

One Boxer Rebellion

Huw Price

9 January 2009

- 1 The Great Divide
- 2 The First Principle of Causal Epistemology
- 3 Working From the Inside
- 4 Sticking to One's Guns
- 5 The Problem of the 'Medical' Cases

The Great Divide

The First Principle

Working From the Inside

Sticking to One's Guns

The Problem of the 'Medical' Cases

The Great Wall of China

Five Point Plan for Unification

One World One Dream

James Joyce on the Great Wall of China

The Great Divide
The First Principle
Working From the Inside
Sticking to One's Guns
The Problem of the 'Medical' Cases

The Great Wall of China
Five Point Plan for Unification
One World One Dream

James Joyce on the Great Wall of China



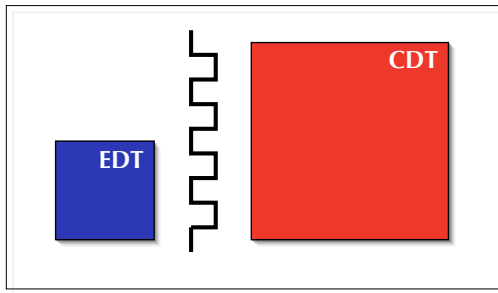
The Great Divide
The First Principle
Working From the Inside
Sticking to One's Guns
The Problem of the 'Medical' Cases

The Great Wall of China
Five Point Plan for Unification
One World One Dream

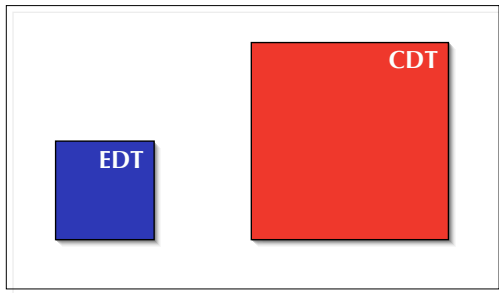
One World One Dream



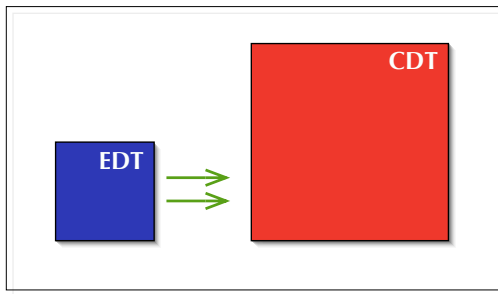
The orthodox picture



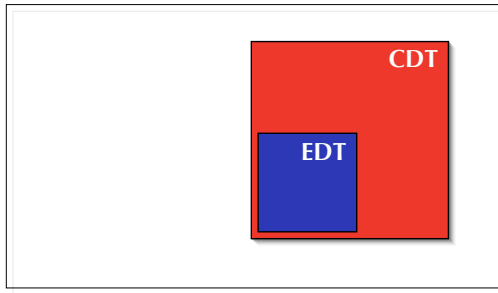
I. Tear down the wall



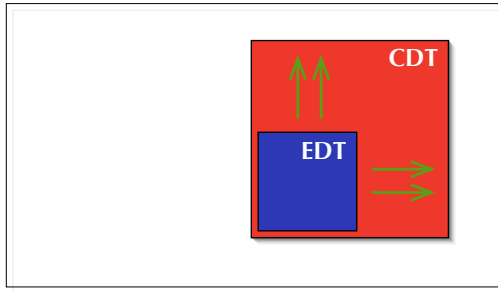
2. EDTers should be CDers, too



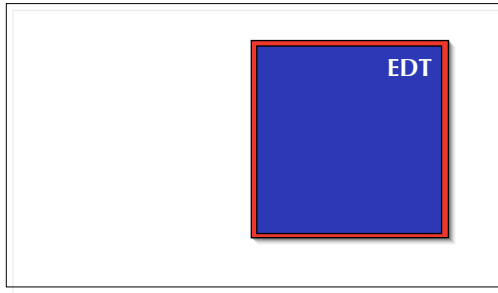
3. We are all CDTERS now



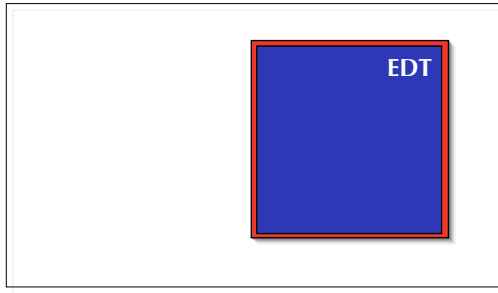
4. Causation is evidential



5. One-boxing wins



One World One Dream One Box



- 1 The Great Divide
- 2 **The First Principle of Causal Epistemology**
- 3 Working From the Inside
- 4 Sticking to One's Guns
- 5 The Problem of the 'Medical' Cases

The First Principle of Causal Epistemology

The First Principle

"In the game of discerning causal links, effective strategies are trumps."

In other words

- Suppose we take it to be rational to do A rather than $\textit{not-A}$, in pursuit of an end B – i.e., we take A to be an effective strategy for achieving B .
- We are thereby committed to view that A is a (positive) causal factor for B .
- (And *vice versa*?)
- Nicely illustrated by Eric's game, based on the Bell correlations.

The First Principle of Causal Epistemology

The First Principle

"In the game of discerning causal links, effective strategies are trumps."

In other words

- Suppose we take it to be rational to do A rather than $\textit{not-A}$, in pursuit of an end B – i.e., we take A to be an effective strategy for achieving B .
- We are thereby committed to view that A is a (positive) causal factor for B .
- (And *vice versa*?)
- Nicely illustrated by Eric's game, based on the Bell correlations.

The First Principle of Causal Epistemology

The First Principle

"In the game of discerning causal links, effective strategies are trumps."

In other words

- Suppose we take it to be rational to do A rather than $\textit{not-A}$, in pursuit of an end B – i.e., we take A to be an **effective strategy** for achieving B .
- We are thereby committed to view that A is a (positive) causal factor for B .
- (And *vice versa*?)
- Nicely illustrated by Eric's game, based on the Bell correlations.

The First Principle of Causal Epistemology

The First Principle

"In the game of discerning causal links, effective strategies are trumps."

In other words

- Suppose we take it to be rational to do A rather than *not- A* , in pursuit of an end B – i.e., we take A to be an **effective strategy** for achieving B .
- We are thereby committed to view that A is a (positive) causal factor for B .
- (And *vice versa*?)
- Nicely illustrated by Eric's game, based on the Bell correlations.

The First Principle of Causal Epistemology

The First Principle

"In the game of discerning causal links, effective strategies are trumps."

In other words

- Suppose we take it to be rational to do A rather than *not-A*, in pursuit of an end B – i.e., we take A to be an **effective strategy** for achieving B .
- We are thereby committed to view that A is a (positive) causal factor for B .
- (And *vice versa*?)
- Nicely illustrated by Eric's game, based on the Bell correlations.

The First Principle of Causal Epistemology

The First Principle

"In the game of discerning causal links, effective strategies are trumps."

In other words

- Suppose we take it to be rational to do A rather than $not-A$, in pursuit of an end B – i.e., we take A to be an **effective strategy** for achieving B .
- We are thereby committed to view that A is a (positive) causal factor for B .
- (And *vice versa*?)
- Nicely illustrated by Eric's game, based on the Bell correlations.

The First Principle of Causal Epistemology

The First Principle

"In the game of discerning causal links, effective strategies are trumps."

In other words

- Suppose we take it to be rational to do A rather than $not-A$, in pursuit of an end B – i.e., we take A to be an **effective strategy** for achieving B .
- We are thereby committed to view that A is a (positive) causal factor for B .
- (And *vice versa*?)
- Nicely illustrated by Eric's game, based on the Bell correlations.

The First Principle of Causal Epistemology

The First Principle

"In the game of discerning causal links, effective strategies are trumps."

In other words

- Suppose we take it to be rational to do A rather than $not-A$, in pursuit of an end B – i.e., we take A to be an **effective strategy** for achieving B .
- We are thereby committed to view that A is a (positive) causal factor for B .
- (And *vice versa*?)
- Nicely illustrated by Eric's game, based on the Bell correlations.

- 1 The Great Divide
- 2 The First Principle of Causal Epistemology
- 3 Working From the Inside**
- 4 Sticking to One's Guns
- 5 The Problem of the 'Medical' Cases

CDT for one-boxers

Consider a CDTer who says:

- I accept the First Principle (of course).
- I take strategic deliberation to be *evidential*.
- For me, then, there's no gap between CDT and EDT – the First Principle ensures that my causal judgements track my decisions about effective strategies, as determined by EDT.
- In the (classic) Newcomb Problem I therefore one-box, taking my action to affect the Predictor's choice.

How can a two-boxer respond?

CDT for one-boxers

Consider a CDTer who says:

- I accept the First Principle (of course).
- I take strategic deliberation to be *evidential*.
- For me, then, there's no gap between CDT and EDT – the First Principle ensures that my causal judgements track my decisions about effective strategies, as determined by EDT.
- In the (classic) Newcomb Problem I therefore one-box, taking my action to affect the Predictor's choice.

How can a two-boxer respond?

CDT for one-boxers

Consider a CDTer who says:

- I accept the First Principle (of course).
- I take strategic deliberation to be *evidential*.
- For me, then, there's no gap between CDT and EDT – the First Principle ensures that my causal judgements track my decisions about effective strategies, as determined by EDT.
- In the (classic) Newcomb Problem I therefore one-box, taking my action to affect the Predictor's choice.

How can a two-boxer respond?

CDT for one-boxers

Consider a CDTer who says:

- I accept the First Principle (of course).
- I take strategic deliberation to be *evidential*.
- For me, then, there's no gap between CDT and EDT – the First Principle ensures that my causal judgements track my decisions about effective strategies, as determined by EDT.
- In the (classic) Newcomb Problem I therefore one-box, taking my action to affect the Predictor's choice.

How can a two-boxer respond?

CDT for one-boxers

Consider a CDTer who says:

- I accept the First Principle (of course).
- I take strategic deliberation to be *evidential*.
- For me, then, there's no gap between CDT and EDT – the First Principle ensures that my causal judgements track my decisions about effective strategies, as determined by EDT.
- In the (classic) Newcomb Problem I therefore one-box, taking my action to affect the Predictor's choice.

How can a two-boxer respond?

CDT for one-boxers

Consider a CDTer who says:

- I accept the First Principle (of course).
- I take strategic deliberation to be *evidential*.
- For me, then, there's no gap between CDT and EDT – the First Principle ensures that my causal judgements track my decisions about effective strategies, as determined by EDT.
- In the (classic) Newcomb Problem I therefore one-box, taking my action to **affect** the Predictor's choice.

How can a two-boxer respond?

CDT for one-boxers

Consider a CDTer who says:

- I accept the First Principle (of course).
- I take strategic deliberation to be *evidential*.
- For me, then, there's no gap between CDT and EDT – the First Principle ensures that my causal judgements track my decisions about effective strategies, as determined by EDT.
- In the (classic) Newcomb Problem I therefore one-box, taking my action to **affect** the Predictor's choice.

How can a two-boxer respond?

Response 1

“You’re wrong about the causal structure of the Newcomb case.”

REPLY: The First Principle ensures that we can’t know this, without already having decided the issue about effective strategies – while that issue is *open*, causal structure cannot be regarded as *known*.

Response 1

“You’re wrong about the causal structure of the Newcomb case.”

REPLY: The First Principle ensures that we can’t know this, without already having decided the issue about effective strategies – while that issue is *open*, causal structure cannot be regarded as *known*.

Response 1

“You’re wrong about the causal structure of the Newcomb case.”

REPLY: The First Principle ensures that we can’t know this, without already having decided the issue about effective strategies – while that issue is *open*, causal structure cannot be regarded as *known*.

Response 1

“You’re wrong about the causal structure of the Newcomb case.”

REPLY: The First Principle ensures that we can’t know this, without already having decided the issue about effective strategies – while that issue is *open*, causal structure cannot be regarded as *known*.

Response 2

“Let’s just stipulate the causal structure.”¹

REPLY: This makes the description of the case self-contradictory, by my agent’s lights. You’ve specified a causal structure, and provided information that implies a different causal structure. (It isn’t a surprise that an incoherent problem has no coherent solution.²)

¹In other words, let’s set up the case with the stipulation that the agent cannot affect the Predictor’s actions.

²Though there’s a nice explanation here for the apparent intractability of the Newcomb Problem – more on this later.

Response 2

“Let’s just stipulate the causal structure.”¹

REPLY: This makes the description of the case self-contradictory, by my agent’s lights. You’ve specified a causal structure, and provided information that implies a different causal structure. (It isn’t a surprise that an incoherent problem has no coherent solution.²)

¹In other words, let’s set up the case with the stipulation that the agent cannot affect the Predictor’s actions.

²Though there’s a nice explanation here for the apparent intractability of the Newcomb Problem – more on this later.

Response 2

“Let’s just stipulate the causal structure.”¹

REPLY: This makes the description of the case self-contradictory, by my agent’s lights. You’ve specified a causal structure, and provided information that implies a different causal structure. (It isn’t a surprise that an incoherent problem has no coherent solution.²)

¹In other words, let’s set up the case with the stipulation that the agent cannot affect the Predictor’s actions.

²Though there’s a nice explanation here for the apparent intractability of the Newcomb Problem – more on this later.

Response 2

“Let’s just stipulate the causal structure.”¹

REPLY: This makes the description of the case self-contradictory, by my agent’s lights. You’ve specified a causal structure, and provided information that implies a different causal structure. (It isn’t a surprise that an incoherent problem has no coherent solution.²)

¹In other words, let’s set up the case with the stipulation that the agent cannot affect the Predictor’s actions.

²Though there’s a nice explanation here for the apparent intractability of the Newcomb Problem – more on this later.

Response 2

“Let’s just stipulate the causal structure.”¹

REPLY: This makes the description of the case self-contradictory, by my agent’s lights. You’ve specified a causal structure, and provided information that implies a different causal structure. (It isn’t a surprise that an incoherent problem has no coherent solution.²)

¹In other words, let’s set up the case with the stipulation that the agent cannot affect the Predictor’s actions.

²Though there’s a nice explanation here for the apparent intractability of the Newcomb Problem – more on this later.

Response 2

“Let’s just stipulate the causal structure.”¹

REPLY: This makes the description of the case self-contradictory, by my agent’s lights. You’ve specified a causal structure, and provided information that implies a different causal structure. (It isn’t a surprise that an incoherent problem has no coherent solution.²)

¹In other words, let’s set up the case with the stipulation that the agent cannot affect the Predictor’s actions.

²Though there’s a nice explanation here for the apparent intractability of the Newcomb Problem – more on this later.

Response 2

“Let’s just stipulate the causal structure.”¹

REPLY: This makes the description of the case self-contradictory, by my agent’s lights. You’ve specified a causal structure, and provided information that implies a different causal structure. (It isn’t a surprise that an incoherent problem has no coherent solution.²)

¹In other words, let’s set up the case with the stipulation that the agent cannot affect the Predictor’s actions.

²Though there’s a nice explanation here for the apparent intractability of the Newcomb Problem – more on this later.

Response 3

“If you’d taken two boxes, you would have been richer.”

REPLY: We don’t know the counterfactuals until we know the causal structure, and that’s precisely what’s at issue. By my agent’s lights, it simply isn’t true that he would have been richer if he’d two-boxed – on the contrary!

Response 3

“If you’d taken two boxes, you would have been richer.”

REPLY: We don’t know the counterfactuals until we know the causal structure, and that’s precisely what’s at issue. By my agent’s lights, it simply isn’t true that he would have been richer if he’d two-boxed – on the contrary!

Response 3

“If you’d taken two boxes, you would have been richer.”

REPLY: We don’t know the counterfactuals until we know the causal structure, and that’s precisely what’s at issue. By my agent’s lights, it simply isn’t true that he would have been richer if he’d two-boxed – on the contrary!

Response 3

“If you’d taken two boxes, you would have been richer.”

REPLY: We don’t know the counterfactuals until we know the causal structure, and that’s precisely what’s at issue. By my agent’s lights, it simply isn’t true that he would have been richer if he’d two-boxed – on the contrary!

Morals

- The Newcomb puzzle stems from failing to get back to the First Principle – failing to see the *priority* of a notion of effective strategy, with respect to our notion of causation.
- This failure encourages us to regard causation as an independent degree of ontological freedom, so that we think we can imagine Newcomb-like cases in which CDT and EDT come apart.
- But an EDTer who keeps her head, rejects that kind of decision-independent causal ontology, and insists that she is a CDTer too, can resist this move.
- Moreover, she then has a trump card ...

Morals

- 1 The Newcomb puzzle stems from failing to get back to the First Principle – failing to see the *priority* of a notion of effective strategy, with respect to our notion of causation.
- 2 This failure encourages us to regard causation as an independent degree of ontological freedom, so that we think we can imagine Newcomb-like cases in which CDT and EDT come apart.
- 3 But an EDTer who keeps her head, rejects that kind of decision-independent causal ontology, and insists that she is a CDTer too, can resist this move.
- 4 Moreover, she then has a trump card ...

Morals

- 1 The Newcomb puzzle stems from failing to get back to the First Principle – failing to see the *priority* of a notion of effective strategy, with respect to our notion of causation.
- 2 This failure encourages us to regard causation as an independent degree of ontological freedom, so that we think we can imagine Newcomb-like cases in which CDT and EDT come apart.
- 3 But an EDTer who keeps her head, rejects that kind of decision-independent causal ontology, and insists that she is a CDTer too, can resist this move.
- 4 Moreover, she then has a trump card ...

Morals

- 1 The Newcomb puzzle stems from failing to get back to the First Principle – failing to see the *priority* of a notion of effective strategy, with respect to our notion of causation.
- 2 This failure encourages us to regard causation as an independent degree of ontological freedom, so that we think we can imagine Newcomb-like cases in which CDT and EDT come apart.
- 3 But an EDTer who keeps her head, rejects that kind of decision-independent causal ontology, and insists that she is a CDTer too, can resist this move.
- 4 Moreover, she then has a trump card ...

Morals

- 1 The Newcomb puzzle stems from failing to get back to the First Principle – failing to see the *priority* of a notion of effective strategy, with respect to our notion of causation.
- 2 This failure encourages us to regard causation as an independent degree of ontological freedom, so that we think we can imagine Newcomb-like cases in which CDT and EDT come apart.
- 3 But an EDTer who keeps her head, rejects that kind of decision-independent causal ontology, and insists that she is a CDTer too, can resist this move.
- 4 Moreover, she then has a trump card . . .

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you're so smart, why ain'cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways.

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you're so smart, why ain'cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways.

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you're so smart, why ain'cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways.

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you’re so smart, why ain’cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways. [Indeed! – HP]

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you’re so smart, why ain’cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways. [Indeed! – HP]

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you’re so smart, why ain’cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways. [Indeed! – HP]

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you’re so smart, why ain’cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways. [Indeed! – HP]

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you’re so smart, why ain’cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways. [Indeed! – HP]

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Why ain’cha rich?”

- Lewis on a favourite one-boxer argument:

The one-boxers sometimes taunt us: if you’re so smart, why ain’cha rich? They have their millions and we have our thousands, and they think this goes to show the error of our ways. [Indeed! – HP]

- The two-boxer response:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- But this response is now blocked – we now have two different conceptions of causal structure, and hence of rational CDT-guided choice – one leading effectively to wealth, and one not!

“Down with causal imperialism!”

My diagnosis:

- Newcomb's Problem turns on a clash between two conceptions of causality:
 - A pragmatic notion, with its roots in the soil of practical (evidential) decision making.
 - A notion corrupted by foreign metaphysical influences – by theories of causation which have lost sight of their practical origins.
- If we're corrupted by foreign influences, the local methods may well seem irrational.
- But the fault lies with the foreign causal principles, which are unsuited to local conditions, in the strange world of Newcomb's Problem.

“Down with causal imperialism!”

My diagnosis:

- Newcomb's Problem turns on a clash between two conceptions of causality:
 - A pragmatic notion, with its roots in the soil of practical (evidential) decision making.
 - A notion corrupted by foreign metaphysical influences – by theories of causation which have lost sight of their practical origins.
- If we're corrupted by foreign influences, the local methods may well seem irrational.
- But the fault lies with the foreign causal principles, which are unsuited to local conditions, in the strange world of Newcomb's Problem.

“Down with causal imperialism!”

My diagnosis:

- Newcomb's Problem turns on a clash between two conceptions of causality:
 - A pragmatic notion, with its roots in the soil of practical (evidential) decision making.
 - A notion corrupted by foreign metaphysical influences – by theories of causation which have lost sight of their practical origins.
- If we're corrupted by foreign influences, the local methods may well seem irrational.
- But the fault lies with the foreign causal principles, which are unsuited to local conditions, in the strange world of Newcomb's Problem.

“Down with causal imperialism!”

My diagnosis:

- Newcomb's Problem turns on a clash between two conceptions of causality:
 - A pragmatic notion, with its roots in the soil of practical (evidential) decision making.
 - A notion corrupted by foreign metaphysical influences – by theories of causation which have lost sight of their practical origins.
- If we're corrupted by foreign influences, the local methods may well seem irrational.
- But the fault lies with the foreign causal principles, which are unsuited to local conditions, in the strange world of Newcomb's Problem.

“Down with causal imperialism!”

My diagnosis:

- Newcomb's Problem turns on a clash between two conceptions of causality:
 - A pragmatic notion, with its roots in the soil of practical (evidential) decision making.
 - A notion corrupted by foreign metaphysical influences – by theories of causation which have lost sight of their practical origins.
- If we're corrupted by foreign influences, the local methods may well seem irrational.
- But the fault lies with the foreign causal principles, which are unsuited to local conditions, in the strange world of Newcomb's Problem.

“Down with causal imperialism!”

My diagnosis:

- Newcomb's Problem turns on a clash between two conceptions of causality:
 - A pragmatic notion, with its roots in the soil of practical (evidential) decision making.
 - A notion corrupted by foreign metaphysical influences – by theories of causation which have lost sight of their practical origins.
- If we're corrupted by foreign influences, the local methods may well seem irrational.
- But the fault lies with the foreign causal principles, which are unsuited to local conditions, in the strange world of Newcomb's Problem.

“Down with causal imperialism!”

My diagnosis:

- Newcomb's Problem turns on a clash between two conceptions of causality:
 - A pragmatic notion, with its roots in the soil of practical (evidential) decision making.
 - A notion corrupted by foreign metaphysical influences – by theories of causation which have lost sight of their practical origins.
- If we're corrupted by foreign influences, the local methods may well seem irrational.
- But the fault lies with the foreign causal principles, which are unsuited to local conditions, in the strange world of Newcomb's Problem.

Options for two-boxers

Two options at this point for my opponents:

- 1 Try to “own” the notion of effective strategy, so that the First Principle delivers two-boxing.
- 2 Appeal to more realistic Newcomb puzzles – e.g., the so-called “medical” cases – in which it seems far less plausible to claim that the true causal structure is non-standard.

Options for two-boxers

Two options at this point for my opponents:

- Try to “own” the notion of effective strategy, so that the First Principle delivers two-boxing.
- Appeal to more realistic Newcomb puzzles – e.g., the so-called “medical” cases – in which it seems far less plausible to claim that the true causal structure is non-standard.

Options for two-boxers

Two options at this point for my opponents:

- 1 Try to “own” the notion of effective strategy, so that the First Principle delivers two-boxing.
- 2 Appeal to more realistic Newcomb puzzles – e.g., the so-called “medical” cases – in which it seems far less plausible to claim that the true causal structure is non-standard.

“Why ain’cha rich?,” again

- Lewis’s response to “Why ain’cha rich?”:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- The intended reading here depends on the counterfactual, “If we *had* two-boxed, we *would have been* (even) richer,” and we’ve already responded to that: assuming the counterfactual is the same as assuming the disputed causal structure.
- So let’s try an unintended reading . . . with support in the Great Texts.

“Why ain’cha rich?,” again

- Lewis’s response to “Why ain’cha rich?”:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- The intended reading here depends on the counterfactual, “If we *had* two-boxed, we *would have been* (even) richer,” and we’ve already responded to that: assuming the counterfactual is the same as assuming the disputed causal structure.
- So let’s try an unintended reading . . . with support in the Great Texts.

“Why ain’cha rich?,” again

- Lewis’s response to “Why ain’cha rich?”:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- The intended reading here depends on the counterfactual, “If we *had* two-boxed, we *would have been* (even) richer,” and we’ve already responded to that: assuming the counterfactual is the same as assuming the disputed causal structure.
- So let’s try an unintended reading . . . with support in the Great Texts.

“Why ain’cha rich?,” again

- Lewis’s response to “Why ain’cha rich?”:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- The **intended** reading here depends on the counterfactual, “If we *had* two-boxed, we *would have been* (even) richer,” and we’ve already responded to that: assuming the counterfactual is the same as assuming the disputed causal structure.
- So let’s try an **unintended** reading . . . with support in the Great Texts.

“Why ain’cha rich?,” again

- Lewis’s response to “Why ain’cha rich?”:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- The **intended** reading here depends on the counterfactual, “If we *had* two-boxed, we *would have been* (even) richer,” and we’ve already responded to that: assuming the counterfactual is the same as assuming the disputed causal structure.
- So let’s try an **unintended** reading . . . with support in the Great Texts.

“Why ain’cha rich?,” again

- Lewis’s response to “Why ain’cha rich?”:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- The **intended** reading here depends on the counterfactual, “If we *had* two-boxed, we *would have been* (even) richer,” and we’ve already responded to that: assuming the counterfactual is the same as assuming the disputed causal structure.
- So let’s try an **unintended** reading . . . with support in the Great Texts.

“Why ain’cha rich?,” again

- Lewis’s response to “Why ain’cha rich?”:

The reason why we are not rich is that the riches were reserved for the irrational. When we made our choices, there were no millions to be had. In the words of Gibbard and Harper,

we take the moral . . . to be something else: if someone is very good at predicting behavior and rewards predicted irrationality richly, then irrationality will be richly rewarded.

Rationality will not.

- The **intended** reading here depends on the counterfactual, “If we *had* two-boxed, we *would have been* (even) richer,” and we’ve already responded to that: assuming the counterfactual is the same as assuming the disputed causal structure.
- So let’s try an **unintended** reading . . . with support in the Great Texts.

“Winning isn’t everything”

“Winning isn't everything”

*For when the One Great Scorer comes
To write against your name,
He marks – not that you won or lost –
But how you played the game.*

“Winning isn't everything”

*For when the One Great Scorer comes
To write against your name,
He marks – not that you won or lost –
But how you played the game.*

– Grantland Rice, “Alumnus Football.”



“Winning isn’t everything”

The Great Divide
The First Principle
Working From the Inside
Sticking to One's Guns
The Problem of the 'Medical' Cases

Options for two-boxers
Higher principles?

“Winning isn't everything”



“Winning isn’t everything”

*For what doth it profit a man,
to gain the whole world, and
forfeit his [decision principles]?*

— Matthew, 8:36



Harper, Gibbard & Lewis

Rationality, again.

- Sure, one-boxing makes you “rich”.
- But there are loftier goals than money!
- Which would you rather be, irrational and “rich”, or rational but not “rich”?

Harper, Gibbard & Lewis

Rationality, again.

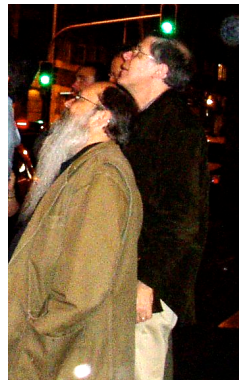
- Sure, one-boxing makes you “rich”.
- But there are loftier goals than money!
- Which would you rather be, irrational and “rich”, or rational but not “rich”?



Harper, Gibbard & Lewis

Rationality, again.

- Sure, one-boxing makes you “rich”.
- But there are loftier goals than money!
- Which would you rather be, irrational and “rich”, or rational but not “rich”?



Harper, Gibbard & Lewis

Rationality, again.

- Sure, one-boxing makes you “rich”.
- But there are loftier goals than money!
- Which would you rather be, **irrational** and “rich”, or **rational** but not “rich”?



Responses (I)

Responses:

- Someone who is playing with the One Great Scorer's opinion in mind is still playing to *win* – it's just that the game isn't football any more!
- Similarly, it isn't incoherent to assign utilities to strategies, but that just changes the decision problem.
- What we are interested in is simply what constitutes an effective utility-enhancing strategy, for someone with the original utilities (represented for convenience by money).

Responses (I)

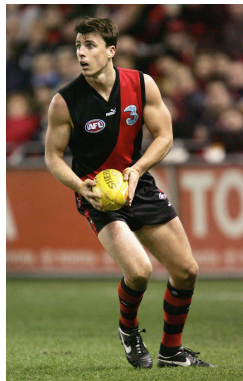
Responses:

- Someone who is playing with the One Great Scorer's opinion in mind is still playing to *win* – it's just that the game isn't football any more!
- Similarly, it isn't incoherent to assign utilities to strategies, but that just changes the decision problem.
- What we are interested in is simply what constitutes an effective utility-enhancing strategy, for someone with the original utilities (represented for convenience by money).

Responses (I)

Responses:

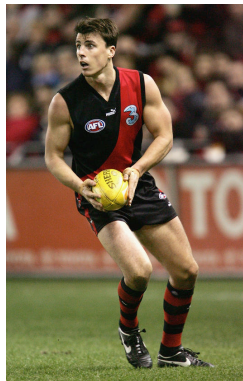
- Someone who is playing with the One Great Scorer's opinion in mind is still playing to *win* – it's just that the game isn't football any more!
- Similarly, it isn't incoherent to assign utilities to strategies, but that just changes the decision problem.
- What we are interested in is simply what constitutes an effective utility-enhancing strategy, for someone with the original utilities (represented for convenience by money).



Responses (I)

Responses:

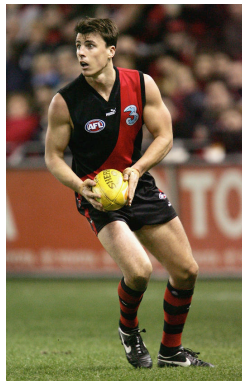
- Someone who is playing with the One Great Scorer's opinion in mind is still playing to *win* – it's just that the game isn't football any more!
- Similarly, it isn't incoherent to assign utilities to strategies, but that just changes the decision problem.
- What we are interested in is simply what constitutes an effective utility-enhancing strategy, for someone with the original utilities (represented for convenience by money).



Responses (I)

Responses:

- Someone who is playing with the One Great Scorer's opinion in mind is still playing to *win* – it's just that the game isn't football any more!
- Similarly, it isn't incoherent to assign utilities to strategies, but that just changes the decision problem.
- What we are interested in is simply what constitutes an effective utility-enhancing strategy, for someone with the original utilities (represented for convenience by money).



Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (Cf. “Interventionism”)
- Examples of such effective-strategy-supporting correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (Cf. “Interventionism”)
- Examples of such effective-strategy-supporting correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (Cf. “Interventionism”)
- Examples of such effective-strategy-supporting correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (Cf. “Interventionism”)
- Examples of such effective-strategy-supporting correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (Cf. “Interventionism”)
- Examples of such effective-strategy-supporting correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (Cf. “Interventionism”)
- Examples of such **effective-strategy-supporting** correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (*Cf.* “Interventionism”)
- Examples of such **effective-strategy-supporting** correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (*Cf.* “Interventionism”)
- Examples of such **effective-strategy-supporting** correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

Responses (II)

The experimental method

- How do we discover effective strategies?
- We “try things and see” – we try wiggling A , and look for correlations with the movements of B .
- In other words, we look for correlations which survive “free choice” of the putative causal variable. (*Cf.* “Interventionism”)
- Examples of such **effective-strategy-supporting** correlations:
 - The Bell correlations.
 - (By assumption) the correlation between one-boxing and wealth, in the standard Newcomb problem.

- 1 The Great Divide
- 2 The First Principle of Causal Epistemology
- 3 Working From the Inside
- 4 Sticking to One's Guns
- 5 The Problem of the 'Medical' Cases

The Smoking Gene

Medical Newcomb Problems

- Imagine there's a gene that predisposes both to smoking and cancer ...
- ... and that smoking predisposes to satisfaction!
- Should you refrain from smoking, to reduce the probability that you will get cancer?
- Isn't EDT committed to saying "Yes!"?

The Smoking Gene

Medical Newcomb Problems

- Imagine there's a gene that predisposes both to smoking and cancer ...
- ... and that smoking predisposes to satisfaction!
- Should you refrain from smoking, to reduce the probability that you will get cancer?
- Isn't EDT committed to saying "Yes!"?

The Smoking Gene

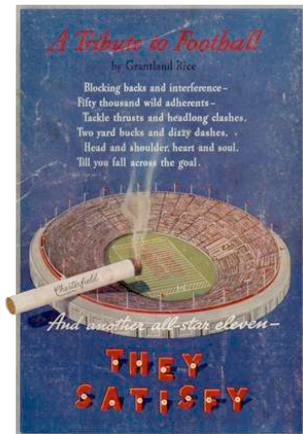
Medical Newcomb Problems

- Imagine there's a gene that predisposes both to smoking and cancer ...
- ... and that smoking predisposes to satisfaction!
- Should you refrain from smoking, to reduce the probability that you will get cancer?
- Isn't EDT committed to saying "Yes!"?

The Smoking Gene

Medical Newcomb Problems

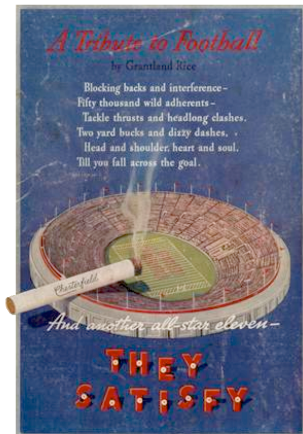
- Imagine there's a gene that predisposes both to smoking and cancer ...
- ... and that smoking predisposes to satisfaction!
- Should you refrain from smoking, to reduce the probability that you will get cancer?
- Isn't EDT committed to saying "Yes!"?



The Smoking Gene

Medical Newcomb Problems

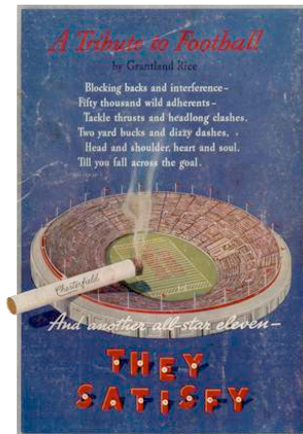
- Imagine there's a gene that predisposes both to smoking and cancer ...
- ... and that smoking predisposes to satisfaction!
- Should you refrain from smoking, to reduce the probability that you will get cancer?
- Isn't EDT committed to saying "Yes!"?



The Smoking Gene

Medical Newcomb Problems

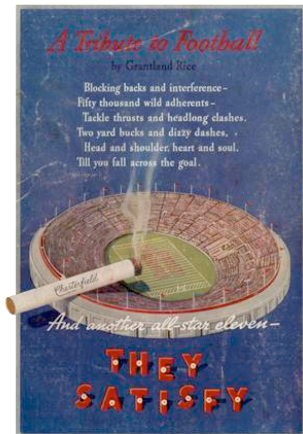
- Imagine there's a gene that predisposes both to smoking and cancer ...
- ... and that smoking predisposes to satisfaction!
- Should you refrain from smoking, to reduce the probability that you will get cancer?
- Isn't EDT committed to saying "Yes!"?



Causal information *is* evidential information

My response

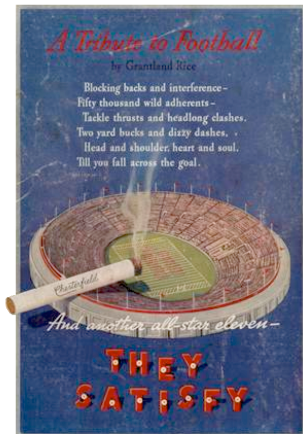
- When we're told the causal structure of the case (in an ordinary case like this!) we're told the relevant evidential dependencies – after all, that's what causation *is*!
- The puzzle is just that of explaining why the statistical correlation (of smoking with possession of the gene) doesn't translate into an evidential dependency, from the agent's point of view.
- That's the puzzle the "Tickle Defence" and its descendants address.



Causal information *is* evidential information

My response

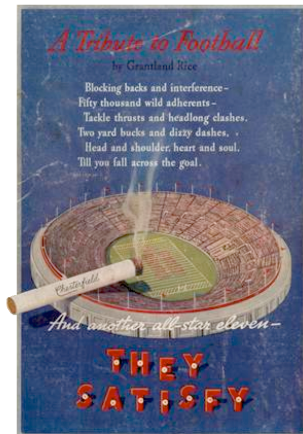
- When we're told the causal structure of the case (in an ordinary case like this!) we're told the relevant evidential dependencies – after all, that's what causation *is*!
- The puzzle is just that of explaining why the statistical correlation (of smoking with possession of the gene) doesn't translate into an evidential dependency, from the agent's point of view.
- That's the puzzle the "Tickle Defence" and its descendants address.



Causal information *is* evidential information

My response

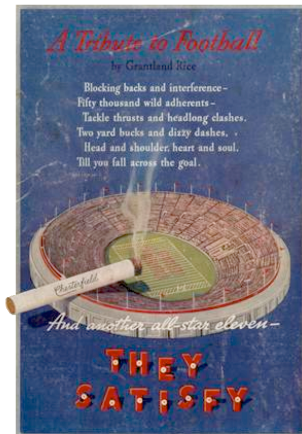
- When we're told the causal structure of the case (in an ordinary case like this!) we're told the relevant evidential dependencies – after all, that's what causation *is*!
- The puzzle is just that of explaining why the statistical correlation (of smoking with possession of the gene) *doesn't* translate into an evidential dependency, from the agent's point of view.
- That's the puzzle the "Tickle Defence" and its descendants address.



Causal information *is* evidential information

My response

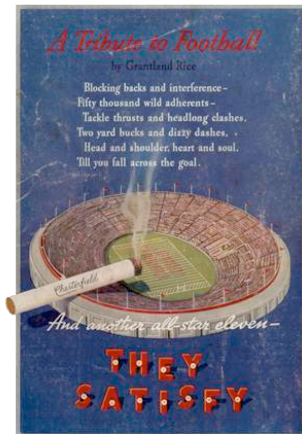
- When we're told the causal structure of the case (in an ordinary case like this!) we're told the relevant evidential dependencies – after all, that's what causation *is*!
- The puzzle is just that of explaining why the statistical correlation (of smoking with possession of the gene) **doesn't** translate into an evidential dependency, from the agent's point of view.
- That's the puzzle the "Tickle Defence" and its descendants address.



Causal information *is* evidential information

My response

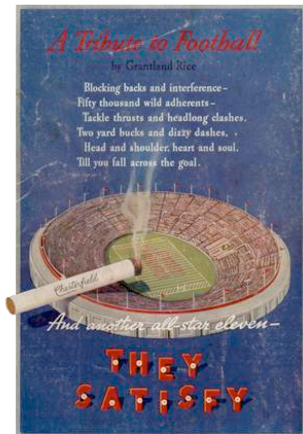
- When we're told the causal structure of the case (in an ordinary case like this!) we're told the relevant evidential dependencies – after all, that's what causation *is*!
- The puzzle is just that of explaining why the statistical correlation (of smoking with possession of the gene) **doesn't** translate into an evidential dependency, from the agent's point of view.
- That's the puzzle the "Tickle Defence" and its descendants address.



Strange causation again

“But what about case X?”

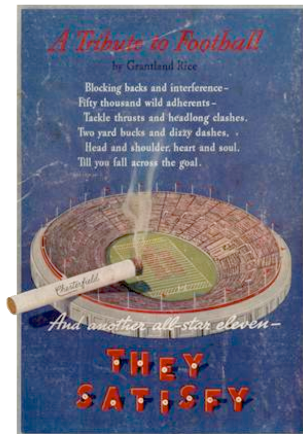
- Someone might come up with a (far less realistic) example, immune from anything like the Tickle Defence – i.e., a case in which there *are* genuine evidential dependencies, from the agent's point of view.
- If so, then I say that that's a case like the original Newcomb Problem, in which the causal structure isn't what Two Boxers take it to be.



Strange causation again

“But what about case X?”

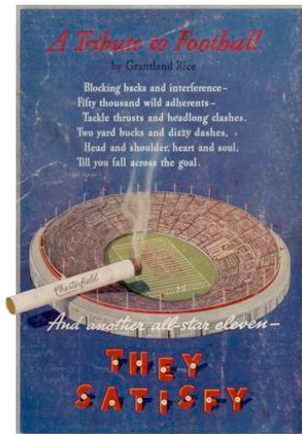
- Someone might come up with a (far less realistic) example, immune from anything like the Tickle Defence – i.e., a case in which there *are* genuine evidential dependencies, from the agent's point of view.
- If so, then I say that that's a case like the original Newcomb Problem, in which the causal structure isn't what Two Boxers take it to be.



Strange causation again

“But what about case X?”

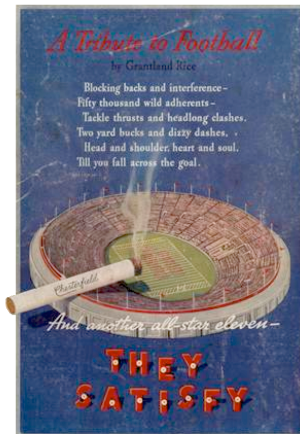
- Someone might come up with a (far less realistic) example, immune from anything like the Tickle Defence – i.e., a case in which there *are* genuine evidential dependencies, from the agent's point of view.
- If so, then I say that that's a case like the original Newcomb Problem, in which the causal structure isn't what Two Boxers take it to be.



Strange causation again

“But what about case X?”

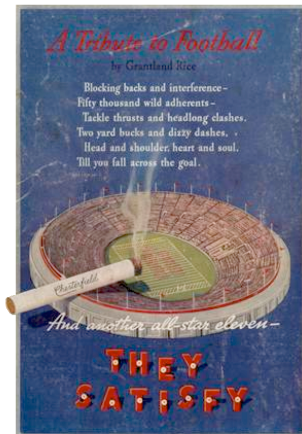
- Someone might come up with a (far less realistic) example, immune from anything like the Tickle Defence – i.e., a case in which there *are* genuine evidential dependencies, from the agent's point of view.
- If so, then I say that that's a case like the original Newcomb Problem, in which the causal structure isn't what Two Boxers take it to be.



Experimentation again

“But which are the strange cases?”

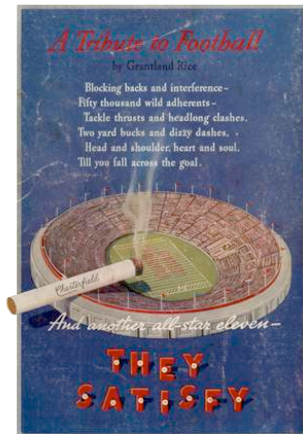
- Q: How do we know in advance whether we can just rely on our naïve causal intuitions?
- A: We don't, in general, and the fall-back is always “Try it and see!”
- This gives the right answer, from an EDTer's perspective, in both the cases already mentioned: you should one-box in the classic Newcomb problem, but two-box – i.e., smoke – in the medical problem.



Experimentation again

“But which are the strange cases?”

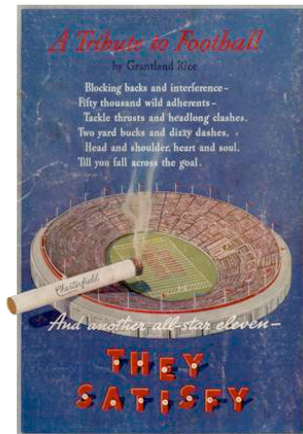
- Q: How do we know in advance whether we can just rely on our naïve causal intuitions?
- A: We don't, in general, and the fall-back is always “Try it and see!”
- This gives the right answer, from an EDTer's perspective, in both the cases already mentioned: you should one-box in the classic Newcomb problem, but two-box – i.e., smoke – in the medical problem.



Experimentation again

“But which are the strange cases?”

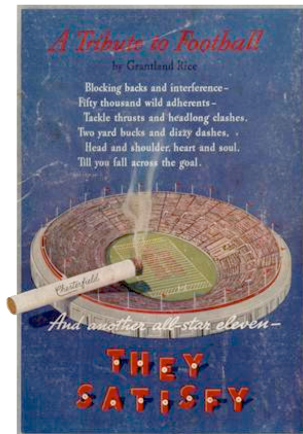
- Q: How do we know in advance whether we can just rely on our naïve causal intuitions?
- A: We don't, in general, and the fall-back is always “Try it and see!”
- This gives the right answer, from an EDTer's perspective, in both the cases already mentioned: you should **one-box** in the classic Newcomb problem, but **two-box** – i.e., smoke – in the medical problem.



Experimentation again

“But which are the strange cases?”

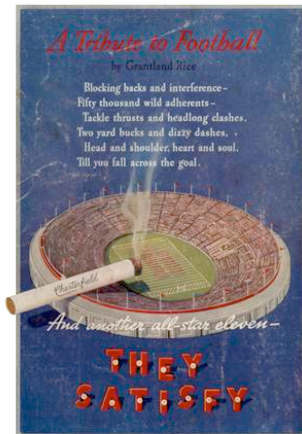
- Q: How do we know in advance whether we can just rely on our naïve causal intuitions?
- A: We don't, in general, and the fall-back is always “Try it and see!”
- This gives the right answer, from an EDTer's perspective, in both the cases already mentioned: you should **one-box** in the classic Newcomb problem, but **two-box** – i.e., smoke – in the medical problem.



Experimentation again

“But which are the strange cases?”

- Q: How do we know in advance whether we can just rely on our naïve causal intuitions?
- A: We don't, in general, and the fall-back is always “Try it and see!”
- This gives the right answer, from an EDTer's perspective, in both the cases already mentioned: you should **one-box** in the classic Newcomb problem, but **two-box** – i.e., **smoke** – in the medical problem.



Conclusions

- 1 A large part of the apparent “hardness” of Newcomb problems stems from unquestioned acceptance, on both sides, of a view about the “true” causal structure of the case.
- 2 Once we ditch that view, recognising the link between causal structure and a pre-causal notion of effective strategy, the fog clears.³
- 3 That option aside, CDT and EDT – now the same thing! – now agree that we should one-box in the classic case.
- 4 Lingering doubt about that is lingering attachment to false metaphysics.
- 5 EDT is not only compatible with CDT, but provides the only viable form of CDT.

³True, one might prefer a more restrictive view of causation – e.g., a *local* notion, in the QM case – but in that case one should abandon both the First Principle and CDT.

Conclusions

- 1 A large part of the apparent “hardness” of Newcomb problems stems from unquestioned acceptance, on both sides, of a view about the “true” causal structure of the case.
- 2 Once we ditch that view, recognising the link between causal structure and a pre-causal notion of effective strategy, the fog clears.³
- 3 That option aside, CDT and EDT – now the same thing! – now agree that we should one-box in the classic case.
- 4 Lingering doubt about that is lingering attachment to false metaphysics.
- 5 EDT is not only compatible with CDT, but provides the only viable form of CDT.

³True, one might prefer a more restrictive view of causation – e.g., a *local* notion, in the QM case – but in that case one should abandon both the First Principle and CDT.

Conclusions

- 1 A large part of the apparent “hardness” of Newcomb problems stems from unquestioned acceptance, on both sides, of a view about the “true” causal structure of the case.
- 2 Once we ditch that view, recognising the link between causal structure and a pre-causal notion of effective strategy, the fog clears.³
- 3 That option aside, CDT and EDT – now the same thing! – now agree that we should one-box in the classic case.
- 4 Lingering doubt about that is lingering attachment to false metaphysics.
- 5 EDT is not only compatible with CDT, but provides the only viable form of CDT.

³True, one might prefer a more restrictive view of causation – e.g., a *local* notion, in the QM case – but in that case one should abandon both the First Principle and CDT.

Conclusions

- 1 A large part of the apparent “hardness” of Newcomb problems stems from unquestioned acceptance, on both sides, of a view about the “true” causal structure of the case.
- 2 Once we ditch that view, recognising the link between causal structure and a pre-causal notion of effective strategy, the fog clears.³
- 3 That option aside, CDT and EDT – now the same thing! – now agree that we should one-box in the classic case.
- 4 Lingering doubt about that is lingering attachment to false metaphysics.
- 5 EDT is not only compatible with CDT, but provides the only viable form of CDT.

³True, one might prefer a more restrictive view of causation – e.g., a *local* notion, in the QM case – but in that case one should abandon both the First Principle and CDT.

Conclusions

- 1 A large part of the apparent “hardness” of Newcomb problems stems from unquestioned acceptance, on both sides, of a view about the “true” causal structure of the case.
- 2 Once we ditch that view, recognising the link between causal structure and a pre-causal notion of effective strategy, the fog clears.³
- 3 That option aside, CDT and EDT – now the same thing! – now agree that we should one-box in the classic case.
- 4 Lingering doubt about that is lingering attachment to false metaphysics.
- 5 EDT is not only compatible with CDT, but provides the only viable form of CDT.

³True, one might prefer a more restrictive view of causation – e.g., a *local* notion, in the QM case – but in that case one should abandon both the First Principle and CDT.

Conclusions

- 1 A large part of the apparent “hardness” of Newcomb problems stems from unquestioned acceptance, on both sides, of a view about the “true” causal structure of the case.
- 2 Once we ditch that view, recognising the link between causal structure and a pre-causal notion of effective strategy, the fog clears.³
- 3 That option aside, CDT and EDT – now the same thing! – now agree that we should one-box in the classic case.
- 4 Lingering doubt about that is lingering attachment to false metaphysics.
- 5 EDT is not only compatible with CDT, but provides the only viable form of CDT.

³True, one might prefer a more restrictive view of causation – e.g., a *local* notion, in the QM case – but in that case one should abandon both the First Principle and CDT.

Conclusions

- ❶ A large part of the apparent “hardness” of Newcomb problems stems from unquestioned acceptance, on both sides, of a view about the “true” causal structure of the case.
- ❷ Once we ditch that view, recognising the link between causal structure and a pre-causal notion of effective strategy, the fog clears.³
- ❸ That option aside, CDT and EDT – now the same thing! – now agree that we should one-box in the classic case.
- ❹ Lingering doubt about that is lingering attachment to false metaphysics.
- ❺ EDT is not only compatible with CDT, but provides the only viable form of CDT.

³True, one might prefer a more restrictive view of causation – e.g., a *local* notion, in the QM case – but in that case one should abandon both the First Principle and CDT.

The Great Divide
The First Principle
Working From the Inside
Sticking to One's Guns
The Problem of the 'Medical' Cases

Medical Newcomb Problems
Assimilation to the rescue
Strange causation again
Conclusions
One big happy family

One World One Dream One Box

The Great Divide
The First Principle
Working From the Inside
Sticking to One's Guns
The Problem of the 'Medical' Cases

Medical Newcomb Problems
Assimilation to the rescue
Strange causation again
Conclusions
One big happy family

One World One Dream One Box

