§1 Scepticism and Epistemic Luck
Nozick offers an alternative to the JTB analysis. He argues that his account answers both the sceptic and the problem of epistemic luck.

Let’s review the sceptic’s argument. Let q be the denial of a sceptical hypothesis (e.g. the hypothesis that we are brains in vats), and let p be some ordinary proposition about the world (e.g. that I have hands).

1. I know that if p then q (e.g. if I have hands, I am not a brains in a vat)
2. I do not know that q [Sceptical Premise]
3. If I know that if p then q, then if I know that p then I know that q [Closure Principle]
4. So if I knows that p then I know that q [from 1 and 3]
5. Therefore, I do not know that p [from 2 and 4]

Given that we can substitute any proposition about the external world for p, this argument seems to undermine my claim to know truths about the external world.

The problem of epistemic luck is analogous to an issue we discussed in the first lecture. Recall that Plato recognised a distinction between knowledge and true belief. Surely a right account of knowledge must explain this divide. The problem of epistemic luck has the same structure.

Consider an example adapted from Bertrand Russell (1948). Suppose I’m in London and need to know the time. Having forgot my watch I glance at Big Ben. The clock has proven accurate in the past. So when I see the clock point to 2 o’clock, I come to believe that it is 2 pm. Now suppose that (unbeknownst to me) Big Ben broke the night before and became stuck pointing at 2. Yet luckily it really is 2 pm. But while my belief turns out to be true, it surely does not count as knowledge.

Historical Note: Russell’s case has the same general features as Gettier’s (1963) cases. As we’ll see next week, Gettier’s cases are used as counterexamples to the JTB analysis of knowledge, since they appear to be cases of merely luckily true justified belief. So Russell (as usual) got there first.

Russell’s case, among others, suggests that we must distinguish knowledge from lucky true belief (i.e. a belief that, given how it was acquired or formed, is merely luckily true).

Problem of Epistemic Luck: A right account of knowledge must explain how knowledge differs from lucky true belief.

§2 Nozick’s Truth-Tracking Analysis
Nozick replaces the ‘J’ part of the JTB analysis of knowledge with 3 and 4:

1. S believes that p
2. p is true
3. If p were false, S would not believe that p
4. If p were true, S would believe that p

3 and 4 are counterfactuals, and together entail that S knows that p only if S’s belief that p is truth-tracking.

On the standard semantics for counterfactuals (due to Robert Stalnaker and David Lewis), a counterfactual is true iff its consequent is true in the nearest worlds (or group of worlds) in which its antecedent is true (cf. §5 of the logic handout). This semantics treats the notion of ‘distance’ between worlds as a matter of comparative overall similarity between worlds: if w is more similar to w₁ than to w₂, then w₁ is closer than w₂ to w.

Condition 3 accommodates Russell’s case. There are nearby worlds in which I look at the clock a bit before or a bit after 2 p.m. — worlds in which it is false that it is 2 p.m. — but where I nevertheless believe that it is 2 p.m. (on the basis of my glance at Big Ben).
Nozick introduces 4 to distinguish knowledge from a different sort of epistemic luck:

‘The dictator of a country is killed; in their first edition, newspapers print the story, but later all the country’s newspapers and other media deny the story, falsely. Everyone who encounters the denial believes it (or does not know what to believe and so suspends judgment). Only one person in the country fails to hear any denial and he continues to believe the truth... [but] if he had heard the denials, he too would have believed them, just like everyone else.’ (p. 478) [See also: his ‘tank’ case on p. 477]

[So S believes that p, but would not believe that p in nearby worlds in which p is true.]

Obvious questions: are cases of epistemic luck really sufficient to motivate 3 and 4? Are 3 and 4 together sufficient to distinguish knowledge from luckily true belief?

§3 Rejection of Closure and Scepticism
Nozick’s analysis of knowledge entails that the sceptic’s closure premiss is false. The closure premiss says:

Closure: If I know that if p then q, then if I know that p then I know that q

Given the truth table for the material conditional (cf. §3 of the logic handout), Closure is false just in case (1) I know that if p then q; (2) I know that p; and (3) it is not the case that I know that q (e.g. I don’t know that I’m not a brain in a vat). Let’s look at why Nozick’s view can generate (1)-(3):

The tricky cases are (2) and (3).

Nozick’s view enables S to know that p (e.g. that she has hands) and so generates (2). Assume that S has a true belief that she has hands, a belief formed on the basis of perception. Since the nearest worlds in which S has hands are worlds in which she would still believe she has hands, condition 4 is satisfied. Furthermore, the nearest worlds in which S doesn’t have hands are worlds in which she would not believe that she has them, since the sceptical scenario denied by q would not count as a ‘close’ world. So condition 3 is also satisfied.

Nozick’s view also entails that S does not know that she is not a brain in a vat (or, more generally, S does not know that q). Even if S is not a brain in a vat, and believes that she isn’t a brain in vat, she would still fail condition 3. Nozick’s condition 3 entails that S knows that she is not a brain in vat only if were she a brain in a vat (i.e. not-q) she would not believe that she is not a brain in a vat. Yet the nearest worlds in which S is a brain in a vat are precisely those worlds in which she may still believe she is not a brain in vat.

Since Nozick’s analysis of knowledge generates (1)-(3), he has a way to block the sceptic’s argument. He can accept our ordinary claims to know, and also accept that we cannot know that we are not brains in vats, but dodge inconsistency by denying the closure of knowledge under known entailment (i.e. the general principle of which Closure is simply an instance).

More generally, Nozick’s analysis of knowledge entails that closure under known entailment will fail for any case in which the following conditions obtain:

1. S knows that p
2. S knows that if p then r
3. The nearest not-r worlds are further away than both the nearest not-p worlds and the nearest p worlds (e.g. the closest world in which I’m a brain in vat is further away than the nearest worlds in which I have hands and the nearest worlds in which I don’t have hands).
4. In the nearest not-r worlds, S believes that r

Question: do these conditions obtain for instances of ‘r’ that are not denials of sceptical hypotheses?
§4 Objection: Closure is Important!
Any response to the sceptical argument will require that we say something counterintuitive, but a denial of Closure (and thus of the more general closure of knowledge under known entailment) comes with a high price.

Closure of Knowledge Under Known Entailment: For all propositions p and r, if S knows that if p then r, then if S knows that p then S knows that r. More briefly: $K(p \rightarrow r) \rightarrow (Kp \rightarrow Kr)$

As §6 of the logic handout explains, the notion of closure is quite general. Be careful to distinguish the closure of knowledge under known entailment from nearby closure principles (both of which are plausibly false):

Closure Under Entailment: If (if p then r), then (if S knows that p then S knows that r). More briefly: $(p \rightarrow r) \rightarrow (Kp \rightarrow Kr)$

Closure Under Known Likelihood: If S knows that p increases the likelihood of r, then if S knows that p then she knows that r.

Unlike these false closure principles, the closure of knowledge under known entailment seems to underwrite much of our ordinary reasoning.

Example:
1. Tyrion knows that if Joffrey becomes King, Joffrey will be a tyrant
2. Tyrion knows that Joffrey will become King
3. So Tyrion knows that Joffrey will be a tyrant

Unfortunately the move from 1 and 2 to 3 depends upon a hidden premiss: the closure of knowledge under known entailment.

Nozick’s rejection of closure under known entailment generates a more general dialectical worry about his account: even if we accept that knowledge might not be closed under known entailment, the pre-theoretic attraction of the principle threatens to outweigh the considerations that lead Nozick to reject it.

In some ways the worry parallels Moore’s concern about scepticism about the external world. He takes our commitment to our ordinary knowledge claims to be more fundamental than the sceptic’s premisses (e.g. that we do not know we are not brains in vats).

§5 Some Questions
Nozick’s account has been attacked from a number of directions, not just its implications for Closure. To get a feel for these worries, here are some questions that arise when we dig deeper into Nozick’s account.

1. Is Nozick’s analysis subject to counterexamples?
2. As stated, the counterfactual conditions do not mention the method by which an agent arrives at her beliefs. But we need to invoke these methods when we evaluate the counterfactuals, since the cases of epistemic luck that motivate condition 3 are those in which an agent’s method is held fixed but the world is slightly altered. Yet how should we individuate these methods?
3. Does Nozick’s account require that we distort the logic of counterfactuals? Lewis, for example, assumes that counterfactuals such as ‘If p were the case, q would be the case’ are automatically true if p and q are actually true. But if Nozick adopts this Lewisian view, his conditions 1 and 2 entail condition 4, and so conditions 1-3 are necessary and sufficient for knowledge.