Epistemic Optimism

Julien Dutant

King’s College London

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Knowledge-first Evidentialism

Two principles for epistemology:

(E) You ought to believe just what is supported by your evidence.

(E=K) Your evidence is just what you know.

New Evil Demon problem

NED claim What you know differs across “good case”-”bad case” pairs, but what is rational does not.

Reject the NED claim: implausible for rationality.
Accomodate: what you know differs, but rationalizes the same beliefs. (Lord)
Accomodate the NED claim  What you know differs across Good and Bad but rationalizes the same beliefs.

Problem 1: action cases
In Good, you know $b \& g$. In Bad, you only know $b$.

<table>
<thead>
<tr>
<th></th>
<th>$b &amp; g$</th>
<th>$b &amp; \neg g$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go the basement</td>
<td>😊</td>
<td>😊</td>
</tr>
<tr>
<td>Go to the garage</td>
<td>😊</td>
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By Dominance, in Good, indifference is rational. In Bad, it is not.
Accommodation  What you know differs across Good and Bad but rationalizes the same beliefs.

Problem 2: conditionalization & defeat

- **Conditionalization.** One’s degree of beliefs must be the result of conditionalizing a prior on one’s evidence.

- **Defeat.** If in Bad you learn that the ball is illuminated by red lights, you should lower your credence that there is a red ball.

NED claim + Conditionalization requires $\Pr(is\ red|seems\ red)=1$. But if $\Pr(is\ red|seems\ red)=1$, you can’t get Defeat (by standard means).
Rescuing knowledge-first evidentialism

Most epistemologists endorse alternatives:
- Reject E=K, e.g. internalism about evidence.
- Reject E, e.g. dispositionalist view of rationality (reliabilism, virtue, dispo. to know, WWKD).

Here we propose a new version of Knowledge-first evidentialism instead.

**Epistemic optimism**  When you can’t tell things are epistemically bad, assume they are good.

Roughly: in Bad it’s rational to believe as in Good because you cannot know that you are in Bad rather than Good.
Epistemic optimism

In Bad it’s rational to believe as in Good because you cannot know that you are in Bad rather than Good.

Variants

1. “The inner side of knowing” (Bird 1 Ichikawa Jenkins 2). It’s rational to believe $p$ iff some internal duplicate of you could know $p$.

2. *Local* epistemic optimism (Rosencranz 3). It’s rational to believe $p$ iff you are not in position to know that you are not in position to know $p$.
   
   \[ Jp \leftrightarrow \neg K \neg Kp. \]

3. Here: *global* epistemic optimism.
The central conjecture

**Conjecture**  Bad case $\leftrightarrow$ *for all you know, you know overall more than what you actually know.*

The $\rightarrow$ direction is fairly safe. Nothing that Bad knows but Good doesn’t.

The $\leftarrow$ direction is the harder one.
Test case: inexact knowledge, sliding

**Conjecture**  Bad case $\leftrightarrow$ **for all you know, you know overall more than what you actually know.**

Inexact knowledge case, sliding
Good case where for **some** $p$: for all you know, you know $p$. Let $p$ be $x \geq 3$:

![Diagram showing overlapping circles with points 1, 2, 3, 4, 5]
**Conjecture**  Bad case $\iff$ for all you know, you know *overall more* than what you actually know.

**Inexact knowledge case, focusing**

Good case where for all you know, you know more *about the position of the hand*.

**Solid areas:** you know that you do not know that.
The central conjecture

Test case: overconfidence

Conjecture

Bad case \iff for all you know, you know overall more than what you actually know.

Inexact knowledge, focusing but overconfidence

Problem: if you (mistakenly) believe you know that it’s exactly 3, then you don’t know that you don’t know.

Answer: look at what you are in position to know.
Motivating the conjecture

Conjecture (→) Good case → it’s not compatible with what you know that you know overall more than what you actually know.

Why think it holds?
In a Good case, you are “making the most” of your situation. A change of situation that would affect what you are in position to know couldn’t strictly improve your total knowledge.

Remark. Good case here means perfectly good. Any ordinary person has some rational false beliefs. They are in “bad cases” for these beliefs.
Define *being epistemically as good as*:  
\[ w \succeq w' \text{ iff at } w \text{ you know everything that you know at } w'. \]
\[ w > w' \text{ iff } w \succeq w' \text{ and } w' \nsucceq w. \]
\( w \) is *strongly optimal* iff there is no \( w' > w \).
\( w \) is *weakly optimal* iff there is no strongly optimal \( w' > w \).

**Conjecture**  Good cases \( \leftrightarrow \) (weakly) optimal cases.

**Proposal:**

**Global Epistemic Optimism**  It is rational to believe \( p \) at \( w \) iff one knows \( p \) at all weakly optimal cases \( w' \) such that \( w' \succeq w \).
Good cases and the New Evil Demon claim

- **Good cases.** If good cases = optimal cases: it is rational to believe exactly what you know.

- **New Evil Demon claim.** It is rational to believe the same things in Good and Bad.
Applications of Epistemic Optimism

Subtler demon cases, Defeat

- **Subtler New Evil Demon case: de re beliefs.**

- **Defeat.** Strictly more knowledge can remove some rational beliefs.
  When you learn that the ball is illuminated by red lights, it’s not rational to believe that it’s red.
Applications of Epistemic Optimism

Weakening the conjecture

- *Weakening the conjecture: 'good' cases without optimality.* Inexact knowledge with strictly better cases, but uniformly distributed.

![Diagram showing overlapping regions labeled 1 to 5.]
Preface paradox

- Preface paradox.

Let \( n \) be the number of claims in the book.
Let \( k \geq 1 \) be the largest number such you know that you do not know \( k \) claims.

- It’s rational to believe all the claims you actually know
- It’s rational to believe that \( n - k \) claims are true.
  i.e., it’s rational to believe the disjunction of all conjunctions of \( n - k \) claims.
Epistemic Optimist semantics

Kripke model $\langle W, R \rangle$ with $R$ reflexive.

*Epistemic betterness.* $w \geq w'$ as $R(w) \subseteq R(w')$,

$w > w'$ iff $w \geq w'$ and $w' \not\geq w$.

Let $\text{top}(w)$ be the set of weakly optimal worlds at least as good as $w$:

$$\text{top}(w) = \{w' : w' \geq w \land \forall w''(w'' > w' \rightarrow \exists w'''(w''' \geq w''))\}.$$ 

Guarantees that for every $w$, $\text{top}(w) \neq \emptyset$. 
Epistemic optimism \( w \models Jp \) iff for all \( w' \in \text{top}(w) \), \( w' \models Kp \).

- **Supervenience.** If \( K(w) = K(w') \) then \( J(w') = J(w) \).
- **K–Jlink.** \( Kp \rightarrow Jp \).
- **No Moore paradox.** \( K \neg Kp \rightarrow \neg Jp \).
- **J is neither K nor \( \neg K \neg K \).** \( \not\models Kp \leftrightarrow Jp \), \( \not\models \neg K \neg Kp \leftrightarrow Jp \).
- **Consistency, closure.**
- **In optimal worlds,** \( Kp \leftrightarrow Jp \).
Sound and hopefully complete:

Logic

Normality for \( K, J \). Factivity: \( Kp \rightarrow p \).

\[
\begin{align*}
Kp & \rightarrow Jp. \\
J \neg Kp & \rightarrow \neg Jp. \\
J(Kp \rightarrow Jq) & \rightarrow (Jp \rightarrow Jq).
\end{align*}
\]

Some notable consequences:

- **Consistency.** \( Jp \rightarrow \neg J \neg p \).
- "**Infallibility"** internalist-looking principles. \( JJp \rightarrow Jp, J \neg Jp \rightarrow \neg Jp \).
- **Smithies’ [4] principles.** \( \neg J(Jp \land \neg p), \neg J(p \land \neg Jp) \).
- Further closure principles: \( J(Jp \rightarrow Jq) \rightarrow (Jp \rightarrow Jq) \).

\( J(Kp \rightarrow Kq) \rightarrow (Jp \rightarrow Jq) \).
GEO vs. The Inner Side of Knowing

The inner side of knowing (Bird 1 Ichikawa Jenkins 2).
It's rational to believe $p$ iff some internal duplicate of you could know $p$.

Two problems:

1. No rational belief in necessary falsehoods.
2. Proliferation of rational belief in Subtler Demon cases.
   If a hallucinate a grain of sand in the glass, then for every grain of sand $x$, I have an internal duplicate who knows that $x$ is in the glass.

Global Epistemic Optimism avoids both.

1. If $p$ is necessary false, I may still not know that I do not know $p$.
2. It’s rational to believe that some grain of sand is in the glass, nothing more.
Local epistemic optimism (Rosencranz 3).

It’s rational to believe $p$ iff you are not in position to know that you are not in position to know $p$.

Principles:

- **K-J.** $Kp \rightarrow Jp$.
- **D.** $Jp \rightarrow \neg J \neg p$.
- **E1.** $Jp \rightarrow \neg K \neg Kp$.
- **E2.** $\neg K \neg Kp \rightarrow Jp$. **
- **NMP.** $J \neg Kp \rightarrow \neg Jp$.

Given E1-E2, NMP requires:

- **Lum.** $Jp \rightarrow KJp$. **

** principles rejected by GEO. Agreement on all others.
Problems for LEO:

1. Heavy idealisations. A rock is in position to know that it doesn’t know that it’s sunny.
2. In inexact knowledge cases, $K \neq J$.
4. Inconsistency. In the Preface, believe all claims in the book. Intuitive, but cannot be used as input to conditionalization.

GEO avoids them.

1. Rock: for every $p$, some better optimal case that doesn’t know $p$.
2. 2, 3, 4: see above.
Global Epistemic Optimism

Two-tiered theory of evidence
- Knowledge: what ultimately rationalizes belief.
- Rational belief: what you conditionalize upon, what rationalizes decision and action.

Features
- **Knowledge-first.** knowledge determines rationality. No further primitive (dispositions, normality, internal duplication, . . .)
- **Consistency.** provides an input to conditionalization.
- **Defeat.** Allows ‘backtracking’ from certainties.
- **Internalist-friendly** judgments on the NED.
- **Attractive K-J principles** that were often associated with internalism.
- **No questionable luminosity claims.**
References


