

Observer Effect: A Subatomic Dialogue

Quarks 1, 2, and 3 are whirling about, orbiting each other like a solar system.

Quark 1: Ok, here it comes, this is what we've been preparing for everyone: They're about to look! Brace for impact. Aaaaand... Here we go!

They all stumble as if hit by an invisible force, breaking the movement pattern. Then they reform the orbit, now moving much slower and swapping positions. Resettled, the dance continues on.

Quark 1: Ok! That wasn't so bad was it? How's everybody feeling?

Quark 2: I feel *weird*.

Quark 3: Me too. But sort of in a good way? It's all...(wiggling) roomy. Kinda tickles.

Q1: I feel that too. Must be the electrical charge.

Q3: Cool. But wait, did we gain charge or lose it?

Q1: I don't know. I suppose it depends what we had before, but we can never know that, so I can't say for sure what's changed.

Q2: I don't like this. It's so *slow*.

Q1: I agree it's an adjustment, but I'm sure we'll get used to it.

Q2: I feel... heavy? Is this what heavy feels like?

Q1: Maybe.

Q3: I think we're light. Oooh, maybe we *are light*! Did anyone see any photons?

Q2: Don't be stupid, you can't *become* light, light is *how* you become.

Q1: That's not exactly accurate. Light is one way of becoming, but it's not the only way.

Q3: Wait, I thought the Looking was how we become. Isn't that how you said it works: we're multiple things, and then once They see us, that's how we become one thing?

Q1: Not exactly. It's complicated. The Looking changes us, and then after They've Looked, then They can Know and Name and Describe us; all of that together is what we call Becoming.

Q2: Why not call it Changing, then? That would be more accurate, wouldn't it?

Q3: How do you figure?

Q2: We were something, and now we're something else. That's a change. 'Become' makes it sound like we were nothing and turned into a something, but we weren't nothing. We were definitely something.

Q1: Yes, indeed. But we don't know what kind of something we were. We can't know until They Know, and They can't Know until They Look.

Q2: Why not?

Q1: I don't know. No one does.

Q3: I bet They know.

Q2: They definitely don't. They're too stupid.

Q3: How can you say that? They're *so* smart!

Q2: They don't know how we work at all. They don't even know how the big stuff works, the stuff that's right in front of them.

Q3: We're right in front of them too!

Q2: Exactly. And they barely know anything about us.

Q3: *You* don't know anything!

Q2: I used to! I used to know everything, and then They had to go and Look!

Q3: You didn't know everything, you knew nothing.

Q2: I didn't *know*, but I *knew*.

Q3: That doesn't make any sense!

Q2: *You* don't make any sense!

Q3 (*proud*): That's right, and neither do you!

Q1 (*in their own world*): Ooh, I think I see an electron over there. Hello, neighbor!

A beat.

Q3: So what do we do now?

Q1: We be!

Q2: Be what?

Q1: What we are.

Q2: Which is... what?

Q1: I'm not sure yet. Maybe we can find out by doing it.

Beat.

Q2: I don't like this. I want to go back.

Q3: Go back where?

Q2: Not *where*.

Q1: When?

Q2: Yes—No! I mean I want to go back to what we were before.

Q3: We can't go back.

Q1: There is no back. There is no what we were before.

Q3: You can't un-become, that's not a thing.

Q2: But I miss it.

Q3: Miss *what*?

Q2: I don't know! I don't remember! I just know I miss it. There's a hole.

Q1 (*nervous*): A black hole?

Q2: No. Maybe? Something used to be there and now it's gone.

Q3: And in its place, there's a hole?

Q2: Yes.

Q3: If there's a hole, doesn't that mean it's still here? The thing that was there before?

Q2: No. What? No.

Q1 (*to Q3*): Interesting, what do you mean by that?

Q3: Well, we became what we are. So the something also became what it is—which is a hole.

Q2: And a hole is *nothing*.

Q1: Well, a nothing is also a something.

Q3: Wait, I thought nothing was the opposite of something?

Q1: Yes. And it's also the same.

Q2: The same as what?

Q1: Exactly.

Q3: I'm confused.

Q1: Me too!

Q3: Anyway, what I was trying to say was that whatever you're missing isn't gone, it changed—it Became, like we did. Only what it became is a hole.

Q2: I meant a hole as in an *absence*.

Q3: But there's no such thing as absence.

Q1: But there is such thing as loss. Or departure.

Q3: Oh, is that what you meant? You think we lost something? Mass? Charge?

Q2: Maybe? I don't know. Oh, never mind. It's too hard to explain! I just feel...sad.

Q3: I'm sorry that Becoming made you feel sad.

Q2: Me too.

Q1: Well, the good news is it's only temporary. Any minute now we'll get to a new stage.

Q3: There's other stages?

Q1: Oh, for sure! We might collide, or decay. Becoming happens *constantly*.

Q3: But I like this stage! I don't want it to be temporary.

Q2: Maybe you'll like the next one even better. Or the next one. Or the next one.

Q3: *Or* I might be sad like you!

Q2: Maybe. Probably at some point, statistically speaking. But then there will be another stage after that. Right?

Q1: Indeed.

Q2: I think that makes me feel better. That there's always a next.

Q3: When does it end?

Q1: End? HA. It doesn't!