



# The Explanation of Everything

## A Critical Assessment of Raymond Boudon's Theory Explaining Descriptive and Normative Beliefs, Attitudes, Preferences and Behavior

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## Introduction

Raymond Boudon is the only social scientist who has proposed a theory that is supposed to explain every phenomenon, or at least most of the phenomena, social scientists are interested in:

- **descriptive beliefs,**
- **normative beliefs (i.e. norms),**
- **attitudes,**
- **preferences and**
- **behavior.**

The theory is **extremely simple.**




Since Boudon subscribes to methodological individualism, the theory can also explain a **wide range of macro phenomena** as aggregations of dependent micro variables.

Thus, in contrast to the „grand“ theories by Marx or Parsons, Boudon's theory refers to **macro and micro phenomena**.

Further attractive features:

- The theory seems to be **testable**.
- Although there is no rigorous test, Boudon provides numerous **illustrations** that **lend plausibility** to the theory.
- What confers a high status to the theory is that it is based on the work **of classical writers**, in particular to Émile Durkheim, Alexis de Tocqueville and Max Weber.



**Perhaps Boudon's theory is the overarching theoretical system social scientists have dreamt of?**

It is thus **worthwhile** to examine the strength and weaknesses of the theory in great detail. This is the aim of this presentation (and the underlying paper).

**It is astonishing that there is so far no detailed critical analysis of Boudon's theory.**



## Contents of the Presentation

- Boudon's theory
- Major problems of the theory:
  - Its explanatory power and
  - its validity.
- Application of two social psychological theories to remedy weaknesses and examine the plausibility of some assumptions of the theory
  - balance theory
  - value expectancy theory
- Boudon's implicit background theory
- General conclusion



## Boudon's Theory: The Cognitivist Model

Here are some quotations:

"... the fact that subject X subscribes to idea Y, that the subject believes in Y, can be explained ... by the **reasons** that the subject has for believing in it" (1994: 3, italics in the text)

"[P]eople believe that X is true, acceptable, good, legitimate, etc. as soon as they have the feeling that X rests upon a set of **acceptable reasons**.

"[P]eople have **strong reasons** to believe what they believe, to do what they do" (1996: 140).

Print in bold added by KDO.



## General formulation:

If individuals have **good reasons** for accepting a (descriptive or normative) belief, for having an attitude or a goal, or for performing an action, then they accept the belief, hold the attitude or goal or perform the behavior.

## Example:

Why did Australian tribes believe that rain dances lead to rain?

One "good reason" was that they often observed that some time after the dances it began to rain.




## What are "reasons"?

**Reason** = other belief (= **second-order belief**), relevant for accepting another belief (= **first-order belief**)

OR

a reason is a **belief** that **explains** attitudes, preferences or behavior.






Not only **"rational" factors** (Boudon's term: these are **reasons**) but **also irrational factors** (Boudon's terms) are causes.

("I do not in any way draw the conclusion that all beliefs have to be explained by reasons" (1994: 20))

**Examples for irrational factors:** affections or "passions," "psychic causes located beyond any control of the subject," "consumption of some chemical substance," "absentmindedness," "deficiency of cognitive capacities" (= constraints!), "internalization of collective beliefs through socialization" or "effects of cultural or of biological evolutionary processes."



The previous formulation of the cognitivist model must thus be expanded:

**If individuals have **good reasons** for accepting a (descriptive or normative) belief, for having an attitude or a goal, or for performing an action, or if there are **irrational factors**, then individuals accept the belief, hold the attitude or goal or perform the behavior.**



For limitations of time, I will focus most of the time on explaining **beliefs**.



# The Major Problems of the Cognitivist Model

## The Explanatory Power of the Theory

Assume for a moment that the theory consists only of **reasons** as the explanatory variable. The major problem is that the theory does not answer the following questions:

- **Given a set of possible reasons**: what are the **specific** beliefs they bring about?
- **Given a set of beliefs as possible explananda**: what are the **specific** reasons that have caused a belief or a set of beliefs?



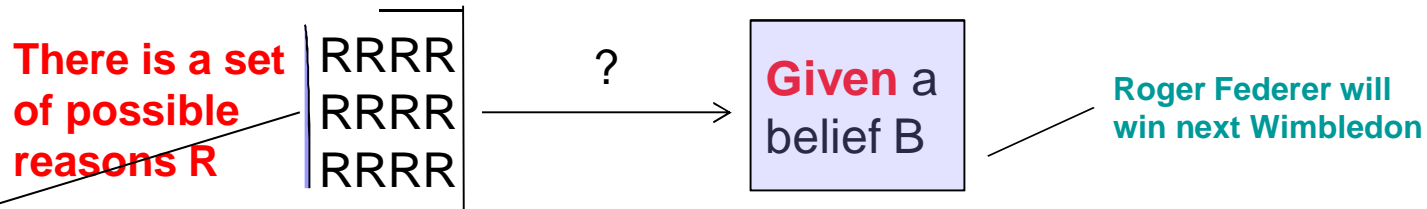
These questions are not answered either for **irrational factors**.  
It is thus not clear:

- **Given a set of irrational factors:** what **specific** beliefs do they bring about?

Thus:

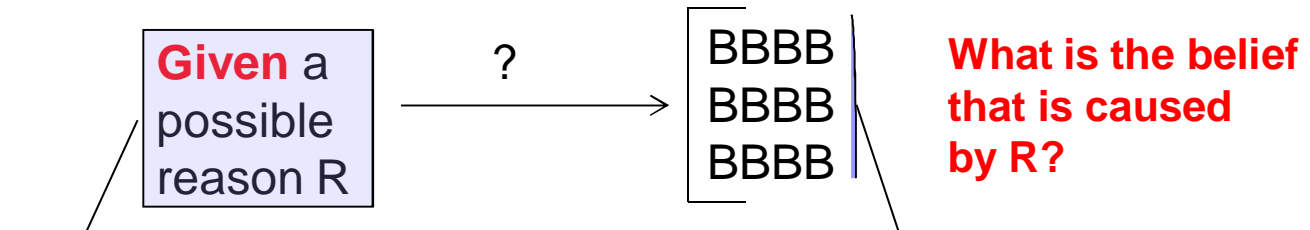
**A selection criterion is lacking that specifies which reasons or irrational factors bring about which beliefs.**

**Selection problem 1:** Given a belief B that is to be explained:  
what are the R's that are the causes for B?



- Belief 1:* Federer was among the top five players before Wimbledon.
- Belief 2:* Federer is a better player on grass than the other players.
- Belief 3:* The unemployment rate is lower in Switzerland than in GB.
- Belief 4:* Federer is married.

**Selection problem 2:** Given a possible reason R:  
what are the effects on what kind of B?



Federer is married.

- Belief 1:* Federer will win Wimbledon.
- Belief 2:* Federer will resign and become CEO in a big firm.
- Belief 3:* Federer will get divorced.




## Example for selection problem 1 (given a single belief that is to be explained ...)

Assume that Swiss tennis fans have the following belief:

- *Belief B*: Roger Federer will win the next Wimbledon championships in July. (Explanandum)

Let the tennis fans have the following set of beliefs that could **in principle** be reasons for B (possible causes):

- *Belief 1*: Federer was among the top five players for two months before Wimbledon.
- *Belief 2*: Federer is a better player on grass than the other players (he has won more matches on grass than other players) .
- *Belief 3*: The unemployment rate is lower in Switzerland than in Great Britain.
- *Belief 4*: Federer is married.



**Intuitively**, we would say that belief 1 (Federer's ranking) and 2 (Federer's play on grass) are relevant for the belief that Federer will win Wimbledon again, but not the other beliefs (unemployment rate, family status).

**But this does not follow from the theory!** It does not give the following information:

**Which of the set of possible “reasons”** (i.e. second-order beliefs)  
- the beliefs 1 to 4 – are causes, i.e. reasons, for the belief in Federer's next Wimbledon victory?






## Example for selection problem 2 (the explananda are not specified)

Given the „reason“ that Federer is married (independent variable).


For which of the following **explananda** is this a reason (or is it no reason at all?):

- *Belief 1:* Federer will win Wimbledon.
- *Belief 2:* Federer will resign and become a leading representative of a sports firm.
- *Belief 3:* Federer will get divorced.

This question cannot be answered.



**Thus, Boudon's cognitivist model has a low explanatory power.**



Nonetheless, the theory is not completely without explanatory content.

It can best be regarded as an **orienting hypothesis** (in Merton's sense) or as a **heuristic device**: it suggests that certain **kinds of factors** are relevant for explaining some social phenomena. Boudon's claim is that it is **reasons that are of major explanatory importance**. He gives the following advice:

**“... to account for a belief, or an action, always try to find the reasons for it” (1994: 18).**

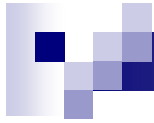
Note: The „**for**“ is only an insinuation for a selection criterion! It is not specified how I choose the possible reasons (or irrational factors **for** a belief.



## The Validity of the Cognitivist Model

There are two problems:

- **The generality of the explananda:** can a single theory explain descriptive and normative beliefs, attitudes, preferences and behavior?
- **Boudon's rejection of utility maximization.**  
Reasons "cannot be reduced to mere considerations of costs and benefits" (1996: 124). Boudon's cognitivist model "is drawn from the 'rational-choice model' by lifting the restriction that the reasons of social actors should always be of the cost-benefit type" (1996: 124).



If utility maximization is rejected, the question arises:

How do people make decisions or adopt beliefs?

For example, why or when do people prefer belief a to belief b?

If this question is not answered the theory has another severe problem regarding its **explanatory power**: it cannot be explained which choices people make.

**Actually, Boudon does not propose an alternative to utility maximization.**



## Can Social Psychological Theories Remedy the Flaws of the Cognitivist Model?

I will now address the two problems of the cognitivist model:

- How can Boudon's theory be improved in regard to its **explanatory power**?
- To what extent are Boudon's **empirical assumptions** – generality of the explananda, rejection of utility maximization – acceptable?




## Procedure to answer these questions

I will look at the implications of two widely applied social psychological theories:

- **Balance theory** (based on Heider 1958) – **BT** – and
- **value expectancy theory** (e.g. Feather 1982) – **VET**.

The following questions should be answered:

- Do the theories **include reasons and irrational factors** as explanatory variables?
- Do the theories show **which reasons and irrational factors** determine **which explananda**?
- Do the theories **confirm the generality assumption**?
- Do the theories **confirm the rejection of utility maximization**?



I applied these theories for each of Boudon's explananda, namely

- descriptive beliefs
- normative beliefs
- attitudes
- preferences and
- behavior.

This is done in the underlying paper.

**For limitations of time, I will address only an example for balance theory and summarize the results of the other analyses.**



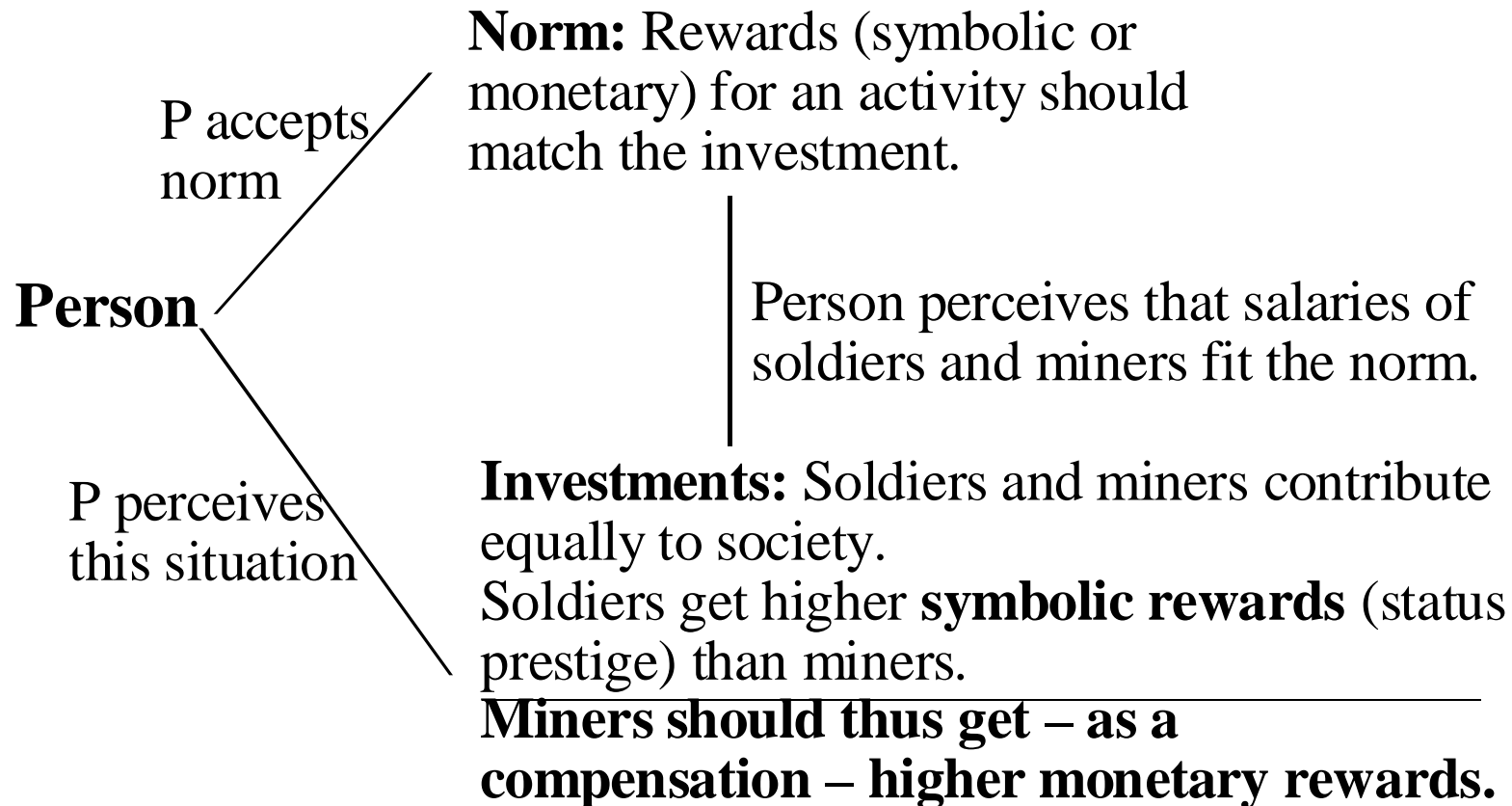
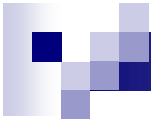


## Applying Balance Theory (BT)

Boudon illustrates the cognitivist model, among other things, with an **example by Adam Smith**.

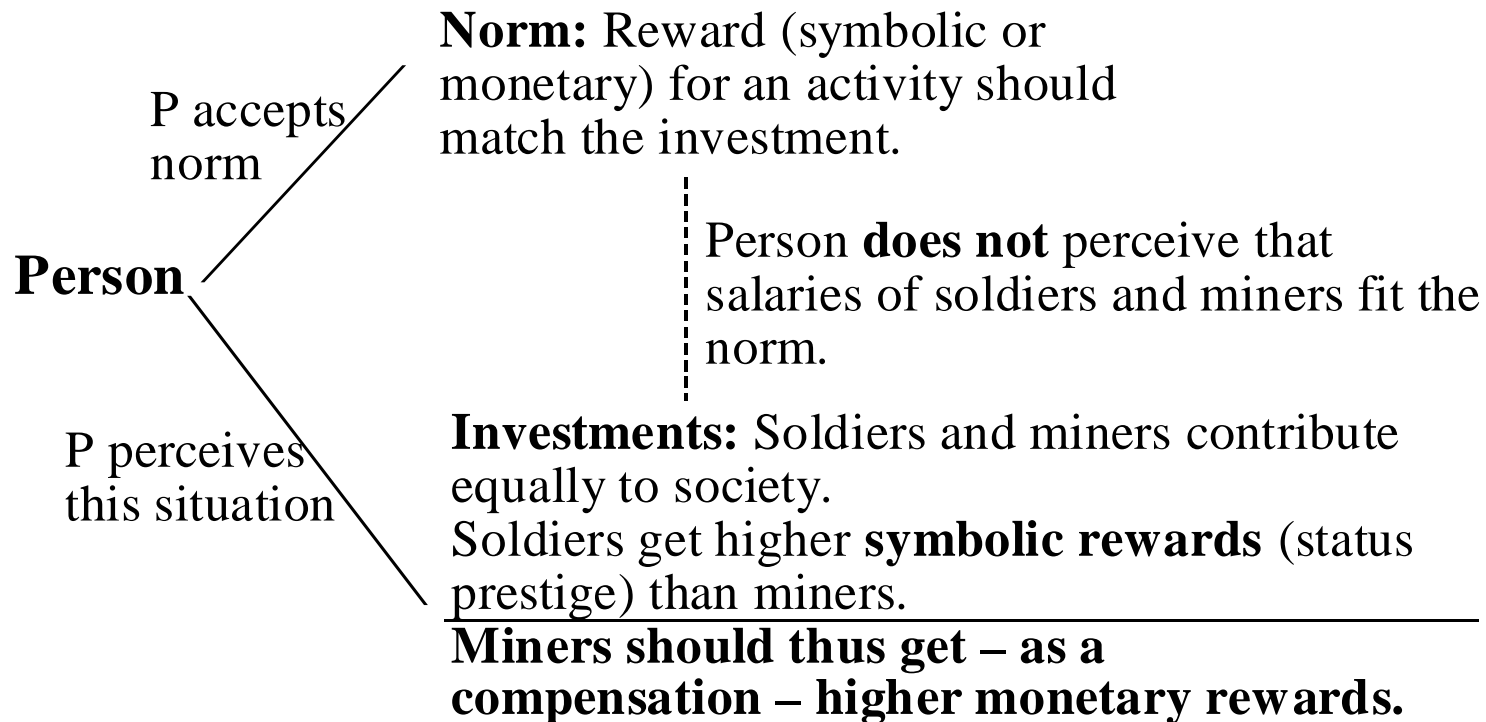
In the 18th century Englishmen were of the opinion that miners should be paid higher wages than soldiers. The issue is thus to explain a norm.

**Boudon's explanation** can be reformulated in terms of BT as a set of cognitions that are related (BT distinguishes between L and U relations):



This is a **balanced situation** (three positive lines) which is **pleasant (= beneficial)** to Person.

Assume now that Person thinks the higher salary of miners is not in accordance with the norm:



This is an **unbalanced situation** (two positive lines and one Negative line) which is **unpleasant** or **costly** to Person.  
**Balanced situations are preferred.**



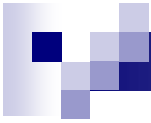
Could **irrational factors** be included?

- There may be and there are **social relationships between Englishmen** (other P's can be added to a cognitive structure).
- We would expect that deviation from shared beliefs leads to **social sanctions** (which would be a relation between P and O...).



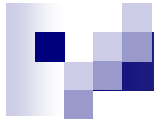
## Some Implications

- **BT explains, among other things, the origin or change of beliefs** and can thus be compared with Boudon's theory.
- **BT includes a selection criterion:** a relation between elements is to be included if this makes Person better or worse off. The belief “apples are healthy” would be irrelevant in the Adam Smith example.
- **BT includes irrational factors** such as a liking relation.
- **BT integrates** reasons and irrational factors. There is no need to distinguish between rational and irrational factors.
- **BT assumes utility maximization.** A balanced state is the best state an individual could achieve, and individuals try to achieve it.
- **BT confirms the generality of Boudon's theory:** cognitive elements and lines may refer to beliefs, attitudes, preferences and behaviors.



Thus,

- BT solves the problem of the low explanatory power of Boudon's theory,
- BT confirms the generality assumption, but
- BT is inconsistent with Boudon's rejection of utility maximization.



In the paper I also applied **value expectancy theory** to Boudon's explananda.

The results are the same as those presented before.

For limitations of time I will not present the results of the analysis.




## **Boudon's Critique of Rational Choice Theory**

BT and VET are versions of rational choice theory (RCT). Boudon is an emphatic opponent of RCT – he wrote two articles against RCT (1998, 2003).

If Boudon's critique of RCT is correct it may not be meaningful to apply BT and VET to criticize Boudon – why apply a clearly inadequate theory to criticize another theory?

It is thus important to examine the extent to which Boudon's critique of RCT is tenable.





The **major problem of Boudon's critique** of “the” theory of rational action RCT is that he does not distinguish between different versions which are burdened with different problems.

There is a **narrow version** — relevant is only egoism, reality is perceived correctly, material incentives are to be included, objective utility maximization and a **wide version** — altruistic motivations and motivations to follow norms are admitted, perceptions (beliefs) are relevant, and subjective utility maximization is assumed (perspective of the actor).

**Boudon's target is the narrow version of RCT, and he does not discuss whether his critique holds for a wide version as well.**



## Here are some quotation illustrating Boudon's critique:

RCT “introduces the fiction of a solipsistic *homo sociologicus*,” whereas Boudon's cognitivist model “recognizes the *homo sociologicus* as a social being” (2012b: 18) – this is exactly what the wide version does.

RCT is „consequentialist“ and assumes „instrumentality“ (2003). That is to say, norms (non-instrumental action) are excluded. This is not the case in the wide version.

„[A]ctors are concerned mainly with the consequences to themselves of their own action“ (egoism -- 2003). Again: an assumption of the narrow version.



## Boudon as a Proponent of the Wide Version of RCT

In outlining his critique of RCT (e.g. 2003) Boudon sketches the cognitivist model (in contrast to "rational choice theory"):

- Beliefs (reasons) – that may, of course, be wrong! – are explanatory variables – **as in the wide version!**
- No restriction to „instrumental rationality“ or „consequentialism“, i.e. values or norms must be included as possible explanatory variables – **as in the wide version!**
- No limitation to pure egoism – **as in the wide version!**
- Importance of the social context – **as in the wide version!**

**Thus, Boudon's theory is – so far –  
equivalent with a wide version of RCT.**



## Utility Maximization – Pro and Con

### Main argument **against** Boudon:

Major social psychological theories – value expectancy theory, balance theory and, in addition, learning theories – assume a subjective version of utility maximization.

Even psychoanalysis implies assumes maximization!



## Boudon's arguments are just allegations

"Reasons," Boudon argues, "cannot be reduced to mere considerations of costs and benefits" (1996). Why not? What is the evidence?

" .. endorsing a theory is a noninstrumental action ... the question the actor is confronted with here is not to maximize a cost-benefit balance, but to check whether, to the best of his knowledge, an idea is acceptable." (1998) Evidence?

**There are thus no detailed arguments against utility maximization (such as empirical findings).**



**Analyzing Boudon's examples shows that he implicitly assumes subjective utility maximization.**

Assume the **Australian tribes** who believe that rain dances generate rain come into contact with modern science. Thus:

- **Traditional belief:** rain dances generate rain.
- **Modern science belief:** processes X lead to rain (not rain dances).

Boudon: the traditional belief will be given up if this is **convincing** (= considered true or superior to the competing belief).

**One explanatory step is missing:**



If modern science is convincing: **why drop the traditional belief?** Why not hold both beliefs?

- Holding simultaneously the belief that rain dances lead to rain and do not lead to rain is dissonant (= **costly**) and will be socially ostracized.
- People often have a goal to know the truth. Realizing this goal is **beneficial**. Not knowing the truth is **costly**.

**Thus: giving up a false belief is clearly a benefit, and keeping it is a cost – in contrast to Boudon's claims.**



## General Conclusions

An **important idea** that is confirmed by the previous analysis is that a **single theory is sufficient** to „explain everything.“ This should lead to further efforts to try to expand existing theories along the lines discussed before.

Boudon is an example for an author who vehemently **criticizes a theory that he actually applies**, viz. rational choice theory. This lends – unintentionally! – further support to this theory.

As far as the **cognitivist model** is concerned, the previous analysis indicates that existing social psychological theories are superior: they remedy the problems of Boudon's theory.






## **This presentation is based on the following paper:**

Opp, Karl-Dieter. 2014. "The Explanation of Everything. A Critical Assessment of Raymond Boudon's Theory Explaining Descriptive and Normative Beliefs, Attitudes, Preferences and Behavior." *Papers. Revista de Sociologia* 99(4):481-514.

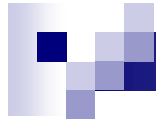


## **This presentation and the underlying paper are based on the following writings of Boudon:**

- Boudon, Raymond (1989). "Subjective Rationality and the Explanation of Social Behavior." *Rationality and Society*, 1(2), 173-196.
- (1994). *The Art of Self-Persuasion. The Social Explanation of False Beliefs*. Cambridge: Polity Press.
  - (1996). "The 'Cognitivist Model.' A Generalized 'Rational-Choice-Model'." *Rationality and Society*, 8(2), 123-150.
  - (1998). "Limitations of Rational Choice Theory." *American Journal of Sociology* 104(3), 817-828.
  - (2001). *The Origin of Values. Sociology and Philosophy of Beliefs*. New Brunswick: Transaction Publishers.
  - (2003). "Beyond Rational Choice Theory." *Annual Review of Sociology*, 29, 1-21.
  - (2009). "On Axiological Rationality." In: Hill, Paul; Kalter, Frank; Kopp, Johannes; Kroneberg, Clemens; and Schnell, Rainer (eds.). *Hartmut Essers Erklärende Soziologie. Kontroversen und Perspektiven*. Frankfurt and New York: Campus. Pp. 31-52.

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- (2009b). "Rational Choice Theory." In: Turner, Bryan S. (ed.). The New Blackwell Companion to Social Theory. Oxford: Blackwell. Pp. 179-195.
  - (2012a). "The Micro-Macro Link. Notes on a planned course on "truth, beliefs, interpretation", unpublished manuscript.
  - (2012b). "'Analytical Sociology" and the Explanation of Beliefs " European Journal of Social Sciences, 50(2), 7-34.
  - (2013). Beiträge zur allgemeinen Theorie der Rationalität, translated by Felix Wolter. Tübingen: Mohr Siebeck.
  - (2014). "On Context." In: Friedrichs, Jürgen, and Nonnenmacher, Alexandra (eds.). Soziale Kontexte und soziale Mechanismen. Special issue 54 of the Kölner Zeitschrift für Soziologie und Sozialpsychologie (Cologne Journal of Sociology and Social Psychology). Wiesbaden: Springer VS (in press).

This is **not a complete list** of Boudon's writings about the cognitivist model. Perhaps this selection **misrepresents** Boudon's theory? A few weeks before his death I asked him which of his publications has the most recent version of his theory. He mentioned some of the papers listed above.



There are good  
reasons to  
Thank you for  
your attention