# "I want to know what it is like for a bat to be a bat."

October 27, 2024 By Caroline and Michael

### Introduction (What Is It)

In 'What is it Like to be a Bat?,' Thomas Nagel delivers what he describes as a definitive refutation of reductionism by arguing for the impossibility of scientifically describing qualia, or the subjective conditions of experience, outside of one's own. Through compelling thought experiments with bats and Martians, the essay introduces a thematic of disparities between internal and external perception. We question Nagel's claims that it is impossible for hypothetical higher life forms to understand human qualia, on the grounds that it is just as feasible that any hypothetical aliens capable of applying reductionism to human cognition will be aesthetically capable of understanding human qualia in the first place.

'What is it Like to be a Bat?' extends into a broader discussion in the following essay 'Subjective and Objective,' where Nagel characterizes dilemmas of identity, epistemology, free will, and ethics as arising from an irreconcilable contradiction between subject-oriented and external reality-oriented explications of the same problem. In light of the extreme difficulties in pursuing objectivity, Nagel proposes an alternative: to not to pursue objectivity too far. We debate this conclusion, investigating reality as we know it with his claims for accepting the polarity and coexistence of the subjective and objective.

### Transcript

Caroline: In 'What is it Like to be a Bat?,' Nagel's dilemma is that the consciousness of bats, and consciousness in general, remain irrevocably unknowable to us. So we can imagine what it is like to be a bat in terms of our human experiences and knowledge, but we can't actually know what it is like for a bat to be a bat. And in 'Subjective and Objective,' which connects back to what he says in the previous essay, he argues that accounts like physicalism, which attempt to reduce the subjective to the objective, are invalid and insufficient. From what I understand, I think he's saying that an objective reality is impossible for us, as humans.

Kolb: I mean, yeah, it probably is. I personally didn't get that he says it's *impossible* impossible. But I do agree that it probably is close to, at least impossible for us.

Caroline: I mean, I feel like they're, I feel like he's saying that it's impossible. I don't know if we can actually know that at all.

Michael: True. And if you like, look at his argument and his premise. I think there's a lot to be disputed with, you know, because this entire argument is if a Martian, or rather, first of all, if we assume that a Martian is smarter than us, and if that Martian dissected us and our brain, then that Martian shouldn't be able to understand what it's like to be a human. But does anyone feel that it's kind of problematic as well? Like, I can't really pin it down, but... why do you have to use, or why do you have to factor in a kind of superior species whose intelligence is much higher than ours?

Caroline: Wait how are you supposed to know that?

Michael: That's what that's what Nagel kind of relies on, right? And I'm asking, why does he have to rely on that? Like, why can't it just be humans dissecting humans?

Kolb: I mean, I think that's kind of the situation, like, say a blind person and a deaf person. You would have to be able to imagine what it's like to be blind either or deaf.

Caroline: I mean, technically, you can. I think the main reason that he chooses a Martian instead of a human is because we're human, and we could basically imagine what it's like to be a human, you know? Like, we have that type of experience, it's more natural to us.

Kolb: Also, he also says that he picked a bat that's really close to a human on the evolutionary tree.

Caroline: Sure, that makes sense.

Michael: But I guess the problem I'm having is it's given that we as humans won't know what or like whichever alien race the existence of which is possible will not be able to understand what it's like to be us. So, what I'm saying is, because the existence of this is so dubious, it's possible that they won't have to dissect us to be able to understand our experience, it's possible that they can share in our experience. They can think about it. We don't know that these higher life forms exist, right?

Kolb: So you're saying Martians might have the capacity to be able to understand us perfectly. And just because we can't just understand them perfectly, we can't assume that no life form can understand other life forms perfectly.

Michael: Because how do we know that intelligence can scale up so perfectly like from bats to humans and then humans to Martians. Is it even possible?

Kolb: I think I get your point. If I do get your point, it's a good point. But I'm not sure if I get your point or not.

Michael: I think you get my point.

Caroline: I kind of don't get your point.

Kolb: I think it's like our abilities are limited in that we can't imagine how we'd be as bat perfectly, right? That's what he says.

Michael: Yeah, so what I'm saying is I'm calling it biological impossibility.

Kolb: Okay, what I got out of your argument was kind of like, we can't assume that just because we have that flaw in our ability to imagine, that doesn't mean that Martians will have those flaws while Martians are able to understand other species perfectly. And we can't assume that.

Caroline: Okay, so how would that apply to like, I guess, Nagel's argument, if I want to fully understand your point? Like, does that really undermine his argument though?

Michael: To me it does. It doesn't have to. I mean I'm just saying that his premise is very much like something out of sci-fi, and from a very skeptical materialist view, it might not even be possible for such a hypothetical situation to come into existence. Maybe like Martians can't exist. So that's the objection I'm raising against his argument.

Caroline: Wait — that Martians don't exist?

Michael: No, what was the capacity described, or what if the capacities and the limitations described by Nagal can't physically exist? The limitation being that they can't understand this without dissecting us.

Kolb: So you can't assume that there's a higher life form than us, that's what you're saying.

Michael: Yeah, because like right now, think of it, we're the only life forms in existence capable of dissecting animals at all.

Kolb: Okay, but we know that we know that bats exist, is that not enough to prove his argument.

Caroline: Yeah, maybe we're like the "higher life form," and if you look at it from, I guess, the bat's perspective, wouldn't it be similar to humans and Martians?

Michael: It would be similar, but you have to think about the fact that the bats aren't questioning whether they can think or understand what it feels like to be an amoeba. So, there's no infinite dissent, so there may not be infinite assent, to frame it kind of mathematically. But, I'm trying to think about whether that's valid or not as well.

Kolb: Yeah, yeah, I think you're right there, like, there's going to be a species that is the most intelligent, regardless of whether it's humans or not. But, I feel like there doesn't have to be an infinite number of species in between to prove this point.

Caroline: Yeah, I kind of agree with that.

Michael: We could just drop this line of reasoning. I mean, I still feel like there's more to be said, but it's a very devil's advocate line of reasoning. We can also talk about why Nagel's idea might be, or his argument, might be true.

Kolb: I mean, I think maybe another way we can approach it is like, and I'm addressing this also towards people who haven't spoken, but like, does anyone here think that it is possible to like, understand another species, perfect or like, to some extent, as humans?

Caroline: As humans, so subjectivity. Because I think Nagel is really—

Kolb: Well, no, understandably, objectively. Because I think he says you can understand subjectively as humans, but like, is there, is there anything we can understand about other species, objectively? Is there anything that anyone here thinks?

Myles: No.

Kolb: Thank you.

[Laughter.]

Kolb: I mean, if there's any ideas, we can experiment with different examples.

Myles: Wait, can we go back to like the Martian thing? I thought that was interesting. If there's a higher order life out there, I think then it's reasonable to assume that they have the power to understand like another species. So, I don't know.

Kolb: No, that's fair though. That's my first interpretation of Michael's thinking so I think that's fair. But I think the thing Nagel would have to prove is that no matter how smart you are, you can't understand. You can't imagine me from someone else's perspective.

Caroline: I think what he's saying is that you can't understand their perspective outside of your own perspective and experiences.

Myles: What I'm saying is that as humans, we can't comprehend the intellectual capabilities of this life form. So it's not fair for us to say, you know, they won't be able to understand us. So I think either it's dumb to bring up aliens, or as humans we can't

comment on it because we just don't have the intellectual capacity to understand what another life form could understand

Kolb: If we have to do it logically right. That's something that Nagel kind of proves himself just because it's cyclical here by saying that we can't have the capacities to comprehend any other species but also can't assume that they don't have the capacity to comprehend other species. So that works, yeah. Yeah, but then what can we conclude from that?

Kolb: Well, we can conclude that it's impossible for humans to understand these other species. Yeah, it's the same conclusion, except what we now conclude is that Martians might be able to understand other species.

Caroline: We also don't know that, like I don't think it brings us to that.

Kolb: That's why I say might.

Michael: I feel like the distinction is that Martians have to be able to understand us, but not other species. Because the way we thought about it until now, the ability to understand other species is really... That's not right, either. So, like, what I feel is the point we've been getting at is that if Martians are similar enough to us, then they might be able to understand our experiences, but, like, not, definitely not what it feels like to be a bat.

Kolb: If they can understand us, why wouldn't they understand what it would be like to be a bat?

Caroline: If we can't understand how Martians understand stuff, then how do we know the extent of a Martians' experiences, or, like, what it can understand? What if it can understand what it's like to be a bat the same way that we could understand what it's like to be a bat, if that makes sense. I just don't... I feel like this is not bringing us anywhere.

Kolb: Well okay, we can try to refute the argument right? I think we can try to think about it from the other way. Like what is the least human thing that humans can understand. So what you said earlier, Caroline, you think that you could in theory be able to understand the experiences of a blind person. So why is that?

Caroline: I mean, why can't you just experience it?

Myles: No, I don't think that you would be able to.

Kolb: You could gouge your eyes out.

Caroline: Yeah... well no, you don't have to gouge your eyes out, though.

Kolb: Just blindfold yourself.

Caroline: Yeah, and then you could experience it.

Kolb: I mean I would agree with that but I think that would just be enough to "experience" what it is like to be a blind person, I think. So like, what you count as experience and what a deaf person experiences.

Myles: I wouldn't say so. Let's say, for like, the blind thing. I don't think you could ever know what it would be like to be blind without actually being blind. But there's ways in which you can try to imagine it. Like, try to see through your elbow right now. You can't. And it's like, you know, you can try to imagine it, but you can never actually know what it feels like because you have eyes.

Kolb: But if you blindfold yourself, is that not...

Myles: No, that's not. Because blind people don't have light receptors. But if you blindfold yourself and you shine a light through the blindfold, you can still see the light.

Kolb: Assuming a perfectly good blindfold then.

Caroline: So wait, like, you know, those German curtains — what were they called?

Michael: Mhm.

Myles: But it would just not be a perfect condition of being blind.

Michael: I guess so and also, given that blindness is more like a spectrum, like there's not just absolute blindness — most blind people see light and color but just very partially, so like it's not just one condition and that complicates things.

Kolb: But you can experience what it's like to be somewhat blind.

Caroline: Yeah, I agree with that.

Kolb: You can put yourself on that spectrum, and it doesn't matter where the spectrum is meant to be.

Myles: No, I disagree. Let's talk consciously. If you aren't blind, but you try to mimic making yourself blind, you know that you still have eyes and you can still see fine. So you won't have that conscious experience of being partially blind or just being fully blind.

Kolb: That's interesting. But that brings me back to the gouging your eyes out, right? You know you don't have your eyes anymore and that's pretty much...

Myles: Yeah, I agree with that. If you rip your eyes out, then you are blind.

Kolb: Okay, great. So humans can experience what it's like to be blind by making yourself blind!

Myles: Yeah, but that defeats the purpose.

Kolb: That's also true. You're just making yourself a blind person. Okay, that's a fair argument. Let's see what Junyi said in the chat.

Caroline: Okay, Junyi said: "Sorry, guys. I have to dip for a school trip. My mic wasn't working for some reason, but I do believe that just because we can't be objective doesn't mean there is no objective. Nagel himself admits that he wishes to remain non-criminal about the existence of an endpoint. In that case, then you're not really refuting objectivity in its purest form, but rather human scientific understanding, which is completely fair — the question he raises in the next chapter." Yeah. I think, yeah, he's not refuting objectivity. He's saying that like we can't, I think he's saying that we can't reduce subjective experiences to objective understanding.

Kolb: I mean, he says that in the subjective and objective chapters. I really did not understand much from the chapter.

Caroline: I think these two chapters are very closely linked. I think "What is it Like to be a Bat" is the explanation of what he says in subjective and objective.

Michael: Maybe even the manifestation or a specific case study because he talks about.

Caroline: Wait, I want to talk about objective reality though. So, like, is there actually an objective reality?

Myles: Give an example.

Michael: I feel like there's a transition that has to be made. I think the question that might be worth asking is... Suppose we could understand what it is like to be a bat. Suppose we dissect the brain of one bat and we kind of absorb all of its experiences into our mind. Could we then even understand the experiences of the one after that?

Kolb: I think that's just the point, no.

Caroline: It's just like, like me and Michael, like, if you dissect us, like, we're both the same species. But can you really understand what it's like to be Michael? Like, can I understand what it's like to be Michael, in Michael's purest form? I think that would be the same question, right?

Kolb: Yeah, I think the point would be, it's no.

Michael: I mean, I think we'd probably be tempted to just say no here. I mean, we've all heard of, like, the, like, how do you know my blue is Kolb's blue all of that?

Kolb: I mean, okay, do any of you know, like, the internet anthology SCP?

Michael: Oh, I was reading one of those yesterday. I was reading about the infinite IKEA one.

Kolb: Okay. So they have something there called consensus reality. I'm wondering if that's, like, if that's the same thing as objective reality. Because one of the things it

theorizes is like, so there's this book that lists what we think is reality. For example, it's right in there. It's that the sky is blue. And that's what everyone has to agree on. And so, assuming every single thing in the universe agrees that the sky is blue, does that become objective reality or is that still different from objective reality?

Myles: The sky is not blue though.

Kolb: Can't argue with that.

Myles: Well, because like, what if you're another alien species that has a different classification of colors and like.

Kolb: Yeah, yeah, yeah. But my point is, assuming everyone in the universe can agree that the sky is blue — I don't care that the sky is not blue, right? Assuming it is blue, and everything in the universe can agree that the sky is blue. Is that the same thing as us having found an objective reality? Or is that simply a consensus reality, not necessarily an objective one?

Caroline: I'm tempted to first say that is the reality. But then again, maybe the sky has its own nature and maybe its nature is that it's yellow, but everyone has this perception, this representation of the sky as blue. But how do we know that that's the actual, real essence of the sky, like does that make sense? I mean, I guess then it would be an objective reality. Okay. I want to bring it back to what I learned in physics class. So we were learning about how when you're in a moving train or something, time moves slower. Have you guys learned about that? If you're on a really, really fast moving train and you're on it for your entire life, everyone around you who is not on that train, is going to age faster than you. But if you, if you're on that train for like five years of life, five years of life in Kolb's stationary perspective, Kolb would age five years, but I would age like two years if I'm on that really fast train.

Michael: Like, yeah.

Caroline: yeah?

Michael: Go on...

Caroline: Oh, well, I was just going to say that all my biological processes, my thoughts and everything just slows down in that moving train. This slowing down is also relative to Kolb. Kolb sees that I'm aging slower, but it's different from my perspective. And I guess like, even those, like, whether something is relative to something else, I guess like, I take that as subjective. It's all subjective. And then I did ask my physics teacher about this, and he was like, the objective facts, the objective reality is that there are things that are relative to each other. There are things that are kind of subjective. And then wouldn't that just be like a consensus reality, like Kolb said. Is that actually objective reality?

Kolb: You can't call it subjective either because the definition of subjective varies among subjects, but it doesn't vary among subjects.

Michael: I mean, in what capacity? Like, the way Caroline just defined it, it does, or rather like space and time. Time, specifically, in this case. But I'm just going to argue that it's the latter. It's a consensus-based reality. And if we refer back to Kolb's analogy of a book, they're interesting, because the only reason why time does that is because, or the only reason why we think time does that is because if you're moving at a speed very close to the speed of light, then light has to move at the speed of light away from you. But that can't really be because like, if you're moving at 99% of the speed of light, then light should only move at like 1% of the speed of light in your frame, if you're approaching it from a classical mechanics of view, right? So, like, think of it as a vector. Like, light is supposed to be C originally, but then you're 0.99C, so light becomes 0.01C. But why can't it do that? It has to move at C, so it happens as time slows down for you to that light and like hit that speed.

Caroline: Oh, yes. Yes.

Kolb: So, the speed of light changes, is what you're saying.

Michael: Yeah, and that's like a physical effect. But do we know that it's a physical effect because like, it only really happens, or we only describe it this way because Einstein describes it this way, which is part of special relativity, but you know, special relativity breaks down at the quantum level. So it's not an irrefutable fact. It's just a theory, right?

Kolb: I mean, you would be able to factor that in though, right? If you were the one person that's traveling and a percent of the speed of light, then you would be able to factor that in knowing that special relativity exists and that the light isn't actually moving.

Like it's actually moving faster than you're perceiving it. You would be able to filter that through your thoughts. So you wouldn't really believe that the light is moving at one percent of the speed of light. You would know that it's the speed of light.

Michael: No, but it is. It's not even a matter of belief.

If you put a clock next to you, the clock is also convinced that light is moving at the speed of light and not just 1% the speed of light. But what I'm saying is, Caroline says, we can all agree that time moves relatively according to different observers, and that's the objectivity of it, right? So Caroline's physics teacher says, it's not subjective because we have the theory governing how light or how time is treated subjectively, but what I'm saying is the theory is not objective at all, it's false. Like it's been proven wrong under certain circumstances, which is like at the quantum physics level, it breaks down. So really, because it's not absolutely true, whenever we use it, we're only really pretending it's true. Like we know it's false, but because it describes the phenomena that we're examining in these specific contexts well enough, we use it. So really, it's a case of,... what is it a case of? It's very much a case of consensus. It's almost like saying two plus two is five or the sky is yellow, even though it isn't.

Kolb: It's just something we accept as a difference in the consensus and objective. Then that's what the conclusion is.

Caroline: Okay, so what exactly is subjective then?

Kolb: So we're starting to collect criteria here now, right? Everyone probably has to agree on it and it has to be true.

Michael: Like 100% necessary.

Kolb: Yeah, which is our definition of true.

Caroline: But then do we have examples of that in our life?

Kolb: One equals one.

Michael: I'm tempted to say no. That can also be disputed.

Kolb: What about just the reflexive property in general.

Michael: No but... This is complex, but... I'm just going to say that there's going to be situations where one equals one is false. You can construct logical mathematical systems where that is false. And that has to do with Godel's Incompleteness Theorem if you know it.

Kolb: If you know it, I'm horrible at math, so I believe you.

Caroline: Well, Michael's an ex-pure math major...

Kolb: I believe you...

Michael: Like that's a whole other rabbit hole that we can go down.

Kolb: Okay, well, let's think of something else then. I mean math is like the biggest example of something objective. It's like an idea though, so it makes it really difficult then. If the principles of math vary.

Caroline: Well we know that the principles of math vary.

Kolb: I guess so.

Myles: A lot of things in math are based on axioms, which we just assume to be true. But to other, I don't know, to bring back the alien because I like aliens, to another life form, these axioms may not be true. So like the whole basis for our mathematics system could just be false when looking at it from another perspective or if you gain a certain insight. So I don't think it's fair to use math.

Michael: Yeah to quickly illustrate that, the statement that the sum of the angles in the triangle add up to 180 is just a perfect example of that. Because you think it's true, right? Because in Euclidean geometry, if you just logically reason, then you get it in like five steps, not even five. But if you extend the concept of a line to be not a straight line, but a curved line, which is valid in non-Euclidean space... like in modern geometry and physical geometry, it's actually the geometry of our universe, like there's a curvature in space time, right? So lines are actually curved and angles actually don't add up to 180.

Kolb: Okay, can we can limit the premise then? Can we say that it is an objective truth that triangles, all the angles of a triangle add up to 180 degrees, assuming Euclidean geometry.

Michael: Yeah, that can be true in Euclidean geometry. But that just makes the general statement false, because, if you just extend the definition of a line,...

Kolb: I don't think differentiating, specifying between Euclidean and non-Euclidean geometry is too outrageous.

Myles: But that's not really helpful for us.

Kolb: Yeah, that would be the other thing to consider. If we're including human created constructs, is that still... does that ruin the whole point of the exercise?

Myles: Yeah. Also, part of what we were saying, that there's criteria for an objective reality — I don't think if you tell my colorblind friend that the sky is blue, he will ever believe you. Because he sees the sky as, whatever.

Kolb: What if everyone else in the world lines up and tells him that the sky is blue, would he not believe them?

Myles: No, because he's never experienced it.

Michael: It's a two plus two equal five scenario.

Kolb: I mean, the other thing to consider is that, assuming Euclidean never existed, we would probably say that it's an objective truth that all the angles are trying to add up to 180 degrees, right? Assuming no one else figures out non-Euclidean geometry. So, it's still risky to say that because anything that we might find that we say is an objective truth, someone in the future might disprove.

Michael: True. So, given this, wouldn't it make more sense to just go the other way and try to prove that there's an objective truth, because I think I have a pretty good proof of that.

Caroline: Go ahead.

Kolb: Yeah.

Michael: First of all, do you guys know like, do you guys still remember how Plato defines objective truths?

Kolb: What, like forms?

Michael: Yeah, like forms. So, first of all, they have to be unchanging, right? And immutable.

Caroline: Oh, yeah.

Michael: And they're eternal and they apparently are immaterial as in they don't occupy space. They exist in a heavenly realm, independent of ours. And then the criticism that people rose Plato for is that, if they're like that, how do we even interact with them, right? And David Hume, if you guys know him, in the 18th century, he objects to all physics, because he says the principle of causation is actually an illusion. So, like, give any explanation of why the sky is blue: the sky is blue because the magnetic field of the Earth reflects radiation from the Sun, and the wavelength of the radiation reflected happens to match blue light. But you can be skeptical of any step in that reasoning process. And you can say, how do you know that the radiation of the sun reaches the magnetic field of the Earth and interacts with it? It's not really a metaphysical principle, it's how we could experimentally observe it in a lab. And we see how scattering works from observation. But, um, I'll get to the point. He thinks statistical observation and scientific induction is not enough to determine causation, merely it's only a process of association. So like the most extreme case, we wake up to see the sunrise every day, and we do this enough times that we think that the sun rising every day is an immutable fact of life, but really, there's nothing necessary about it. Like there's nothing causing the sun to rise, or there's nothing causal in the statement the sun rises every day. It's only contingent, and really the sun can just fail to rise tomorrow, or Newton's third law or Newton's second law can just stop working at the macroscopic level tomorrow, and it could just entirely make sense.

Caroline: I think that's just like what Myles said about his friend, like his friend wakes up and the sky is what color to him right. But that's an immutable fact to him, but to everyone else, the immutable fact is that the sky is blue.

Kolb: Wait here's the thing, Michael. I think that's really valid, however what's wrong with Plato's own explanation that our souls simply interacted with forms before we were humans

Michael: I mean that's also true, right. But like that's even more devious. Besides, Hume, he's all criticizing Plato right now.

Kolb: You know consensus reality exists, we know it's possible for everyone to agree on the same thing. So it's just a matter of if it's impossible for us to get the truth.

Caroline: The objective truth.

Kolb: Well, we're defining objective truth as the truth that everyone believes. And something that is necessarily true. We know it's possible for something that everyone believes together. I just don't know if it's possible for us to understand a necessary truth.

Michael: Right and here I'm actually trying to argue against necessary facts.

Kolb: So spend judgment!

Caroline: Yay...! Skepticism! Wait so our conclusion is that there is no objective reality, objective truth, right?

Michael: Necessary truth.

Kolb: So if there's no necessary truth, then there's no objective truth, right?

Michael: Same thing, right? But like, are we referring to consensus objective reality or like, necessary objective reality?

Kolb: We've said that knowing a necessary truth is a condition for us knowing an objective truth.

Caroline: Okay, yeah. So, our conditions are that there has to be a consensus and it has to be necessary for something to be an objective truth, for an objective reality.

Kolb: If we settle on skepticism, the next question would be, do the common arguments for dogmatism solve this issue? Because dogmatists choose to believe something simply because they think it's useless to not believe anything, right?

Caroline: Kind of. I wouldn't say that's the only reason.

Michael: I would say that argument fails to show the... Really it's admitting to the fallibility of your beliefs, right? You're not saying that whatever you believe in, it's going to be true forever.

KolbL I just quickly google-searched it. So if I believe something, the fact that I believe it is still the truth. So another scenario would be. So I say I like the color red, and I go around telling everybody in the world in the universe that I like the color red, and so everybody knows that Kolb likes the color red, does that become an objective truth?

Michael: No. I mean, yes, but I would say that it's no truer than the sky is blue. Suppose you get kidnapped by North Korean radicals, Kolb, and you get tortured and forced to sing the North Korean anthem and wave the North Korean flag every day, I think by the end of ordeal, you'd hate the color red.

Kolb: That kind of ruins the whole dogmatist's argument... that I've just Googled myself.

Caroline: Wait, if we apply this to science, I feel like scientists, or generally people would say that science is the objective truth. The evidence that we see in our physical world kind of signals everyone that it's kind of objective because that's what we see in everyday life, so that's also a consensus reality, then?

Michael: I mean science doesn't agree that its roles are necessary, right?

Kolb: I think that's cope. I think that science thinking that science is the objective truth is cope. Wait, have you guys read the three-body problem?

Michael: Yeah. what about it?

Caroline: I've heard of it.

Kolb: Well, basically, one of the things that set off the story was that in the beginning, all the scientists found out that the truth about the universe is beyond our imagination. And so scientists around the world start killing themselves because of that.

Michael: Oh, well, I dispute the validity of that argument because what made them kill themselves is this super advanced alien civilization controlling particle accelerator experiments so that the results become completely irrelevant.

Kolb: That was afterwards though.

Michael: No, that's that's during. That's what happens from the start of the story.

Kolb: Oh really? But I do still think that it's like a part of scientists' lives, that for them to feel like they have a purpose, they have to have to believe that science is real and that science is true. Otherwise, it kind of ruins their own ethos.

Michael: I wouldn't agree with that, because if you know, you know, but fundamentally physics is operating under the current assumption that quantum physics and, relativity, are irreconcilable and fundamentally contradict each other. And so physicists are aware of the fact that all their theories are wrong, and they need to come up with a better theory. And, at the same time, we teach Newtonian mechanics in physics class, even though we know that it doesn't hold up at all relatively, statistically. I feel like the claim that scientists are kind of self-assured of their own theories, correctness, is maybe a myth. If you go about like Francis Bacon, Newton, their approaches were all experimental, empirical. It's kind of the point of science.

Kolb: Like, what were we arguing before? Roadblock on our argument is like truth has to be immutable, that's why I like red things as an objective truth doesn't work. So why does the truth have to be immutable?

Michael: Well, so it doesn't have to be. We can agree on something being the truth, even if it's not necessary or be even outright false,...

Kolb: The same way we can agree on has to be immutable, because if it's not immutable, then it's not necessary.

Michael: Yeah, we're trying to debate whether necessary truths can exist, right? And I'll just give you Hume's conclusion. Like, the one that I've been trying to argue towards his conclusion. is that anything in experience must be contingent, which is like the reverse of necessary. Because think about it. If we go by what I said, and causation doesn't really hold up experimentally, then nothing we observe a posteriori can be necessary. It's like Descartes, because what is to keep us from rationally doubting everything that we see around us, or even rationally doubting that like we're in a matrix or something. Like, if I can doubt that an object in front of me is a simulation, then it has to not be necessarily true. And by doubting, I mean rationally, like I don't know of its existence, it's entirely plausible that this is just an evil demon playing tricks on me.

Kolb: Well, yeah, but you're using skepticism as an example. You see, it's just difficult because I personally agree with skepticism, but I feel like there should be a dogmatist way to explain this.

Michael: I could offer one.

Kolb: All the dogmatists I know from SHI are not here.

Caroline: I mean, we could propose it. And before the meeting ends, which is in five minutes, we should talk about what we want to read next time. Did you see the message that Professor Bobonich sent? He was asking what we wanted to read, and I was like, I don't know, like ethics, metaphysics, stuff that we've been discussing. He told us to browse through Oxford's 'A Very Short introduction Of' series. So, what would you guys be interested in?

Michael: My personal recommendation is Peter Singer's Introduction on Hegel, there's one on Kant and Schopenhauer as well, if you guys are into that.

Kolb: But we're torturing everyone by making everyone read Hegel now.

Michael: No, we're torturing everyone by making everyone read Peter Singer, who is not Hegel.

Kolb: Maybe we can ask everyone in the chat because I'm sure there's a lot of cool philosophical things we can talk about. I know the other group, they kind of just pull up to meetings and talk about on the spot. They talked about some pretty cool things. I know

they spent a meeting talking about the prison theory... the panopticon. So, like, we can find things that are less strictly philosophical, and just talk about them in a philosophical sense. It doesn't have to be traditionally philosophical because I know Singer is like, when talking about modern philosophy, everyone's going to tell you to go reach Singer. Also when my friends attempt to write philosophical stuff, that's like one of the most commonly cited ones. So, I don't know.

Michael: I mean, his niche is kind of niche.

Caroline: Yeah, I think we could just ask everyone in the chat.

Michael: How do we get more people to come?

Caroline: I think everyone's just really busy with college apps and stuff.

Michael: Well one quarter of them are in twelfth grade.

Caroline: Oh, yeah, maybe.

Kolb: In our year there were a lot more rising seniors than juniors, right?

Caroline: I'm not sure. I mean, a lot of people just said that they were too busy. Like, Jack.

Kolb: Yeah, Alida said he wouldn't be able to make it this month, but he would be able to make it starting afterwards.

Caroline: Yeah, okay, but great talk guys. Hopefully, we'll see you next time. And we could talk about more really interesting things.

Kolb: I thought that was really productive.

#### Conclusion

This meeting, centered around the final two essays 'What is it Like to be a Bat?' and 'Subjective and Objective,' concluded our discussion on Thomas Nagel's "Mortal Questions." We mused upon how Nagel extracts evidence for his arguments, deciding that, as the existence of the imaginary Martians is so dubious, we cannot make any concrete assumptions about their inability to understand our qualia. Despite raising this point as a challenge to Nagel, we concluded that it only increases skepticism regarding the possibility of understanding subjective experiences in a reductionist manner. We brought up the impossibility of replicating the experience of a blind person and questioned whether it is truly possible for a subjective observer to describe the experiences of any external being, even another human.

Transitioning into a debate on the possibility of objective reality, we also discussed scientific points of view, mainly considering how physics tackled objective truths. We came up with two tentative criteria for an objective reality: for a reality to be objective, it must be necessarily true and there must exist a general consensus of that reality. We showed that solely defining objectivity on the basis of consensus is problematic, as what can be agreed upon and verified is still not "necessarily true," leading into a debate on empirical skepticism. As presented by empiricism, the notion of immutable and necessary truths independent of perception has its challenges, and that, in this light, consensus regarding reality is nonetheless essential to lend objectivity to it. We ended the discussion without having established the possibility of a dogmatist objective reality.

## Attendees

Caroline

Charles

Junyi

Kolb

Lihi

Michael

Myles