

A Science Lesson

A One Act Play

By Ben Deeb

For his Father's 75th Birthday

SCENE 1

ANDY, wearing a lab coat, walks onto the stage of an elementary school auditorium, dragging a collapsible rolling crate full of science demonstration equipment.

A folding table sits on the center of the otherwise empty stage. Andy pulls a Van de Graaff generator out from the crate and places it on top.

PRINCIPAL GRASS approaches the stage from the back of the auditorium.

PRINCIPAL GRASS

Good morning! You found the auditorium.

ANDY

Yep! Wasn't a problem. Half the schools in the district have this same layout.

PRINCIPAL GRASS

Well we're happy to have Atomic Andy here at Field Club. Second and third graders will be coming in at 10:15.

ANDY

They're my favorite. Old enough to have real conversations with, but not quite old enough to grasp the concept of "cool," so they're less... dick-ish.

PRINCIPAL GRASS

Every grade has its dicks, I promise. Will the presentation be the same for all the groups?

ANDY

Basically, but I change the language a little depending on age. It's less about getting them to understand specific scientific concepts and more about making them excited about science as a whole.

(Andy pulls out a graduated cylinder, a bottle of liquid, and a bag of powder from the crate. Principal Grass is already staring at a cellphone, uninterested.)

ANDY

Like, if I started talking about how adding potassium iodide to hydrogen peroxide catalyzes an exothermic reaction, I'd lose them immediately. So I talk about how chemicals can react with each other when you mix them. Then, when foam explodes out of the cylinder, I tell them we've made elephant toothpaste.

MR. GRASS

Fun.

ANDY

My main goal is to get them to associate science with curiosity and wonder. Giving them the answers isn't as important as getting them to ask the right questions, you know?

PRINCIPAL GRASS

Mmhmm. Anything you need from me?

ANDY

I'm good! Just going to finish setting up.

PRINCIPAL GRASS

See you at 10:15.

(Principal Grass heads back down the aisle as Andy pulls a metal vacuum flask full of liquid nitrogen from the crate, sets it on the table, and unlatches the lid.

A cloud rises out into the air as the -196°C (-321°F) liquid boils into nitrogen gas. The stage lights go out and a spotlight illuminates the cloud. Andy freezes in place as a variation on the Shepard-Risset glissando plays.

After a long eerie moment, the sound stops and the lights come back up. Two figures now stand on either side of Andy, who jolts, startled.

These are GIIK-GĒK and WOOB-WŪB, two aliens from a higher dimension. They look like normal humans, but they're wearing futuristic-looking clothing. Neither acknowledge Andy's presence.)

GI IK-GĒK

Whoa, did we do it?

WO OB-WŪB

I think it's pretty obvious that we did it.

GI IK-GĒK

Sick!

ANDY

I'm sorry, who are you? And what did you, exactly?

GI IK-GĒK

(casually)

We decomplicated.

(Woob-wūb gasps.)

GI IK-GĒK

Oh. Oh crap. Can it see us?

ANDY

Uh, yeah.

WO OB-WŪB

It can see us!

GI IK-GĒK

Well that's not great.

(to Andy)

Hey, why can you see us?

WO OB-WŪB

It doesn't know!

ANDY

What are you talking about? And can you stop calling me "it?"

GIİK-GĒK

Hey, it can hear us too.

WOOB-WŪB

Obviously!

ANDY

Okay, I'm starting to kind of freak out here. Where did you come from?

GIİK-GĒK

We're from a reality a few levels higher than yours. That make sense?

ANDY

No.

WOOB-WŪB

Stop talking to it! We have to recomplicate. Now.

GIİK-GĒK

Why?

WOOB-WŪB

You know how much trouble we could get into for initiating contact with a lower life form? Judy would absolutely lose it.

GIİK-GĒK

Well, yeah, but we already initiated contact. Damage is done, right? Might as well see where this goes.

ANDY

Is this a bit? Did Science Buddies send you to mess with me?

GIİK-GĒK

No, babe, we're actually from a higher dimension.

ANDY

That sounded sarcastic that way you said it.

WOOB-WŪB

That's how Giik-gēk always comes off.

ANDY

Giik-gēk?

GIİK-GĒK

Yours truly. And this is Woob-wūb.

WOOB-WŪB

We're going to be in so much trouble.

ANDY

And you want me to believe you're aliens, initiating first contact with humanity. In an elementary school auditorium.

GIİK-GĒK

Yeah, but not on purpose.

WOOB-WŪB

Definitely not on purpose.

GIİK-GĒK

It's not like we chose you to talk to.

ANDY

First off, rude. Second, assuming you actually are aliens and this isn't completely insane, why are you speaking English?

WOOB-WŪB

We're not. Your mind is interpreting our intent and translating it into more generally comprehensible terms.

GIİK-GĒK

What the hell does that mean?

ANDY

Uh, same question.

WOOB-WŪB

(to Giik-gēk)

How do you not know this?

(to Andy)

In this reality, we're more or less beings of pure thought. Our physical forms exist only in your consciousness.

ANDY

So you're not really here?

(Andy tries to wave a hand through
Giik-gēk's chest, but ends up
smacking them in the side.)

GIİK-GĒK

Ow! What the hell?

ANDY

I thought you weren't real!

WOOB-WŪB

I said we exist in your mind, not that we're not real.
There's a difference. Sure, we're a projection of your
consciousness, but we're just as real to you as anything else
is.

ANDY

Prove you're aliens.

GIİK-GĒK

Huh?

ANDY

Prove you're aliens. Do something to make me believe you're
not figments of my imagination or just two wackos who
wandered into an elementary school to screw with me.

GIİK-GĒK

Well we are kind of figments of your imagination.

WOOB-WŪB

But in a sense, we're also controlling your imagination.

ANDY

What does that even mean?! Did someone dose me with
something? Am I having a psychotic break?

GIİK-GĒK

Whoa, calm down, babe.

ANDY

Why do you keep calling me babe?!

WOOB-WŪB

Technically, your brain is interpreting Giik's casual intent
as language, so you're calling yourself babe.

ANDY

This is crazy. You're not aliens.

GIİK-GĒK

Then how do you explain us just zapping into existence here?

ANDY

How do *you* explain it?

GIİK-GĒK

As a super cool zapping. Into existence.

WOOB-WŪB

(exasperated)

We were probing for places where the fabric of your dimension is thin - the presence of consciousness is a factor, but it mainly has to do with extreme temperature differences. Your liquid nitrogen there must have made this an easier point to access.

(Andy stops for a minute and thinks
about this.)

ANDY

How, exactly? Explain it to me. Is it a reaction that happens near absolute zero or does it warp spacetime or--

GIİK-GĒK

Oh, babe. We don't know any of that.

ANDY

How can you not know? If you're actually higher dimensional aliens, you need to explain it.

WOOB-WŪB

It's complicated. And we're not really scientists.

GIİK-GĒK

I'm *definitely* not a scientist. I consider myself more of an adventurer-slash-raconteur.

WOOB-WŪB

We know basics about how this stuff works, but that's about it. Like how you know how your phone works using little circuits and ones and zeroes. But can you explain what's actually going on inside?

ANDY

I guess that makes sense.

GIİK-GĒK

So you believe us now?

ANDY

Nope. Still don't buy it. You're not aliens.

GIİK-GĒK

How do you not buy it? We're here!

ANDY

Extraordinary claims require extraordinary evidence.

GIİK-GĒK

Hmph.

ANDY

Can we wrap up whatever weird prank this is? I have to do a whole science presentation and the kids will be here any minute.

GIİK-GĒK

Nah, you got time.

(Andy glances at a clock on the back of the stage and notices the second hand has stopped moving.)

WOOB-WŪB

Giik, did you--

GIİK-GĒK

Stop time? Yeah.

WOOB-WŪB

When?

GIİK-GĒK

Well I'd say a few seconds ago, but that doesn't really make sense in the context of time being stopped, does it?

(Andy wanders the stage, touching things to make sure they're real, then pulls out a phone that doesn't seem to be working.)

ANDY

Why won't my phone work?

GIİK-GĒK

More like why *would* your phone work? I stopped time. Stuff doesn't work normal when time's stopped.

ANDY

How... how did you do that?

GIİK-GĒK

With a time stopper.

ANDY

And how does that work?

GIİK-GĒK

The time stopper? No clue. Again, not a scientist.

WOOB-WŪB

Why would you stop time? We're specifically not supposed to stop time.

GIİK-GĒK

It wanted extraordinary evidence to prove we were aliens! Seemed like a good way!

WOOB-WŪB

This was such a bad idea, Giik. We need to go before Judy realizes where we are.

ANDY

Okay, disbelief suspended, who the hell is Judy?

GIİK-GĒK

Our teacher.

ANDY

So, you're kids? I'm being harassed by alien kids?

GIİK-GĒK

I mean, we are in an elementary school.

WOOB-WŪB

I just want to point out that juveniles of our species still have cognitive abilities far beyond your most brilliant adults.

ANDY

So you're Giik-gēk and you're Woob-wūb and your teacher is... Judy?

GIİK-GĒK

Well our actual names would be incomprehensible to you. If you heard them in all nine dimensions your brain would literally explode. Only metaphorically not literally, because your little 3D brain would never be able to grasp that many dimensions. Giik-gēk and Woob-wūb are probably just weird names you subconsciously associate with aliens.

ANDY

Okay, but *Judy*?

WOOB-WŪB

We already went over this. Our language, names included, is invented by your consciousness. We think things at you and your brain translates them into comprehensible terms. You're the one calling her Judy.

ANDY

Ohhh my god. I'm ready to wake up now.

GIİK-GĒK

Seriously? Now you think you're dreaming? Two higher beings decomplicate to talk to you and you don't have, like, any questions or anything?

(Andy stops for a moment to think about this.)

ANDY

Yeah. Okay, fine. If you are actually life forms from another dimension, let's do this. What's the meaning of the universe? Why does anything exist?

GIİK-GĒK

Dang, homie's coming out of the gate hot.

WOOB-WŪB

We don't know.

GIİK-GĒK

Yeah, we're not philosophers or whatever.

ANDY

Cool. Great. And when you say you're from a higher reality, what does that mean exactly?

GIİK-GĒK

You wouldn't really be able to comprehend it.

ANDY

Try me.

WOOB-WŪB

No, like, you literally can't comprehend it. You experience the cosmos in three dimensions.

GIİK-GĒK

Spacetime could be considered a fourth dimension, but I stopped time so don't worry about that.

WOOB-WŪB

(ignoring this)

We experience nine dimensions. We had to decomplicate down to three to interact with your reality. Kind of like a flattening of perception.

GIİK-GĒK

Let's just show it the Carl Sagan video.

ANDY

I'm sorry, you know about Carl Sagan?

GIİK-GĒK

We're not experiencing this moment at the same rate as you. I've watched a ton of your reality's explainer videos while you were asking dumb questions. Carl Sagan seemed like a pretty dope dude, bee tee dubs.

WOOB-WŪB

The gist of it is, imagine you live in a two dimensional world. Everything's flat. You're flat. You only move in two dimensions. No concept of up or down. Then a three dimensional being lowers onto your plane of existence. You only see the flat cross section of it that intersects with your two dimensional plane, not the full 3D being. That cross section is us. Kind of. The way it actually works is way, way more complicated than that metaphor.

GIİK-GĒK

Carl did a whole demo with a table and an apple. You should watch it. It's episode 10 of the original cosmos.

ANDY

So you're saying that since I live in a three dimensional world and can only barely comprehend a fourth dimension through metaphor, I shouldn't bother trying to understand the nine-dimensional reality you're from?

GIİK-GĒK

Exactly!

WOOB-WŪB

That's why we weren't supposed to contact you.

GIİK-GĒK

Kinda rude to show up to someone's place and be like, "Yo, there's a whole community of higher-dimensional beings that you'll never be able to comprehend, let alone be a part of."

ANDY

That's why humanity hasn't found alien life? Because they think it would be rude to let us know what we're missing out on?

GIİK-GĒK

Pretty much.

ANDY

But what if we gain the technology to contact higher dimensions? Or somehow evolve the ability to experience the place you're from?

GIİK-GĒK

Not how it works. You either got it or you don't, babe.

WOOB-WŪB

Maybe think of it this way: You're reading a novel, and you have the ability to go into the story and talk to one of the characters. But you also know the character can never leave the novel and experience the higher reality you're coming from.

GIİK-GĒK

Also, you can flip through the book and see what happens to the character at any point.

WOOB-WŪB

It wouldn't be very nice to drop into the story and let the character know that they're stuck in a novel with a preordained plot and they have no way to escape.

ANDY

So then you already know what I'm going to say.

GIİK-GĒK

Kinda. We know what you would have said if we hadn't zapped all up in your reality, but I don't know what Woob's going to say, because we exist in both spaces and aren't bound by the rules of your dimension.

ANDY

So... by putting yourself in my story, you're changing the outcome?

WOOB-WŪB

Well, no. Cause and effect don't actually work that way.

ANDY

Is it like a branching multiverse then?

GIİK-GĒK

Not at all.

WOOB-WŪB

You wouldn't get it. Literally, you can *never* get it. Your three dimensional brain just isn't equipped.

GIİK-GĒK

Can you just believe us when we say you won't get it? It's all beyond your comprehension, so quit trying to eff the ineffable!

ANDY

So I'm just supposed to accept that there's this whole community of alien life that humanity will never be a part of, and that mankind will never have knowledge of the true nature of the universe, and I should just accept that and get on with my life?

GIİK-GĒK

Bingo!

ANDY

But unlike you, I *am* a scientist--

GIİK-GĒK

(whispering)

Science *teacher*.

ANDY

--And my whole field is based on trying to get at the absolute, objective truth about our cosmos. Now you're saying that no matter how hard we work, we'll never have access to that truth?

WOOB-WŪB

This is why there are rules against us contacting you! It's not nice knowledge to have.

(Andy slumps down on the stage.)

ANDY

So if we have no way to access any kind of objective truth or concrete reality, what's the point of doing anything?

GIİK-GĒK

Maybe think of it like, "What's the point of *not* doing anything?"

WOOB-WŪB

Science is cool, anyways! It can still provide useful models of how your universe works. Plus, fostering curiosity and seeking knowledge rarely makes the world a worse place.

ANDY

But... we can never know anything about the larger universe beyond our own measly three dimensions?

WOOB-WŪB

If it makes you feel better, there are almost certainly dimensions higher than ours that we don't have access to either.

GIİK-GĒK

Turtles all the way down, babe. Just tons and tons of turtles.

ANDY

I hate this. I hate this so much. Can you just, like, wipe my memory? Is that something aliens can do?

WOOB-WŪB

You think they trust us with that technology? We're kids!

GIİK-GĒK

And, as evidenced by our recent actions, we're not extraordinarily responsible ones.

ANDY

This is perfect. I'm the first human being to have contact with aliens, and the ones I meet are screw-up children.

WOOB-WŪB

Didn't seem like the right time to mention it before, but this almost certainly isn't first contact. I'm sure somebody else contacted a human before.

ANDY

Then why isn't there a record of it?

WOOB-WŪB

Nobody believed them, probably. Hard to get an experience like this past peer review.

ANDY

Well then let's fix that! If you can't unburden me of knowing all this, then leave me with something I can use to prove your existence. You at least owe me that.

WOOB-WŪB

Like what?

ANDY

You said you know what's going to happen in our future, right? How about a stock tip. Or some lotto numbers.

GIİK-GĒK

Doesn't seem like you're going for scientific credibility here, babe.

ANDY

Nothing wrong with publicly predicting the future while also getting rich. Especially considering you just told me life is objectively meaningless.

WOOB-WŪB

We never said life's objectively meaningless.

GIİK-GĒK

Just that if life *does* have an objective meaning, you'll never know it. But we won't either! We're all in this together.

ANDY

Super helpful, thanks.

GIİK-GĒK

Hey, it gets us through the day.

WOOB-WŪB

We have to go now, seriously. If Judy finds out we were here--

GIİK-GĒK

She's not gonna find out. But fine.

WOOB-WŪB

Are you going to restart time?

GIİK-GĒK

Already did.

WOOB-WŪB

When?

ANDY

Funny.

GIİK-GĒK

Well okay. Later, babe.

WOOB-WŪB

Sorry about all this.

ANDY

Wait! What am I supposed to do now? Just live with all this?

WOOB-WŪB

I guess that's up to you. You didn't have any answers before and it seems like you were doing just fine.

GIİK-GĒK

(in a faux-spooky voice)

Or maybe this was all a dream!

WOOB-WŪB

You are such a dick.

(The stage lights go out and the spotlight returns to the canister of liquid nitrogen as the Shepard-Risset glissando plays in reverse. When the stage lights come back up, Andy is alone on the stage. We hear the sound of kids filing into the auditorium. Andy looks up to see them, and speaks, shakily.)

ANDY

Come on in, kids.

(As we hear the kids settle in and the chatter die down, Andy takes a deep breath, thinks for a moment, then grins and switches on the Van de Graaf generator. Andy's hair stands on end.)

ANDY

What's up, everybody! Who's ready to get excited about science?

curtain