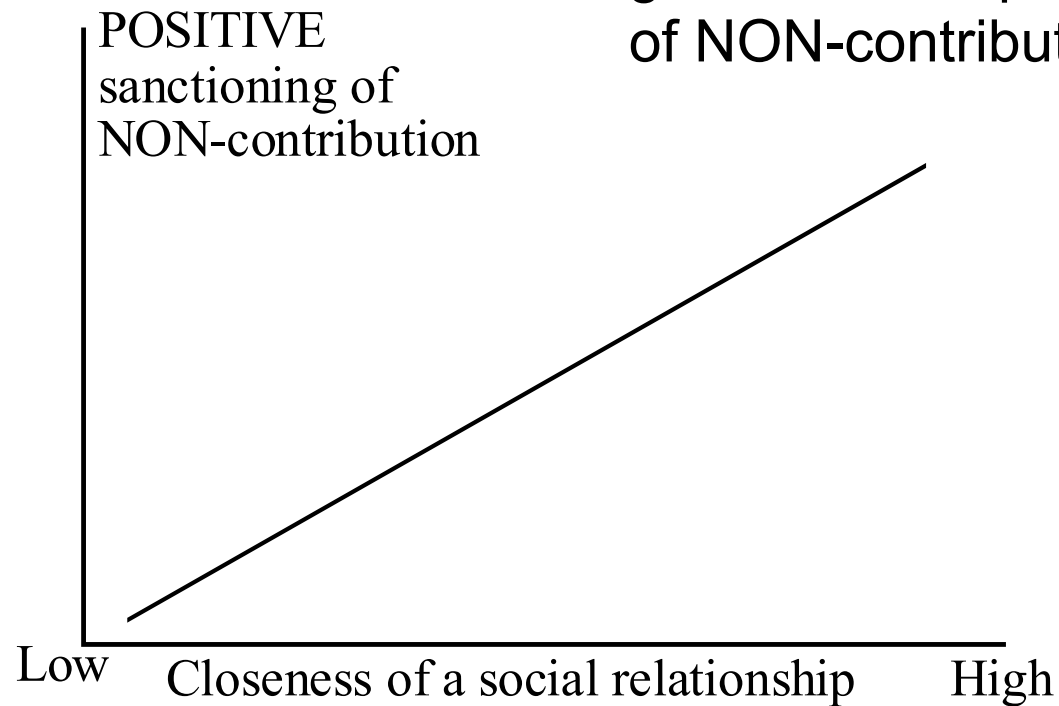
Police are expected to crush a demonstration (protest is a contribution to a first-order public good). **Sanctioning** may be expected to lead to costly counter-sanctioning (second-order public good).

Assumptions: (1) Norms do not demand „heroic“ (very dangerous) actions (e.g. being in resistance movements). (2) Abstaining from such actions is sanctioned positively and not negatively.

If social relationships provide more opportunities to sanction, friends and acquaintances will be encouraged not to contribute. Thus, **social relationships increase positive sanctioning of NON-contributions.**



High **costs of contributions** to first- and second-order public goods lead to positive sanctioning of NON-contributions.



In this situation relatively **close friends** will have an incentive to provide high **benefits** if one does NOT contribute.

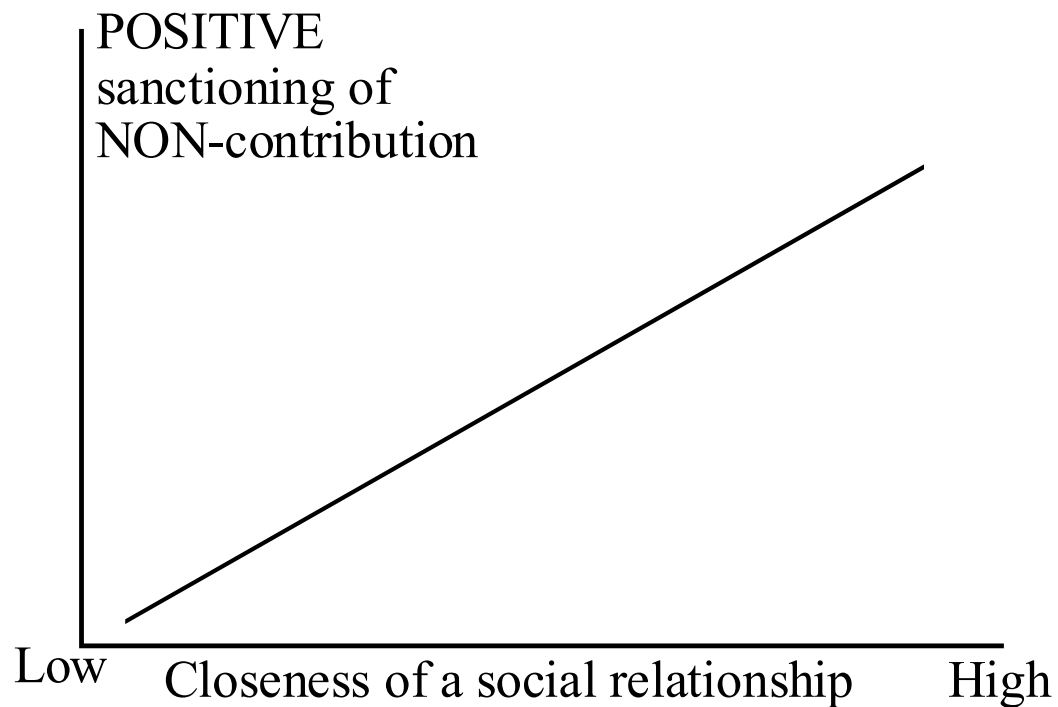


(3) The perceived influence on the provision of the first-order public good

Assume there is **no chance that joint action of a group will provide the first-order public good** – e.g. an initiative demands from the city government of Venice a contribution of 2000 € per student. Would a person A encourage his or her friend B to become active for this cause?

Thus, B would be expected to invest time and money for an absolutely **hopeless and futile cause!** This would probably be the end of the friendship or of any relationship between the two persons. Friends are **(normatively) not expected** to engage in such activities.

Thus: If there is a **very low perceived influence** on the provision of the first-order public good social relationships lead to **positive sanctioning of NON-contributions**.





SKIP – for time limitations

Are there pre-existing sanctioning norms?

Such a norm reads: **punish defectors**, i.e. those who did wrong. Or there is an „emotional disposition of a willingness to sanction“ (Voss and Vieth 2015: 176).

Examples: Großmünster, granddaughter (these were clear norm violations).

But such a **norm assumes that there are defectors**: in a situation where contributions to first-order public goods are a hopeless cause or are very costly, there is no moral wrongdoing if one does not contribute. (See the example of the mice.) So **networks are irrelevant**.

If the sanctioning norm or „emotional disposition“ to sanction are **conditional** (i.e. demanding not to sanction hopeless contributions), **social relationships reduce sanctioning**.



SKIP – for time limitations

Nonetheless, sanctioning is common in many situations where it is actually costly. It seems that there is some **evolutionary basis of sanctioning**. (Nasty note: if you do not have an explanation for a behavior, try to find the explanation in the evolution!)

The **basic idea** is that in earlier times groups were small. In this situation, sanctioning and sanctioning norms (!) were likely to increase “fitness” or, in modern terms, were likely to contribute to the provision of the desired public goods for the group. Such a sanctioning trait may thus have become part of our genes and is transmitted to present day homo sapiens.



SKIP – time limitations

- Coleman wants to explain norms of sanctioning contributors or non-contributors. Does Coleman explain a norm that regulates the externalities? This would be a norm
 - that one should refrain from causing negative externalities
 - or that those who cause positive externalities must be compensated.
 - How can such a norm be explained?

Idea: If a norm to contribute to reduce negative externalities originates, it would be highly consonant to believe that the externalities should be reduced.



SKIP – time limitations

For the contribution to the provision of first-order public goods there are **many other incentives**, apart from sanctioning, such as (for a summary see Opp 2009):

- intensity of first-order public goods preferences AND
- perceived influence (which is often overestimated!),
- participation norms,
- status gain in group by participating
- sanctioning of those (1) who cause the externalities (smokers) or (2) those who contribute or do not contribute (Coleman).

Sanctioning is thus only one incentive for contributing to the first-order public good!

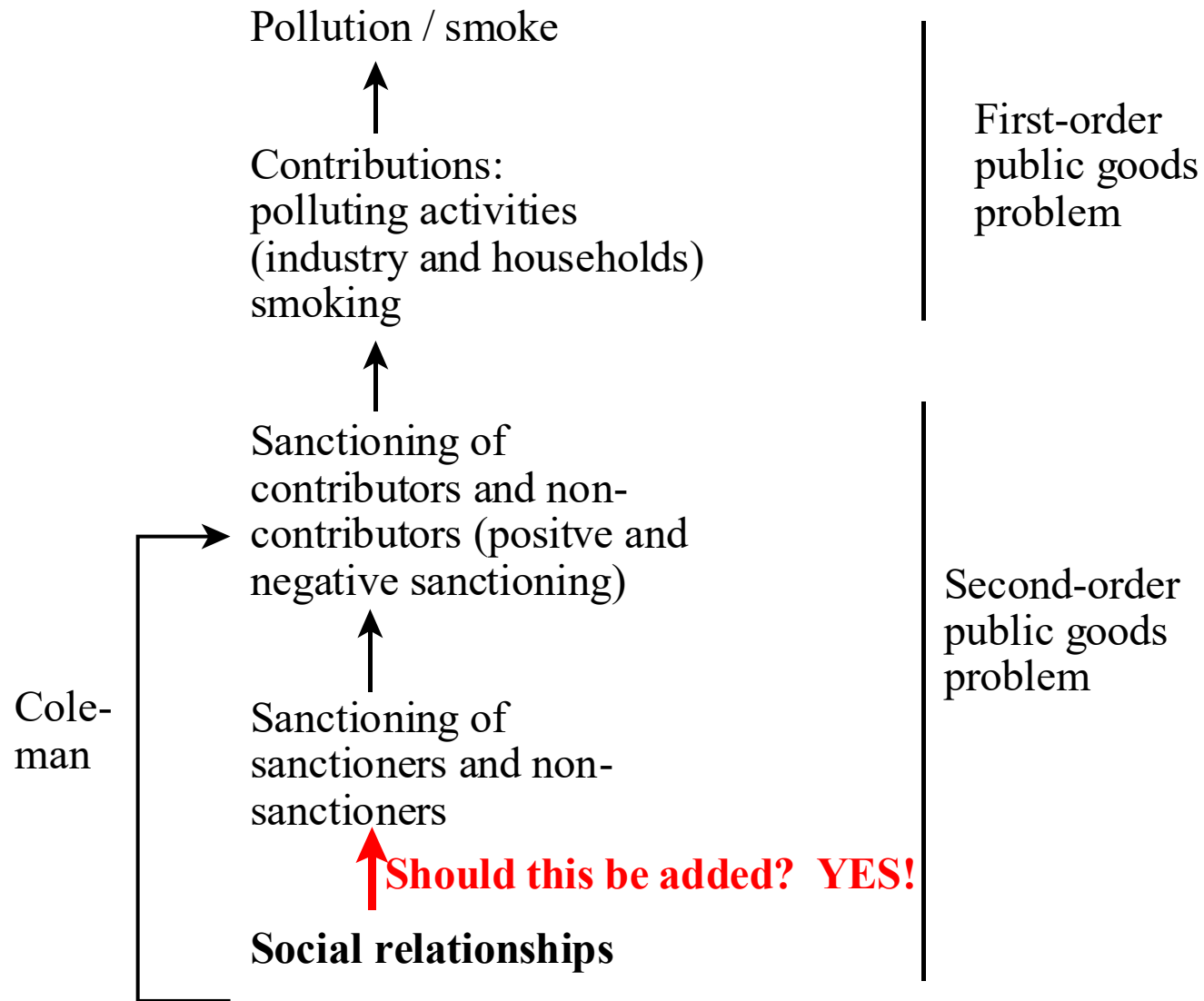


So far it was assumed:

social relationships → sanctioning of (non-)contributors/

Could social relationships also lead to sanctioning of
sanctioners?

social relationships → sanctioning of sanctioners





Do norms emerge if there are no externalities?

Table manners: lower classes imitate higher classes.

Rules of politeness (take the smaller part of a pie...)

Language rules: groups create a special language or words to be different.

Norms of fashion: firms create fashion to earn money! New fashion often becomes a norm (leggings and miniskirts and torn trousers were despised some time ago). NGR69

Groups often want to **create new positive externalities** for themselves or others.

A **scope condition** has to be added: **if** there are externalities, then it holds: ...

Iroh#

NGR69#

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What are the Mechanisms of Norm Emergence in Coleman's theory?

Coleman addresses the **emergence of norms by design**: norms are “purposively generated, in that those persons who initiate or help maintain a norm see themselves as benefiting from its being observed or harmed by its being violated” (242).

Could externalities also lead to **spontaneous norm emergence** and, if so, what exactly are the processes? These questions are not addressed.



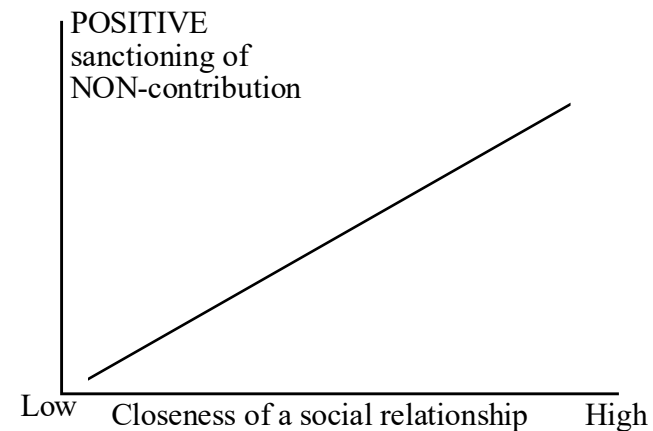
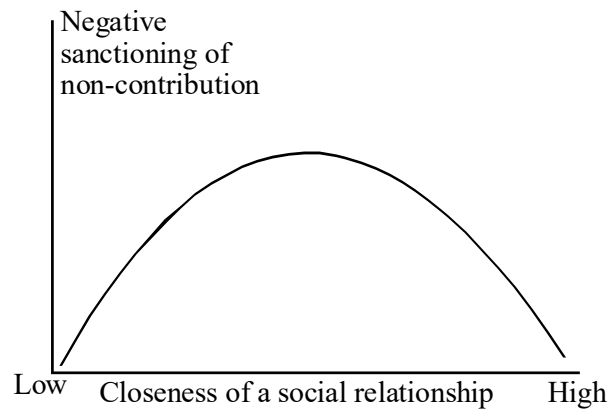
Summary and Conclusions

Scope condition: If there are externalities ...

Dependent variable should be: likelihood of **sanctioning** of contributors or non-contributors to the first order public goods.

Effects of social relationships are conditional:

- In general, **increasing closeness** of a relationships first increases sanctioning of contributing, then reduces it (**inverse u-curve**)
- If **costs** of contributions to first-order public goods and of sanctioning are high, and if **influence on the provision is low**, positive sanctioning of NON-contribution increases with closeness of social networks.





Open questions and further research

- What are the relationships between **norms and sanctioning**?
- When is there **spontaneous and deliberate** norm emergence
- What is the **causal model** – see the graph before?
- There is **only one rigorous empirical study**:
 - Piskorski, Mikołaj Jan, and Andreea Gorbatâi. 2017. "Testing Coleman's Social-Norm Enforcement Mechanism: Evidence from Wikipedia " *American Journal of Sociology* 122(4):1183-1222.
- Which **structure of social networks** promotes sanctioning of contributions of the public good? For example: weak or strong ties, etc. – see ideas in Centola, *How Behavior Spreads*, 2018.



SKIP – for limitations of time

General conclusion:

Coleman's theory contains fruitful ideas that should be further developed!



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**Thanks for
complying with the
norm
to let me finish!**