Transcript for Interview on Lying and Deception.

26th September 2023, 4:15pm

[Jackson Paull] – The purpose of the interview is to gauge your thoughts on how deception has impacted your lives, and I think you guys have a really unique position because you have both taught something that is very similar, but in different ways under different assumptions and restrictions – algebra-based and calculus-based physics. There’s this concept of a “lie of omission” which is where you are deceiving someone or altering their world view by leaving out some important information which might change how they think about [whatever it is you might be “lying” about]. So, one of the big questions that I want to ask you, “Do you think that teaching something [and in the process] leaving out details which might provide a more complete image is deceptive in any way?”

[Mark Misage] – No, so like with physics, its building blocks. You learn the ideal – there’s no air resistance. And then after you’ve learned that you can throw air resistance in, and now fluid dynamics come into play.

[Nancy Misage] – It’s more a recognition of where cognitively your students are. […] Most students come to you with background knowledge, and you’ve got a pretty good understanding of Juniors at Westlake High School and what their background knowledge is. And I think that is where we were particularly successful is we knew where our students had come from and so we knew where we could engage. If a student asked for further clarification, then if it was something that I wasn’t super well versed in, I hope I would have been honest with my students and said “Look, that’s beyond the scope of this course, this is an algebra based course and you’ve got great questions, fabulous questions, lets see if we can find a resource where we can both learn.” So, I don’t think it was deception, I think it was more about knowing which pieces go together and what sixteen-year-olds can handle.

[Jackson Paull] – Yeah I love that answer, and I think it ties nicely into the follow up question, which is: “Physics has this kind of ‘ground truth’ and it can be verified, but is there any aspect of our lives as people that you shouldn’t [simplify, because] there’s no real building blocks up to it, and it’s just a hard thing where if you’re going to explain it to someone you have to give them everything [and its up to them to ask for simplification]?” Does that make sense?

[Mark Misage] – Yeah, hmm...

[Nancy Misage] – I think with matters of human relationships, at some point as a human being you have to learn the hard stuff. You have to learn what it’s like to lose a best friend. You have to learn what it’s like to have relationships that were so important to you fall apart. So, it’s kind of like ripping the Band-Aid off. Sometimes life is challenging, and life is hard, and I can be sympathetic and empathetic, but there’s not a lot I can do to help somebody through those life’s challenges.

[Jackson Paull] - Yeah, personally I totally agree with that. It’s so fascinating how there’s this difference between things where we can offer simple explanations to help build peoples curiosity and understanding of the world, but then you have this sort of crux of what does it mean to omit things? Are you robbing someone of the subjective human experience when you [simplify complex things too far].

[Nancy Misage] – And I would also say that, with physics, physics is a model. It’s a model of how our physical universe “works.” To say that there is “objective truth” I don’t know that I would agree with that. It’s a model.

[Mark Misage] – That’s working pretty well.

[Nancy Misage] - That’s working pretty well, but hopefully with scientific endeavor, if something comes up that goes against our current model. Then yes, you have to reformat and reformulate our “laws.”

[Mark Misage] – And you can see that, our students would see that in labs. Like when you drop a ball down an incline plane, the ball always ended up short. Everybody would say “why is it ending up short?” And it was always “well what do you think?” And they want the answer, so you tell ‘em, some of that gravitational energy is getting turned into rotational kinetic energy, and that depends on the mass distribution of the ball… and at that point they’re just like

[Mark and Nancy Misage] - UGHHHHHH

[Mark Misage] – That’s why we’re doing it this way first, and we’ll get to it later. We’re not hiding anything from you, we’ll just get to it later. And we had the luxury of doing that in physics, you don’t have the luxury of doing that in a philosophy class, right?

[Jackson Paull] – This is kind of a departure, but I just want to hear your thoughts on this, do you think it would be ever possible to come up with a model for something like the human psyche? To be able to develop something with more of that building-block approach for something like a psychology course? Or is that something where you really have to go top down, explain everything to the fullest of your ability?

[Nancy Misage] – I know so little about human psychology, and to me that borderlines on philosophy and faith – what it is to be human. What is the mind and the self? And all that – I can say the words but…

[Mark Misage] – Its messy! I don’t think it can be modeled.

[Nancy Misage] – Nuh uh. And I think this makes me nervous about Artificial Intelligence, because its only gonna be as good as the programmer, and I know it has the ability to learn on its own, but… teaching sixteen-year-olds, you don’t want a sixteen-year-old to develop their understanding with a misconception, so how do you recognize whether a misconception is beginning to develop. So, I have a lot of questions there.

[Mark Misage] – And when we were teaching, we had a model for teaching, but it didn’t always work. Theres just so many variables. And that’s what made the job fun, you were constantly trying to solve how to teach to this group of students or this student.

[Nancy Misage] – And every single year I would have a student ask a question in some new way that would allow me to recognize – OHH, so that’s why for ten years people haven’t understood what I’ve said. So, a unique way a student asks a question is what allows me to recognize where my presentation was leading to difficulties, so then I could modify, change, and hopefully improve.

@ 10:11