

# CAN **MORE** KNOWLEDGE REALLY BE A **BAD** THING?

## CHALLENGING THE PRINCIPLE OF NON-MONOTONICITY

POST-NORMAL SCIENCE WORKSHOP, HAMBURG, GERMANY  
SEPTEMBER 16TH-19TH 2012

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# WHAT QUESTION AM I ASKING?

**The principle of non-monotonicity holds that “more is not always better”**

**Commonly accepted: more information can lead to worse decisions because of limited time and capacity to treat the information.**

**But what if the decision-maker is an ideal person?  
Can then more knowledge lead to worse decisions?**

**“The veil of ignorance surrounding a random distribution helps the decision maker to make better decisions. This holds true even if the decision maker is an ideal person who is able to process unlimited amounts of information in virtually no time”**

**(Peterson 2007)**

# THE STARTING POINT

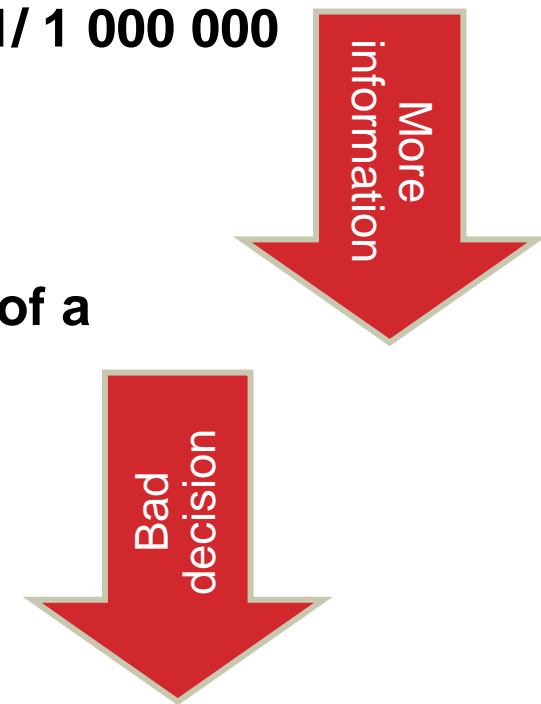
« There are epistemic situations in which decisions will be worse if more information is acquired. »

Example (Peterson 2007):

New efficient drug with adverse drug reaction: 1/ 1 000 000

The adverse drug reaction only affects bearers of a specific, yet undiscovered, gene

Decision: the drug is not approved



# IS IT REALLY THE NEW PIECE OF INFORMATION THAT CAUSES THE BAD DECISION?

## 2 ways to look at it

Probabilistic Causation: causes change the probabilities of their effects

Treating information as technology (cf. Kranzberg)

# REVISITING KRANZBERG'S LAWS OF TECHNOLOGY

**1. Information is neither good nor bad; nor is it neutral.**

**2. Invention is the mother of necessity: “Every technical innovation seems to require additional technical advances in order to make it fully effective.”**

**The new piece of information leads to worse decision insofar as it is not part of a bigger picture.**

**=> The problem is not too much but too little! (cf. Alexander Pope)**

**3. Information comes in packages, big and small. “The fact is that today’s complex mechanisms usually involve several processes and components.”**

**Data → Information → Knowledge → Wisdom**

**4. Although information might be a prime element in many public issues, other factors (notably ethical) take precedence in policy decisions.**

**Here, the ethical belief that random distribution is more morally acceptable than distributed risk takes precedence in the policy-making decision.**

**5&6. STS are the most relevant field ever, and a very human one. ;)**

## TO WRAP IT UP...

- When more information leads to worse decisions, it can only be said so in terms of probabilistic causation.
- “Information is neither good nor bad; nor is it neutral.” (cf. Kranzberg 1985)
- Can a decision-maker led by her irrational beliefs when processing the information be said ideal?
- More wisdom is needed to deal adequately with more information (cf. Puech 2008)

# DOES IT WORK?

## 2 ADDITIONAL CASE STUDIES

### **The vaccine example**

**« given the way people reacted to this information; it would have been better to not know about the adverse effects of the vaccine. »**

### **Sai Weng Lost his Horse (in a very post-normal world)**

**« the changes have no end, nor can the mystery be fathomed »**

**What if Sai Weng had to make a decision?**

**Information + 1 = bad/Information + 2 = good (?)**



# MY CLAIM

**The principle of non-monotonicity is supposed to be part of an argumentary against the precautionary principle, said to lead to worse decisions by paralyzing the decision-making process.**

**I do not deny that more information can be followed by worse decisions, nor that seeking more information can be very cost-ineffective, especially when dealing with non-ideal decision-makers.**

**I claim however that the non-monotonicity principle can lead to another, maybe more disruptive, kind of paralysis, by preventing the very pursuit of information that could improve the decision.**

# WHY DOES IT MATTER?

## MY PHD FINDINGS IN A NUTSHELL

- **Paper 1: « Revisiting the moral specificity of environmental legacy towards future generations »**

- There is no moral specificity of environmental legacy towards future generations compared to other legacies.

- **Paper 2: « Online Deliberation and Environmental Governance »**

- Public debates around environmental issues which are not previously known by the respondents and are not seen as affecting their lives are likely to raise little concern and eventually be unsuccessful.

- **Paper 3: « Discussing the right thing at the wrong place?: What Reactions to Trade Regulation of Rare Earth Elements are Really About »**

- The WTO is not, as sensed by many Internet-users, the right arena to discuss ownership of exhaustible resources.

# THE KIND OF DECISIONS IT COULD LEAD TO...

- **Paper 1: if there is no moral specificity of the environmental legacy, why even bother? Let's just mine and ravage everything and make it up otherwise.**
- **Paper 2: If people who do not know anything about a particular topic cannot engage in public debate, let's just ask the experts and not be concerned with the public.**
- **Paper 3: Internet-users don't know what they are talking about, let's not pay attention + Chinese people are just a bunch of selfish nationalistic people / the WTO in general is useless.**

HOW TO AVOID THAT?

DOES IT EVEN MAKE SENSE TO  
WANT TO AVOID IT?

THANK YOU FOR YOUR ATTENTION,  
QUESTIONS AND COMMENTS