

SECTION 3: DARK MATTER AND ANTI-MATTER

(All is dark except for the projection screen on stage 3. Pre-recorded video plays. The faces of STEPHEN HAWKING and NEIL DEGRASSE TYSON seated around a table, speaking directly to the camera.)

STEPHEN HAWKING:

"When the pair is moving forward in time, it is called a particle. But when the particle is traveling back in time (from the event at which the pair annihilates to that at which it appears), it is said to be an antiparticle traveling forward in time."

NEIL DEGRASSE TYSON:

"85 percent of all the gravity that's out there has some mysterious unknown source. It may be that the dark matter is not matter at all, it's the gravity from ordinary matter from a nearby other universe in the multiverse, whose gravitational influence we feel."

THE STORY OF THE TWO QUEENS

(Grandmother reads from an oversized book in her Treehouse. Simultaneously two slow dance duets: YOUNG GIRL and ALMITRA; THE LOVERS 1 and 2.)

GRANDMOTHER WISDOM:

Once upon a time, there were two sisters, Night Queen and Sun Queen. They were best friends, but for most of their lives, they were destined to live life separately from each other. A great ocean separated them. Night Queen lived in a vast expanse of enchanted forest. The forest was so thick that no light ever got in. There were all sorts of secrets and owls and rabbit holes in her forest. The weather was always perfectly chilly. Sun Queen lived in a glass castle near a bright white lake. It was always perfectly warm, and she hung many prisms in her windows to refract the sunlight into rainbows.

Now, twice a year a very magical thing would happen. The queens were allowed to switch places. Night Queen would wake up in the glass castle, and Sun Queen would wake up in the dark forest. Night Queen reveled in the warmth and would write joyful poetry about the rainbows and the calm waters. Sun Queen at first was confused by the maze-like forest, overwhelmed by the darkness, fearful of the creatures making sounds in the thickets.

But after the first couple of years, Sun Queen learned to treasure her rare ventures to the forest. She felt as if her body dissolved into the darkness, and this was relieving to be able to wander without desire. Her heart would sing sad, long, echoing melodies as she wandered for that day.

Just before the queens were to return home the day after, they would choose one thing to bring with them. Night Queen would be allowed to take a prism, or a small bowl of lake water, and Sun Queen would be allowed to take stones from the forest. Once, an owl even followed her home. And so it went on like this, year after year, these temporary visits, and this choosing of a talisman to carry along. This went on until there was so much of Night in the glass castle, and there was so much of Sun in the deep forest, that the queens became confused as to which place was their home. Trees grew near the bright white lake, and a pool of bright white water appeared in the enchanted forest. And so their worlds turned upside down. The Queens forgot which one was which. Words lost meaning. They forgot they ever had names at all. Now they were two queens, coming into their queendom. At their fingertips they had full command of light and dark, because they danced in between.

(Lights change as we move to the Lab.)

THE LAB

(DAVIDE sits on a chair on stage 3, next to a very small desk, sifting through a hefty stack of papers. The HUSBAND has put on a lab coat and enters in a hurry. He is searching through the papers on the desk for a particular notebook.)

DAVIDE:

You didn't call me back.

HUSBAND:

Good to see you too, Davide.

DAVIDE:(recalibrates)

Everything OK?

HUSBAND:

Yeah. Well. I'm not sure.

(Pause.)

DAVIDE: (really trying)

Is there anything--

HUSBAND:

It's Almitra. She was in an accident.

(DAVIDE becomes genuinely concerned. He doesn't know how to deal with these kinds of situations.)

DAVIDE:

I'm sorry to hear that...is she OK?

I think she'll be alright.

HUSBAND:

That's good.

DAVIDE:

Yeah. I mean, you know how it is.

HUSBAND:

How what is?

DAVIDE:

You know--it's just hard. For both of us.

HUSBAND:

Of course. I would imagine.
Are you looking for something?

DAVIDE:

Yeah, I wanted to check my old notebook again on invariant vision, back in the first couple experiments. There may have been a flaw in the original data.

DAVIDE:

Right. Yeah. I saw it yesterday.
(Pause.)
I have some bad news.

HUSBAND:

I don't know if I can take any more bad news.

DAVIDE:

There are two other groups in Harvard and Belgium that are doing the exact same project as you.

HUSBAND: (frozen)

You're kidding.

DAVIDE:

Unfortunately, no.

HUSBAND:

Have they published yet?

DAVIDE:

Not that I know of. But—

HUSBAND:

Then we just need to analyze the data faster than them. Where's my notebook--you said you saw it?

DAVIDE:

Yeah. Um. I've been working on the data while you were away. It's doesn't make any sense.

HUSBAND:

What?

DAVIDE:

It's rubbish. I'm sorry. It doesn't get us any closer to solving the vision problem.

HUSBAND:

We can always run more recording sessions. We can run the rats through the tasks again. We can run them differently, gather new data. Or we could switch to molecular techniques instead--

DAVIDE:

Both of us knew the project was really ambitious. Maybe we can let them have this one.

HUSBAND:

Let them have this one.

(Pause.)

You want to let years of work go down the drain. You know what it could mean for us if we got published with this.

DAVIDE:

I know.

HUSBAND:

We built this lab together.
We can solve this.

(They freeze. Lights change. Lover 1 enters stage 3 carrying a microphone and an umbrella.)

**THE PRIMORDIAL LOVERS: DARK
MATTER STRETCHES**

(Musician plays a sad ebbing and flowing song. Lover
1 stands near the scientists, speaks into a microphone.
Lover 2 sits near the musician, speaks or sings slowly
into a microphone.)

2:

Hello my love, I am in a deep dark night.
I am not afraid.
I know the morning brings your light.
My Love, I've grown so comfortable here
where the bats and the locusts click and coo
and the smell of moss and campfire
is a kind of home
and the rare moment of moon shadow
on the tip top of a mountain
is a home inside a home
where sometimes I forget
there ever was a time called morning.

1:

Dark matter stretches the distance between us.
We were born of the same material.
Have you forgotten already?
Have you forgotten me?
Now comes the point when we can't see one another.
What do you feel when you are surrounded by the thickness of space?
What is left: the memory of the memory
You do know where you came from,
But what came before that?

GRANDMOTHER (singing):

*Something out of Nothing
Everything has a Beginning
Except:
What made the Big Bang, Bang?*

INTERLUDE: AN ADVERTISEMENT

(Dim lights on ALMITRA in hospital bed. Sound of a TV turning on. A commercial on the projector screen: a man sitting at a desk, with a phone and DVD case on display. He speaks to the camera directly. Absolutely as cheesy as possible.)

ADVERTISEMENT MAN:

Have you been wondering your **purpose** is? Are you feeling **drained** and **confused**? Well folks, I'm here to tell you that most people don't understand their soul purpose simply because of DNA blockages. That's right. There is something holding you back from activating your DNA. If you could activate all of your DNA, you would begin to understand exactly why you incarnated here and what you are meant to do.

If you are ready to activate your DNA, all you need to do is pay at the link you see at the bottom of your screen, and then call me at 1-800-DNA-Master. After we've done the initial scanning and cleansing, I'll start to activate your DNA. We will activate the right amount for you at this time, and after a few weeks, you can come back to have the rest activated, for a special second-visit discount price.

This is completely safe and is guaranteed to work; *however, please know that side effects and symptoms of the activation may include: detoxification, emotional outburst, dizziness, night sweats, ringing in the ears, hallucinations, back pain, groin pain, limb pain, forgetfulness, desperation, thirst, hunger, uncontrollable Charlie's horses, bad breath, avoidance, anxiety, depression, isolation, madness, scabies, rabies, inappropriate jokes, and possibly a host of other symptoms.* Eventually, you will be clear of these symptoms and you will know the purpose of your life, **guaranteed**. Please, if this message speaks to you in any way, give me a call at 1-800 DNA Master-- **after you've paid at the link you see at the bottom of the screen.**

(Screen turns off.)

THE HOSPITAL

(ALMITRA in her hospital bed. A NURSE is tending to her, wiping blood off her forehead.)

NURSE:

Does it hurt when I do this?

ALMITRA:

A little bit.

NURSE:

I'm just going to make sure it's all clean for when the surgeon comes.

ALMITRA:

Okay.

(The Nurse cleans, Almitra wincing.)

NURSE:

Don't worry, you are beautiful and the surgeon will make sure you stay that way.
(Almitra stares blankly at her.)

NURSE:

Do you remember what happened?

ALMITRA: (slowly, in a trance)

You know how sometimes if you think too hard about something you can't figure it out, like you try to remember the name of...a long lost friend, but it's on the tip of your tongue, it's there, but you just can't get it. So you have to think about something else. Stop prying. Look away. And in the middle of your dinner that night you'll be chewing on some steamed broccoli and all of a sudden you'll remember his name: George. Or Ragheb. Or Dawn. Or whoever it is. It has to come as a complete surprise. You have to forget about it. Sometimes we should be OK with being somewhat blind. Knowing that we're completely in the dark about it all. Or maybe we're completely in the light?

NURSE:

Don't worry, Nirvana will be with you soon.
(Long pause.)

ALMITRA: (intensely)

What?

NURSE:

Nirvana--your surgeon--she'll be here soon.
(The NURSE leans over ALMITRA again to make sure the last bits of blood are cleaned up. ALMITRA gazes unblinkingly into her eyes. The HUSBAND enters the room suddenly, causing both ALMITRA and the NURSE to jump.)

NURSE:

You scared me. Hi. Come in.
(He goes to ALMITRA and strokes her face.)

HUSBAND:

Hi honey.

ALMITRA:

Hi.

NURSE:

Nirvana will be here shortly. I just need to ask a few more questions.

HUSBAND:

What?

NURSE:

I said, the surgeon will be here soon. OK. Almitra. What is your date of birth?

(Silence.)

NURSE:

How much pain are you having right now, on a scale of 1 to 10?

(Silence.)

NURSE:

Did you lose consciousness?

(Lights up on stage 3, where Lover 1 stands with an umbrella.)

1:

She remembers her atoms, her nerves, her chemicals, her sensations, her experiences, that feeling in the pit of her belly, that swoon in her chest, that tickling at her fingertips. She sees herself as a droplet in the ocean. She sees herself as not herself, she cannot visualize a self anymore.

ALMITRA:

I don't know.

HUSBAND: (clarifying)

Do you remember what happened or did you lose consciousness? Do you know that you were in an accident?

1:

She thinks, how could it be something lost or found? Her mind plays tricks:

Memory slips

Fades

There are holes

Her body says:

?

Her mind says,

We will figure out this puzzle, don't worry

Her body shouts:

You exist!

And there is nothing else besides the cool night air

Absolutely nothing

Why waste your life a rotting head on a rotting stick

Breathe with me

Her mind says:

I expect, I have seen, I presume

Her mind drives itself crazy trying to pinpoint the order

Body break body heal

Brain break brain whole

She sees herself as a droplet of the ocean.

ALMITRA:

I remember the before and after.

SECTION 4: IMAGINARY TIME

(All is dark except for the projection screen on stage
3. Pre-recorded video plays. STEPHEN HAWKING
seated at a table, speaking directly to the camera.)

STEPHEN HAWKING:

"One can think of ordinary, real, time as a horizontal line. On the left, one has the past, and on the right, the future. But there's another kind of time in the vertical direction. This is called imaginary time, because it is not the kind of time we normally experience. In imaginary time, there are no singularities or boundaries. So maybe what we call imaginary time is really more basic, and what we call real is just an idea that we invent to help us describe what we think the universe is like."

THE PRIMORDIAL LOVERS: MORE SIMPLE AND MORE COMPLEX

(Lover 2 is dancing with an umbrella, singing as the
Musician plays.)

2:

But my dear, now I know, it is not I loving You!

It is impossible!

It is a vessel witnessing the divine:

(A part witnessing the impossible whole)

A flow of energy,

beholding, in awe, diving into the river

(Gazing into an eternal mirror)

That's it!

It's more simple.

(And more complex.)

STATUE GARDEN

(The Musician continues to play as lights come up on all stages. Grandmother Wisdom reads from a book and smokes, Young Girl lights a candle, Davide and Husband look through a notebook together, Lovers 1 and 2 dance near the musician--almost touching but never touching, Nurse speaks to Surgeon. Almitra is still in her hospital bed, clutching her head in pain. Sudden deafening silence. Pause.)

GRANDMOTHER	DAVIDE	HUSBAND	LOVER 1	NURSE
<p>Once upon a time, there was a little girl who went for a walk in the woods. This was a magical place where no time passed outside of the woods in the ordinary world.</p> <p>Inside the woods, her vision changed.</p> <p>It was as if she could see the tiny bits and pieces that made up everything and nothing.</p>	<p>Vision is internal activity already happening in your head.</p> <p>From the retina to the visual cortex.</p> <p>The cortex has more than 30 different areas coordinated to give a coherent perception of the car.</p>	<p>A moving car generates infinite number of poses, sizes, and shadows when seen by our eye,</p> <p>yet the car is still perceived as a car.</p> <p>poses...</p> <p>sizes... shadows...</p>	<p>It is unbearable</p> <p>to be able to hear you</p> <p>but not touch you.</p> <p><i>"still dwelling</i></p> <p><i>within the bounds of that first</i></p> <p><i>moment which scattered the stars</i></p> <p><i>into space"</i></p>	<p>Craniocerebral trauma puncture loss of wounds consciousness loss of Craniocerebral loss of puncture loss of wound trauma ready for surgery.</p>

(All characters except ALMITRA freeze. Silence. Almitra rises, ghostlike, walks slowly, barely moving, through the garden of statues, observing them curiously before moving on to the next one. Eventually she drifts back, more dissolved, to her bed.)

THE HOSPITAL

(As the musician plays a quiet reprise of ebbing and flowing music, lights up on stage 4, the hospital room. A NURSE and the HUSBAND hover above the bed of ALMITRA.)

NURSE:

Did you lose consciousness?

(Lights on stage 3, Lover 1 frozen in a grotesque shape.)

1:

*again she feels the slipperiness of time,
collapse of time
like a wine glass shattered in a flash
smattering of flesh
Her body says, whether time goes forwards
backwards or
spirals in or
spirals out,
does it matter?
what matters
is--is.*

ALMITRA:

I...don't know.

HUSBAND: (clarifying)

Do you remember what happened or did you lose consciousness? Do you know that you were in an accident?

ALMITRA:

I remember the before and after.

NURSE:

Alright, how old are you?

ALMITRA:

32.

(A brief pause--Husband and Nurse exchange worried looks. Almitra may or may not pick up on this.)

Were you driving the car?

NURSE:

No.

ALMITRA:

Okay. I'm just going to do a few tests here.

NURSE:

(The Nurse does a series of concussion tests involving muscle pressure and eye movement.)

Okay, can you tell me how you're feeling now?

I have a headache.

ALMITRA:

Anything else?

NURSE:

Her voice sounds different.

HUSBAND:

Does it? Do I seem different?

ALMITRA:

I'm going to step out for a moment. Nirvana should be here shortly.

NURSE:

(She exits. Husband kisses Almitra's hand.)

Honey. What's going on?

HUSBAND:

I'm...okay. It's just the headache.

ALMITRA:

There's no other pain? The wounds look pretty deep.

HUSBAND:

Yeah. I mean. I feel different, but I can't really explain it.

ALMITRA:

Okay.

HUSBAND:

It's like... there is a veil, or a veil was lifted?

ALMITRA:

Maybe you died.

HUSBAND:

(She freezes cold. Stares at him with huge eyes.)

I'm kidding! Relax!

ALMITRA:

You always say the wrong thing.

HUSBAND:

Hey, I was kidding.

ALMITRA:

What if you're right.

HUSBAND:

Don't be ridiculous. You're not dead.

ALMITRA:

I'm touching you. But I don't feel like I'm really touching you.

(She is grasping at his face, stroking his arms, holding his hands, anything she can think of.)

When you were far away—we can't possibly exist in the same moment.

HUSBAND:

...

Do you remember the night before we were supposed to get married. The first time?

A MEMORY, A SECRET

(Sound of a distant party, becomes more distant. Husband goes into the Circle, sits on the edge, looking up at the imaginary sky.)

HUSBAND: (calling loudly)

Honey! Come look!

(Lover 1 comes and sits beside him. Husband points up.)

Look, there's Venus. She's so bright. That's my star.

(1 takes his face and kisses him on the lips, quickly, delicately, softly.)

HUSBAND: (looking into 1's eyes)

What am I going to find here today?

1:

Hmm?

In there. HUSBAND:(staring into 1's eyes)

Yes? 1 and ALMITRA:

(Lights up on Lover 2, speaking or singing to Lover 1 from a distance:)

2:
 Pulled into the pupil.
 The eye of the storm:
 Portal, worm-hole,
 opposition of emanation,
 destruction inherent in creation.
 Gaze in void. Move in veil.
 There is no path back from the emptiness,
 But God is there: chaos.
 The rootless root of all.
 The ecstasy and the space between.

(Husband gazes for a moment longer into the eyes of 1. They kiss again.)

Can I tell you a secret? 1:

Of course. HUSBAND AND 2:

I am in love with every living creature on this planet. 1:

Oh, that's really nice. HUSBAND:

I don't think you understand. 1:

You've always been very gentle. HUSBAND: (hurriedly, wanting to kiss again)

You don't get it. 1:

Hm? HUSBAND:

1:

Don't you think the droplet in the ocean is in love with all the other droplets? Because they're completely inseparable. And you never know where the droplet actually is from moment to moment.

HUSBAND:

Okay, so you love everyone because you feel inseparable from them?

1:

I see myself reflected in the faces of everyone I meet. Even the little squirrels that live outside our window.

HUSBAND:

Sounds...a little narcissistic?

1 AND ALMITRA:

You always say the wrong thing.

HUSBAND:

Sorry. I didn't mean it. I'm happy you are so happy.

1:

I need to go away for a few days.

HUSBAND:(sharply)

What?

1:

Please.

HUSBAND:

But our wedding is *tomorrow*.

1:

Could we postpone it for a few days?

(A loud voice in the distance calls out for the couple to come back to their party.)

HUSBAND: (anxious)

Let's talk about this later?

(He leans in to kiss, a touch aggressive. He is more passionate in this kiss than 1. 1 is distracted.)

THE HOSPITAL

ALMITRA:

I remember it. Or at least I remember something about it that I wanted to remember.

HUSBAND:

You know it broke my heart.

ALMITRA:

Yes.

(Long pause.)

Why were you thinking of it.

(The Surgeon enters cheerily.)

SURGEON:

Hello!

ALMITRA AND HUSBAND:

Hello.

SURGEON: (preparing some needles)

Are you ready to get all stitched up? You'll barely feel anything.

ALMITRA:

Sure.

SURGEON:

Don't worry, you're still going to be beautiful.

ALMITRA:

I wasn't worrying about that.

THE STORY OF THE CIRCLE AND THE SPHERE

(Grandmother's Treehouse. YOUNG GIRL is in her lap, half-asleep.)

YOUNG GIRL:

Why did you stop Grandma?

GRANDMOTHER:

I thought you were asleep.

YOUNG GIRL: (sleepily)

I'm awake. Keep reading.

GRANDMOTHER:

Okay. So, the sphere tried and tried to explain geometric patterns, but the circle did not understand.

The sphere then grabbed hold of the circle's hand and began to float upwards. As they floated higher and higher away, the circle looked down and saw for the first time in his life that he could see the shapes and the insides of *everything*.

The sphere then took the circle's hands and guided them across her smooth exterior. He had never before felt a Solid. He began to weep. When he had felt the entirety of her surface, he asked her,

"As you yourself combine many circles in one, and as you have come as a messenger to teach me the knowledge of the 3rd dimension, there is doubtless one above you who combines many spheres in a higher existence, there is doubtless some more spacious space, some more *dimensionable dimensionality*? Is it so?"¹

YOUNG GIRL: (mumbling)

Di-men-sh-bull, demon, shell I--

GRANDMOTHER:(articulating)

Dimensionable dimensionality.

¹ From *Flatland* by Edwin Abbott Abbott