

EXPLANATORY NOTE:

The script moves forwards and backwards in time.

To save your brainpower, the main character will usually have an approximate age appended to his name, to help identify him. Thus, Feynman-25, Feynman-67, and so on.

BLACK.

And, over:

TAP. TAP. TAP. TAP.

FADE IN:

EXT. FAR ROCKAWAY, NEW YORK, 1928 - DAY

A boy of ten sits on the sidewalk outside a large house. Beside him is a toy truck, with a ball sitting in the hopper at the back.

The boy beats a rhythm out on the hood of the truck.

TAP. TAP. TAP. TAP.

INT. LAURITSEN LABORATORY BASEMENT, CALTECH, 1969

A small room, white-painted brick, no windows, lit by neon lights.

It's a classroom, with rows of chairs, empty now.

At the front of the class, a blackboard. And standing in front of the blackboard is a man of about 50, a wry smile on his face and a mop of unruly hair.

He stands in the empty classroom, waiting, and while he waits he taps a rhythm with chalk on the blackboard.

TAP-TAP. TA-TAP. TA-TAP. TAP-TAP.

INT. A PARTY, CALTECH, 1953 - NIGHT

A younger man of 33 takes up the rhythm on the bongo drums he holds between his legs, as the people swirl around him in the tiny apartment --

-- and he's got the same smile on his face as he loses himself in the hammer of a classic martillo rhythm, and god damn but he's good, not just good but brilliant, moving through to a two-handed polyrhythm of thirteen against twelve, improvising and filling and returning to the beat like he never left it alone for a moment --

-- and then the beat slows back down to

TAP. TAP. TAP. TAP. TAP. TAP. TAP.

As everyone in the apartment applauds this amazing musician and we cut to:

INT. WASHINGTON CORRIDOR - DAY

An old man in his late sixties, same smile, collapsed and slouching in an institutional wooden bench on the side of a Washington corridor and gently tapping out a rhythm with his fingers on the side of the bench.

TAP. TAP. TAP. TAP. TA-

He stops as the door opposite him CLUNKS OPEN to reveal a MILITARY FLUNKY, who says

MILITARY FLUNKY
They're ready for you now, Doctor
Feynman.

RICHARD FEYNMAN responds in the New York drawl that he has kept throughout his life.

FEYNMAN-67
Thanks.

EXT. TRINITY, NEW MEXICO, 1945 - NIGHT

A group of army vehicles are parked in the desert, and around them stand various scientists and army types - sipping coffee from thermos flasks, talking under their breath in small groups.

In the distance, searchlights criss-cross the sky, moving first apart, but then regularly returning to one particular point, a hundred feet in the air and twenty miles away.

As we pass one group we catch fragments of their speech.
EDWARD TELLER smears sun lotion onto his face.

EDWARD TELLER
What is your prediction?

ISIDORE RABI
I think... Eighteen thousand
tons.

A scientist standing nearby looks queasy; he walks a few paces, and quietly throws up behind some bushes.

EDWARD TELLER
Will you have sun lotion?

Isidore Rabi shakes his head. Teller puts away the lotion and draws gloves over his hands.

EDWARD TELLER (CONT'D)
Hm. And Feynman?

ISIDORE RABI
I have not seen him.

Moving on past them until we find an army weapons carrier. At the radio, is RICHARD FEYNMAN, 25. He's turning each of the dials, a little bit at a time, listening hard, then adjusting more, trying to tune in.

No joy. He flips back to an earlier combination, and moves from the dials to the antenna. Shifts it.

Music. A Tchaikovsky waltz, eerie in the night, fading in and out on a shortwave frequency.

Feynman smiles. Back to the dials, and he turns one of them a quarter turn and waits for the signal he knows should be there...

Still nothing. The smile fades slightly for a moment until:

RADIO VOICE
Minus thirty minutes.

And it's back, bigger than ever.

A SOLDIER passes by carrying several pairs of welders' goggles. He offers a pair to Feynman, who makes no move to take it.

SOLDIER
Goggles, sir?

FEYNMAN-25
There's enough glass in the windscreen to filter out the ultraviolet.

SOLDIER
Right.

He moves on.

INT. TRINITY COMMAND CENTER, 1945 - NIGHT

Twenty five miles away.

ROBERT OPPENHEIMER, project director, wearing a tired old hat and coat. Tired himself. HANS BETHE next to him.

BETHE
Just five minutes now. Until we know for certain.

Oppenheimer holds a wooden post to steady himself. Exhausted. Grasping it tightly. Looking to the window.

OPPENHEIMER
Lord, these affairs are hard on the heart.

EXT. TRINITY, NEW MEXICO, 1945 - NIGHT

Soldiers and scientists alike are lying down, feet facing the tower twenty miles away, everyone wearing welding goggles and looking towards it.

The radio voice is counting down.

RADIO VOICE
30. 29. 28. 27.

Rabi, on the ground, turns to the man beside him, GRIESEN.

ISIDORE RABI
Aren't you nervous?

GRIESEN
Nope.

Find Feynman a short way off sitting in the front seat of the weapons carrier. Not wearing goggles. Just looking ahead through the windshield.

The searchlights snap off.

RADIO VOICE
13. 12. 11. 10.

GRIESEN
Now I'm scared.

Feynman, intent, watching.

RADIO VOICE
3. 2. 1.

And the world's first atomic explosion TURNS NIGHT INTO BRIGHTEST DAY.

Everything is completely silent.

Feynman grins, ebullient, as the fireball starts to dissipate and the sky turns purple over the place where the bomb exploded.

Then the CRACK of detonation, several seconds later than the light, hits them, a peal of thunder following.

Feynman yells a scream of triumph and starts applauding this thing that he and the others have created.

FEYNMAN-25
Woohoo!

And everyone else joins in the laughing and cheering, hugging one another and shaking hands and applauding while Feynman watches the mushroom cloud begin to form.

INT. RICHARD'S BEDROOM, 1928 - NIGHT

JOAN FEYNMAN, 4, watches from the door as RICHARD FEYNMAN, 10 flicks electrical switches wired into a crate.

As he does so, small light bulbs sticking out from the top of the crate grow or diminish in brightness.

There are also two metal prongs sticking out from the top of the crate next to them. At this point, they do not do anything.

JOAN

Whatchyoo doing, Ritty?

FEYNMAN-10

See these switches? They let me change the way these lamps are wired together. See, if the lamps are in series, the current is the same, and the voltage gets split between each lamp, so they're dim. But if they're in parallel...

He flicks the switches, and the brightness of the lamps flares up as he does so.

FEYNMAN-10 (CONT'D)

Then they've each got the same voltage, and the current gets divided instead!

JOAN

Oh. Is that all?

He's losing his audience.

FEYNMAN-10

You know I can punch holes in paper with electricity?

And she's back again.

He switches off the lights and turns a rheostat attached to the crate up to maximum.

Sparks start to arc between the two terminals, blue flares lighting the room.

JOAN

That's pretty good, I guess.

FEYNMAN-10

Look at this!

He grabs a piece of paper and holds it between the terminals; the blue sparks punch little holes through it.

He shows the paper to Joan, then makes some more holes.

The paper starts to char.

And then WHOOMP it's on fire.

FEYNMAN-10 (CONT'D)

Oh.

He looks around - where to put the burning paper?

In the metal wastebasket, of course. In it goes.

Unfortunately there's newspaper in there. The wastebasket's on fire now.

Joan watches on with big eyes as Feynman looks around the room for something to put the fire out with.

There's a magazine to one side. Large enough to cover the wastebasket. Feynman grabs it and puts it over the top of the wastebasket, completely covering it.

FEYNMAN-10 (CONT'D)

Ha. Stops the oxygen getting in!

JOAN

Is that it then?

She wanders off back down the hall.

Feynman lifts the magazine off the wastebasket to see what's occurring within.

The fire's out - but there's still smoke.

Lots and lots of black smoke.

Which is now filling the room.

He pulls the door to his room shut and tries to pick up the wastebasket -- OW! It's still hot.

He uses the magazine as a heat pad and holds the wastebasket out of the open window of the room.

The smoke starts to dissipate into the night.

INT. FEYNMAN LIVING ROOM, 1928 - NIGHT

Feynman's parents LUCILLE and MELVILLE, and their two guests are playing bridge.

MELVILLE

One Heart.

FEMALE GUEST

One Spade. Can you smell something burning, Lucille?

LUCILLE

Don't worry. It's just Richard, playing.

FEMALE GUEST

Aren't you worried he might hurt himself?

LUCILLE

Richard would let us know if he needed any help. Two Hearts.

INT. GIANONNI'S BAR, 1969 - DAY

A TRUCKER takes a sip from his beer glass, puts it back down on the formica table. All the time he never takes his eyes away from

A SMALL STAGE

On which a beautiful topless girl - KATHLEEN - dances to a sixties tune.

Across from them, in a booth, sits RICHARD FEYNMAN, 50. He has a pencil and is sketching away on an overturned paper menu/placemat.

The tune finishes, and Kathleen goes over to the bar where owner GIANONNI is putting glasses away, while another dancer takes her place on the stage.

KATHLEEN

Who's that in the corner?

GIANONNI

Professor. Doesn't talk much.

KATHLEEN

So what's he do then?

Gianonni shrugs.

KATHLEEN (CONT'D)

You're terrible.

She picks up a pad and paper and heads over towards Feynman, who has put down his placemat.

KATHLEEN (CONT'D)

Can I get you another drink?

FEYNMAN-50

Another seven-up please.

She scribbles it down on the pad, smiles a big smile.

KATHLEEN

We don't get many from Caltech in here. What is it you do?

FEYNMAN-50

I think a lot.

KATHLEEN

And they pay you for that?

FEYNMAN-50

I'm quite good at it.

KATHLEEN

Is that what you were doing on the placemat earlier?

FEYNMAN-50

A friend of mine is teaching me to draw, so I thought I'd find some good things to draw in here.

KATHLEEN

Can I look?

FEYNMAN-50

Sure.

He turns round the placemat. On it is a sketch of the trucker's face as he watched Kathleen dance.

INT. ARLINE'S BEDROOM, 1941

Feynman-25 stands in the room. On the bed is a beautiful woman - ARLINE. She's obviously not well, and doesn't get up.

ARLINE

Mother was crying last night. And that set me to thinking that if I had glandular fever, why is she crying so much?

Feynman looks guilty. Doesn't say anything.

ARLINE (CONT'D)

Tell me properly. Once and for all. What do I have?

FEYNMAN-25

You have Hodgkin's disease.
(beat)
I'm sorry.

ARLINE

God! They must have put you through hell.

FEYNMAN-25

The doctors said it wouldn't be good for you to know. That you'd live longer if we didn't tell you. I wrote you a letter.

He hands it over to her. She doesn't open it.

FEYNMAN-25 (CONT'D)

I carried it in my pocket every day. So I could give it to you as soon as you found out.

ARLINE

Why?

FEYNMAN-25

Because I knew you'd leave me as soon as you found out I lied.

He stands there for a moment, helpless.

ARLINE

What are we going to do now?

FEYNMAN-25

I want you to stay with me.

ARLINE

I don't want to leave you.

FEYNMAN-25

Putsie, will you marry me?

A long beat.

INT. LECTURE HALL, 1949

Feynman-33, Oppenheimer, and other physicists sit in the audience as MURRAY SLOTNICK finishes his lecture, drawing the last equations on the board as he does so.

SLOTNICK

So while the pseudoscalar coupling gives finite answers, the pseudovector coupling would diverge to infinity.

A bit of clapping from some of the audience, including Feynman. Not all, though.

Oppenheimer rises to his feet.