Lottery Paradox and other things

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Outline

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2. The odds that your ticket will lose are very high.
3. Do you know that you will not win the lottery? Do you know that your ticket will lose.

You do not know that you are going to lose!

1. It looks like you do not know that you will not win the lottery.

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2. It is intuitive that you do not know.

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1. It looks like you do not know that you will not win the lottery.
2. It is intuitive that you do not know.
3. Plus there are good arguments for thinking that you do not know!

First argument

1. After all, if you did know that you were going to lose, then why would you buy a ticket?

First argument

1. After all, if you did know that you were going to lose, then why would you buy a ticket?
2. It is pretty irrational of you to buy a ticket of which you know that it is going to lose!

Second Argument

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Second Argument

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2. Then by parity of reasoning you should be able to know of every losing ticket that it will lose.
3. But then you should be able to say which ticket would win!
4. And of course you can't do that. So it seems wrong to say that you know your ticket will lose.

You never know!

Here is the slogan of NYC's lottery:

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2. Notice that it doesn't really matter how good the odds are that your ticket will lose.

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1. Does it matter how good/bad the odds are?
2. Notice that it doesn't really matter how good the odds are that your ticket will lose.
3. Even if the odds that you will lose are 15 billion to 1, we're still not comfortable saying that we know your ticket will lose.

The odds do not matter

1. As long as there's any chance (however small) at all that your ticket will win–no matter how small–then it doesn't seem like you can know you won't win.

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1. Does it matter whether the drawing happens in the future?
2. Suppose the drawing has already happened, but no one knows the results yet. In this case, too, we would not know that we have lost! (assuming that we have lost).
3. So it does not matter whether the drawing is a future event or not.

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4. But you could win a lottery between now and then; and if you do win, then you'll probably be out celebrating rather than getting your hair cut.

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2. Lots of our ordinary beliefs are vulnerable, too.
3. For instance, you might think you know where you'll be tomorrow at noon. You plan to be getting your hair cut in the East Village.
4. But you could win a lottery between now and then; and if you do win, then you'll probably be out celebrating rather than getting your hair cut.
5. Or, you could get hit by a car between now and then. (I'm guessing that the chances of getting hit by a car are about the same as the chances of winning a small lottery.)

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1. If you're not yet able to know that you won't win the lottery, and that you won't get hit by a car, then how can you know where you'll be tomorrow at noon?
2. Similarly, you think you know where your bike is parked right now.
3. This is probably much greater than your chance of winning the lottery.
4. So if the chance you'll win the lottery is high enough to keep you from knowing you'll lose, then the chance that your bike has been stolen should be high enough to keep you from knowing where your bike is right now.

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The puzzle, everyone

1. It seems like the reason we can't know in all those cases is that there's a chance we're wrong. But this is true about nearly everything we believe!
2. Most beliefs we have about the future are such that there is a (however small) chance that they are wrong.
3. For most propositions about the future, you may not know that they are true.

First example

1. Mary knows that she will not have enough money to go on a Safary next summer.

First example

1. Mary knows that she will not have enough money to go on a Safary next summer.
2. If Mary knows that she will not have enough money to go on a Safary next summer, then Mary must know that she will not win the lottery of which she just bought a ticket.

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1. Mary knows that she will not have enough money to go on a Safary next summer.
2. If Mary knows that she will not have enough money to go on a Safary next summer, then Mary must know that she will not win the lottery of which she just bought a ticket.
3. So Mary must know that she will not win the lottery of which she just bought a ticket.

First example

1. But we have seen that she does not know that she will not win the lottery.

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1. But we have seen that she does not know that she will not win the lottery.
2. Where have we gone wrong?

Second example

1. Mary knows that her car is parked behind the bank.

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Second example

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2. There is a very small chance that her car has been stolen.
3. So, as in the lottery case, Mary cannot know that her car has not been stolen between then and now.

Outline

The Structure of The Paradox

In each of these cases, the structure of the problem is the same. There is what we might call an ordinary proposition, a proposition of a sort we ordinarily take ourselves to know. There is, on the other hand, a lottery proposition, a proposition of the sort that, while highly likely, we would intuitively disinclined to take ourselves to know. And in each case, the ordinary proposition entails the lottery proposition.

Consequences of the paradox

These considerations generate powerful pressure towards a skepticism that claims that we know little of what we ordinarily claim to know.

in-class exercise

Write your own lottery paradox!

Question I: Skepticism?

How does exactly the paradox generate pressure towards skepticism?

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Towards skepticism

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Towards skepticism

1. Because Mary does not know that her car was not stolen, then if the second premise is correct, it cannot be true that she really knows that her car is parked behind the bank.
2. Because the same reasoning generalizes to so many of our beliefs, we reach the conclusion that we do not really know most of them!
3. Skepticism is the view that we know very little (or nothing) of what we presume to know.

What are the options?

Skepticism We embrace skepticism. We just know close to nothing of what we ordinarily presume to know.

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2. How could we even act successfully in the world, if we did not know them?

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Skepticism We embrace skepticism. We just know close to nothing of what we ordinarily presume to know.

1. But this outcome is unpalatable. Are we all so wrong in assuming that we know certain things?
2. How could we even act successfully in the world, if we did not know them?
3. Is skepticism a plausible outcome? Could we be successful at anything if skepticism were true?

The options

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Skepticism The first option is to embrace skepticism.

Mooreanism The second option is to embrace Mooreanism.

Mooreanism

1. Mooreanism is the view that we know the lottery proposition.
2. According to Mooreanim, we know that we are not going to win the lottery, that our car has not been stolen and so on.
3. In other words, mooreanism embraces the conclusion of the paradox.

Mooreanism

1. But how plausible is Mooreanism?

What are the other options?

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2. If you find mooreanism unpalatable too, also you are not alone.

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Mooreanism

Skepticism We embrace skepticism.

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Mooreanism

Skepticism We embrace skepticism.

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Reject the second premise

Second example

Consider again the argument:

ordinary proposition Mary knows that her car is parked behind the bank.

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Outline

The Principle of Closure: first

1. The principle that supports the second premise is something like:

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Naive Closure

If S knows that p, and p entails q, then S must know that q.

Motivating principle

The motivating thought behind Naive Closure is that it is plausible that we can always **enlarge** our knowledge by accepting things that are entailed by what we know.

Problems with Naive Closure

1. Naive Closure faces a lot of problems.

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2. Can you think of any problems with Naive Closure?

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   Inferring failure Or I could fail to correctly draw the conclusion q from p. In which case, I would also fail to know q, while knowing p.

2. So Naive Closure is pretty implausible.

A Revision of Naive Closure?

1. Consider the difference between the following two principles:

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If S knows that p, and p entails q, then S must know that q.

Revised Closure

If S knows that p, and p entails q, then S must be in position to know that q.

The Principle of Closure: first

Consider again:

1. Only the latter is at all plausible!

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Consider again:

1. Only the latter is at all plausible!
2. But what does it mean to be in position to know that q. It is still pretty vague...

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If S knows that p, and p entails q, then S must be in position to know that q.

The Principle of Closure: first

Consider another more precise version of Closure:

Closure Proper

If S knows that p, believe q because p entails q, then S knows that q.

The Principle of Closure: first

1. Can anybody think of a problem with Closure Proper?

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The Principle of Closure: first

1. Can anybody think of a problem with Closure Proper?

Closure Proper

If S knows that p, believe q because p entails q, then S knows that q.

2. It is possible that in the course of grasping q as entailed by p, one may lose knowledge that p.

The Principle of Closure: Revisions

Closure Proper

If S knows that p, believe q because p entails q, then S knows that q.

Closure Proper Revised

If S knows that p, believe q because p entails q, then if S has preserved knowledge of p throughout, S must know that q.

Outline

Cast of Characters: Fred Dretske (1932-2013)

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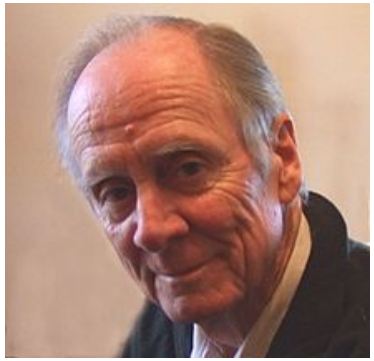

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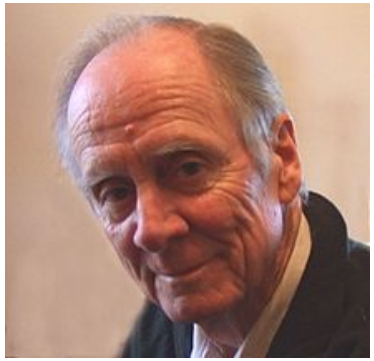
2. In the last part of his career, til 2013, he taught at Duke, Philosophy.



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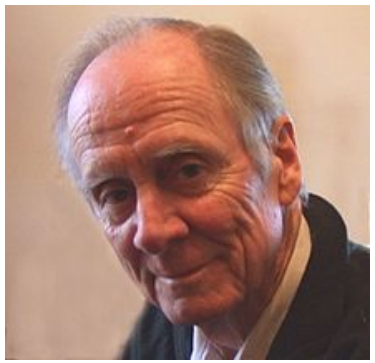

Cast of Characters: Fred Dretske (1932-2013)

1. Dretske (1932-2013)
2. In the last part of his career, til 2013, he taught at Duke, Philosophy.
3. One of the best epistemologists of the 20th century.
4. He is famous for rejecting the Principle of Closure.

Dreske's first argument: Modes of knowledge are not closed

1. Dretske has argued that we should expect closure failure because none of the modes of gaining, preserving or extending knowledge are individually closed.

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1. Dretske has argued that we should expect closure failure because none of the modes of gaining, preserving or extending knowledge are individually closed.
2. Dretske makes his point in the form of a rhetorical question: "how is one supposed to get closure on something when every way of getting, extending and preserving it is open?"
3. Can you think of ways to come to know that are not closed?

Examples of Modes of knowledge that are not closed

PC: If S perceives p, and (S believes q because S knows) p entails q, then S perceives q.

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RC: If S remembers p, and (S believes q because S knows) p entails q, then S remembers q.

Dretske's second argument: Elusive Propositions

1. Dretske has another argument against the Principle of Closure. He thinks that certain propositions are simply harder to know than ordinary propositions.

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2. Those propositions are elusive.

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1. An elusive proposition is such that its falsity would not change our experiences.

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2. Skeptical propositions are elusive in this sense ....

Dretske's second argument: Elusive Propositions

1. An elusive proposition is such that its falsity would not change our experiences.
2. Skeptical propositions are elusive in this sense ....
3. If I were a brain in a vat, my experiences would be the same. So the proposition that I am a brain in a vat are elusive.

Elusive Propositions

1. Why are they elusive?

Elusive Propositions

1. Why are they elusive?
2. One reason is that we cannot know them by perception.

Elusive Propositions

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3. So it is hard to see how we could know them at all.

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1. Why are they elusive?
2. One reason is that we cannot know them by perception.
3. So it is hard to see how we could know them at all.
4. Is this true? Is it true that unless we can know p by perception, p is elusive in this way?

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Summary

1. The lottery paradox leads to a widespread skepticism.
2. If we embrace its counterintuitive conclusions, instead, we should be Moorean.
3. A way to avoid both skepticism and mooreanism is to reject Closure.
4. We have seen two arguments for thinking that closure does not hold.
5. The first argument was the argument from modes of knowledge.
6. The second argument was the argument from elusive propositions.