

A T O M I C

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ORiGiN™
Theatrical

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C H A R A C T E R S

LEO SZILARD (30) - A brilliant Hungarian physicist with an annoying habit of always being right. He sees the future and science as the way he's going to save it.

TRUDE WEISS (20) - A gifted doctor. She's smart enough to know how tough a life with Leo will be, and strong enough to deal with that.

ENRICO FERMI (30) - Italian Nobel-winning physicist. If it's not science, he's not interested.

ARTHUR COMPTON (30) - Nobel-winning quantum physicist and head of the Chicago Metlab. Torn between science and religion, morality and duty.

EDWARD TELLER (30) - A Hungarian genius like Leo with a more aggressive World view. He wants a bigger bomb.

LEONA WOODS (20) - The only woman on the Metlab team, but she's not going to let that stop her.

ROBERT OPPENHEIMER (30) - The bomb is his ticket to the recognition his brilliance deserves. It's an expensive ticket.

GENERAL GROVES (30) - Highly intelligent and quite reasonable. Till you get in his way. He will use the bomb to end the war. Yes he will.

PAUL TIBBETS (30) - A fearless young pilot with a keen sense of duty. If he can't win the war single-handed, he'll show how it's done.

LAVERNE/MAE/LENA (20) - Rosie the Riveter meets the Andrews Sisters.

BARTENDER (20)

FEMALE SCIENTIST (20)

SCIENTIST (20)

U.S. Military men x 2 (20)

NY Commuters x7

VOICES: News Announcers, Scientist, Roosevelt, Truman, Japanese announcer

S O N G S

ACT 1

THE ATOM BOMB IS HERE (1960) *Ensemble*
LITTLE FIRE *Leo, Trude, Ensemble*
THE FORCE THAT LIGHTS THE STARS *Leo, Trude*
A RISK YOU TAKE *Leo, Trude, Ensemble*
THERE ARE LINES *Fermi, Leo*
DARK DAYS *Leo, Fermi, Teller, Trude*
HEADLIGHTS *Trude*
ATOM SMASHER *Leona, Ensemble*
STARS AND STRIPES *Tibbets, Leo*
WHERE IS HOME? *Leo, Trude*
ONE DAY *Leo*

ACT 2

HOLES IN THE DONUTS *Laverne, Mae, Lena*
GREATER BATTLE *Leo, Ensemble*
WORLD OF GRAY *Compton, Leo*
GREATER BATTLE REPRISE *Leo, Fermi*
THE ATOM BOMB IS HERE (1945) *Leo*
THE FORCE THAT LIGHTS THE STARS REPRISE *Leo, Trude*
ONLY NUMBERS *Leo, Trude, Tibbets*
WHAT I TELL MYSELF *Leona, Oppenheimer, Ensemble*
FINALE *Trude, Leo, Ensemble*

S C E N E S / S O N G S

SCENE	LOCATION	SONG
ACT I		
1	Prelude (1960)	1. The Atom Bomb Is Here (1960)
2	Formal Gathering NY (1954)	1a. After The Bomb
3	Berlin (1933)	2. A Little Fire
4	AAC Office London	2a. Walk In The Rain
5	Southampton Row	3. The Force That Lights The Stars
6	Atlantic Crossing (1938)	4. A Risk You Take
7	Kings Crown Lobby (1939)	5. There are Lines
8	Columbia Lab	6. Dark Days
9	Columbia Campus	
10	Columbia Montage	6a. Montage
11	Compton's Office (1941)	6b. Arthur Compton
12	Columbia Lab	6c. Hello Chicago
13	Trude's Place	7. Headlights
14	Metlab	
15	The Bar Montage	8. Atom Smasher
		8a. Atom Smasher Reprise
		8b. The Phone Call Transition
16	The Bar	8c. Into The Bar
		9. Stars and Stripes
17	Trude's Place (1943)	9a. Stars And Stripes Transition
		10. Where Is Home?
		10a. The Letter
18	The Road Back	11. One Day
19	Metlab	
20	Alamogordo (1945)	
ACT II		
21	Formal Gathering NY (1954)	11a. Entr'acte
22	Oak Ridge (1945)	12. Holes in the Donuts
23	Transition	12a. Queen Elizabeth
24	Leo's Place	13. Greater Battle
		13a. Leona Signs
25	Metlab	14. World of Gray
26	Above America	15. Greater Battle Reprise
27	White House	16. The Atom Bomb is Here (1945)
28	Washington Bar	17. The Force That Lights The Stars Reprise
29	Above Hiroshima	18. Only Numbers
30	Aftermath	18a. Aftermath
31	Formal Gathering NY(1954)	19. What I Tell Myself
32	Going home (1960)	20. Finale

S C E N E S / C H A R A C T E R S

SCENE

CHARACTERS

ACT I

1	Prelude (1960)	COMMUTERS #1-7
2	Formal Gathering NY (1954)	LEONA, OPPENHEIMER, TELLER, COMPTON
3	Berlin (1933)	MAN, WOMAN, MAN 2, LEO, TRUDE, Ensemble
4	AAC Office London	Leo, Trude
5	Southampton Row	Leo, Trude, Ensemble
6	Atlantic Crossing	Leo, Trude, Ensemble
7	Kings Crown Lobby	Leo, Fermi, Teller
8	Columbia Lab	Leo, Fermi, Teller, Trude, FRENCH, US, ENGLISH & GERMAN ANNOUNCERS (VO)
9	Columbia Campus	Leo, Fermi, Teller, Trude
10	Columbia Montage	Leo, Fermi, Teller, Trude, ROOSEVELT (VO)
11	Compton's Office	Compton, GROVES
12	Columbia Lab	Compton, Leo, Fermi, FEMALE SCIENTIST
13	Trude's Place	Leo, Trude
14	Metlab	LEONA, Fermi, Teller, Leo
15	The Bar Montage	Leo, Leona, Fermi, Teller, BARTENDER, SCIENTIST, Compton, OPPENHEIMER
16	The Bar	Leo, PAUL, Bartender
17	Trude's Place	Leo, Trude
18	The Road Back	Leo, Radio (VO)
19	Metlab	Compton, Teller, Fermi, Leona, Leo, Truman (VO)
20	Alamogordo	Leo, Oppenheimer, Groves, Fermi, Compton, Teller (optional)

ACT II

21	Formal Gathering NY (1954)	Leona, Oppenheimer, Teller, Compton
22	Oak Ridge (1945)	MAE, LENA, LAVERNE, MILITARY MEN
23	Transition	Announcer
24	Leo's Place	Leo, Trude
25	Metlab	Leo, Fermi Female Scientist, SCIENTIST, Compton, Leo, Leona, Ensemble
26	Above America	Leo, Fermi
27	The White House	Compton, Leo, Oppenheimer, Fermi, Groves
28	Washington Bar	Leo, Paul, SOLDIER, Trude
29	Above Hiroshima	Leo, Trude, Paul, Announcement (VO)
30	Aftermath	Announcers x 4 (VO)
31	Formal Gathering NY (1954)	Leona, Oppenheimer, Teller, Compton, Leo, Trude
32	Going Home	Leo, Trude, Fermi, Ensemble

SUGGESTED DOUBLING

1. Leo (m1)
2. Trude / Laverne / Commuter #1 (f1)
3. Fermi / Commuter #2 (m2)
4. Compton / Commuter #3 (m3)
5. Teller / Tibbets / Groves / Commuter #4 (m4)
6. Oppenheimer / Scientist / Commuter #5 (m5)
7. Leona / Lena / Commuter #6 (f2)
8. (Optional) Male understudy / Bartender
9. (Optional) Female understudy / Mae

ACT ISCENE 1

AT RISE:

1 PRELUDE

1

New York 1960. The height of the Cold War. Commuters in a state of panic.

SONG 1: THE ATOM BOMB IS HERE (1960)

COMMUTER #2

U2 PLANE SHOT DOWN IN FLAMES

#3

EISENHOWER HELD TO BLAME

#4

RUSSIA DEMANDS AN APOLOGY

#2, 3, 4

WILL THIS END IN WORLD WAR THREE?

#6

WHAT DO THEY NEED THESE WEAPONS FOR?

#7

WILL MANKIND SURVIVE THE NEXT WAR?

#1

ARE THEY TARGETING NEW YORK?

ENSEMBLE

WHY DON'T THEY JUST SIT DOWN AND TALK?

ALL THAT WE HOLD DEAR
SOON COULD DISAPPEAR
THE ATOM BOMB IS HERE

#1

DUCK AND COVER KNOW THE DRILL

#4

SHELTER STOCKED BATHTUB FILLED

#7

RADIO AND FLASHLIGHT NEAR

ENSEMBLE

WELCOME TO OUR WORLD OF FEAR

HOW LONG DO THEIR BOMBERS TAKE?
SHOULD WE LEAVE OR IS IT TOO LATE?

(MORE)

ENSEMBLE (CONT'D)

HOW MANY WARHEADS DO WE NEED
FOR THE FREE WORLD TO SUCCEED?

IS THIS OUR FINAL SONG?
HOW DO WE GO ON?
UNDER THE ATOM BOMB

WE'RE ON THE BRINK OF MASS ANNIHILATION
WON'T SOMEBODY PLEASE EXPLAIN
HOW WE GOT INTO THIS SITUATION?
HAS THE WHOLE WORLD GONE INSANE?

#1

CAN'T WE GO BACK?
CAN'T WE UNDO?

#3

CAN'T WE GO BACK
AND START ANEW?

#4

CAN'T WE GO BACK?

#5

CAN'T WE UNDO?

ENSEMBLE

BACK TO THE WORLD WE KNEW

TOO LATE TO SHED A TEAR
HOLD YOUR CHILDREN NEAR
THE ATOM BOMB IS
ATOM BOMB IS
ATOM BOMB IS HERE

LIGHTS FADE.

2

FORMAL GATHERING - NY (1954)

2

SONG 1A: AFTER THE BOMB

Four old friends over wine at a table. LEONA WOODS, ARTHUR COMPTON, EDWARD TELLER and J ROBERT OPPENHEIMER. Teller stands, smoking. The mood is sombre. Leona breaks the ice.

LEONA

I know it's a horrible thing to say, but I actually prefer funerals to weddings. At least I know what to wear.

TELLER

It's good to be among friends Leona. Whatever the occasion.

OPPENHEIMER

Friends Teller? Since when do friends stab each other in the back?

TELLER

Good God Oppenheimer. I never told that inquiry anything I haven't said to your face. I'm a scientist. I call it as I see it. You would have lost your security clearance regardless of my testimony.

COMPTON

Now is not the time. I for one am glad it's just us.

TELLER

Absolutely. I am so tired of the inevitable question.

LEONA

'Would you do it again. If you knew the consequences?' Don't people ever get tired of asking?

COMPTON

Of course we knew the consequences. The consequences of failing. Losing the free world to Hitler.

OPPENHEIMER

We didn't know Jack Shit.

LEONA

Now we're racing the Soviets to see who can destroy the world faster. Just like Leo said we would.

COMPTON

Learning God's secrets doesn't mean we inherit his wisdom.

OPPENHEIMER

Are you still holding on to God, Compton? After all he put us through.

COMPTON

God is the only reason I got through.

LEONA

Did any of us really get through?

TELLER

We had a job to do and we did it.

LEONA

That doesn't keep you awake at night?

TELLER

I sleep like a baby. But then, I'm not Leo Szilard. Trying to save the world.

LEONA

Poor Leo.

TELLER

He never knew when to quit. That was his downfall. He was exactly the same when I knew him, back in Berlin.

Teller lights a match for a new cigarette. He watches the flame as we are transported back to Berlin in 1933.

TELLER (CONT'D)

Before the inmates took over the asylum.

SONG 2: LITTLE FIRE

LIGHTS FADE.

In the distance we hear a fire siren. People screaming as everyone races off stage.

3

BERLIN (1933)

3

MAN

Fire! Call the police!

WOMAN

Mein God, it's the Reichstag!

MAN 2

The Reichstag? Who would do such a thing?

TRUDE WEISS (20) answers a frantic pounding on her door.

LEO (OFF)

Trude. Hurry. Open up. It's Leo.

A breathless LEO SZILARD (30) races in with a suitcase.

TRUDE

Leo? What's wrong?

LEO

Pack your things. We have to leave. Now!

TRUDE

Leave? What are you saying?

LEO

A LITTLE FIRE STARTED
IN BERLIN TONIGHT
THAT DISTANT GLOW'S THE REICHSTAG
UP IN FLAMES

THEY'RE ROUNDING UP THE COMMUNISTS
THEY SAY SET IT ALIGHT
OR IS IT OUR NEW CHANCELLOR'S
TO BLAME?

THAT FURNACE IN THEIR EYES
THE RAGE THE FEAR
THE REASON I LEFT HUNGARY
FOR HERE

TRUDE

For God's sake Leo.

THAT LITTLE FIRE BURNING
IN BERLIN TONIGHT
WILL BE A FADED MEMORY
BY DAWN

WE'RE IN THE HOME OF CULTURE
THE CITY OF LIGHT
WHY DON'T YOU COME ON IN
AND GET WARM

A PAPER FOR MY
MEDICAL DEGREE
COULD BENEFIT FROM
YOUR ANATOMY

LEO

FOR MONTHS I'VE SEEN THIS COMING
THE TINDER IS DRY
ONE TINY SPARK WILL SET IT
ALL ABLAZE

MY BAGS WERE PACKED AND READY
AND NOW IS THE TIME
WE MIGHT NOT GET THE CHANCE
IF WE DELAY

TRUDE

MY STUDIES MY FRIENDS
MY WHOLE FAMILY
YOU DON'T KNOW WHAT IT IS
YOU'RE ASKING OF ME

Trude exits. Leo, distraught,
calls after her.

LEO

Please Trude. You've got to believe me!

She returns after a long beat with
a suitcase, dressed for travel.

TRUDE

I do believe you Leo. Only because you have an
annoying habit of being right.

They walk past an angry rabble of
Nazi supporters.

ENSEMBLE

A LITTLE FIRE'S BURNING
IN BERLIN TONIGHT
IN THE HEARTS AND MINDS OF EVERY
GERMAN SON

A BETTER WORLD AWAITS THOSE
THAT CAN SEE THE LIGHT
ALL THE OTHERS BETTER
PACK THEIR BAGS AND RUN

LEO

A LESSON FOR HUMANITY TO LEARN
YOU START A LITTLE FIRE
EVERYTHING CAN BURN

Leo and Trude exit.

ENSEMBLE

A LITTLE FIRE'S BURNING
IN BERLIN TONIGHT
A LITTLE FIRE'S BURNING
IN BERLIN TONIGHT

LEO

EVERYTHING CAN BURN

ENSEMBLE

A LITTLE FIRE'S BURNING
A LITTLE FIRE'S BURNING
A LITTLE FIRE'S BURNING
IN BERLIN
TONIGHT

LEO (CONT'D)

EVERYTHING CAN
BURN

Music out.

LIGHTS FADE.

Leo on the phone.

LEO

Professor Chadwick? Leo Szilard from the Academic Assistance Council. (pause) Yes. (pause) Really? Well it turns out Hitler's stupidity is your good fortune. I have a list of very recently unemployed industrial chemists. Pioneers in their field.(pause) Of course I will. Thank you.

TRUDE enters holding a paper lunch bag.

TRUDE

I brought us lunch.

LEO

Trude. What a nice surprise.

He takes the paper bag and weighs it in his hand.

LEO (CONT'D)

Seeded rye. Chopped liver. And a sliced pickle from Blooms.

TRUDE

One day you'll get it wrong. Then I'll be surprised. My shift starts at two.

She takes a bite of her own sandwich.

LEO

I knew you'd land on your feet.

TRUDE

My supervisor said I'll be a great doctor.

LEO

I could have told you that.

TRUDE

You did. Right after you told me I was lousy at physics. On our first date.

LEO

Before that. I never date my students. But you were lousy at physics.

TRUDE

I'm so relieved.

LEO
 I need to mail some resumes
 I'll walk you to the hospital.

SONG 2A: WALK IN THE RAIN

They grab some umbrellas and head
 to a rainy London street.

5 SOUTHAMPTON ROW - LONDON

5

They pass commuters holding
 umbrellas.

TRUDE
 Mailing resumes? You should get an assistant.

LEO
 There's no money for that.

TRUDE
 They're paying you to solve the world's
 problems by yourself?

LEO
 They're not paying me at all.

TRUDE
 So how do you eat?

LEO
 (holds up sandwich)
 I have my sources.

TRUDE
 No really.

LEO
 You remember that family who died in their
 sleep.

TRUDE
 Of course. Their refrigerator leaked toxic gas.
 You wanted to do something.

LEO
 I did something. With my professor.

TRUDE
 Einstein?

LEO
 We developed a new refrigerator pump.
 Electrolux paid good money for that patent.
 Enough to last another year.

TRUDE

And then what? You're also an unemployed Jewish refugee. Why not use your position to find yourself a job.

LEO

(holding up resumes)

These people will starve. I won't. One advantage of leaving early.

TRUDE

One day early. The very last train out. I almost didn't join you.

LEO

I wouldn't have left without you.

(Music out)

In any case, I'm done with pure physics. I'd like to do something that can help people. Like biology.

SONG 3: THE FORCE THAT LIGHTS THE STARS

LEO (CONT'D)

Imagine finding a cure for cancer. Or there's an exciting new field. Atomic physics. Only last month they discovered neutrons.

TRUDE

Neutrons. Sounds like an alien life form.

LEO

The energy contained in atoms is the most powerful force in the universe. What if we could harness it?

IMAGINE UNLIMITED POWER
IMAGINE THE WORLD WE COULD BUILD
BATTERIES THAT LAST A HUNDRED YEARS
GAS TANKS THAT ALWAYS STAY FILLED

SHIPS THAT DON'T NEED REFUELLING
WITH FUNNELS THAT NEVER BLOW SMOKE
BREATHE COUNTRY AIR IN THE CITY
RIDING BUSES THAT DON'T MAKE YOU CHOKE

THE FORCE THAT LIGHTS THE STARS
IMAGINE IF IT WERE OURS
THE POWER THAT IGNITES THE SUN
COULD LIGHT THE WAY FOR EVERYONE

A WORLD JULES VERNE NEVER IMAGINED
H G WELLS ONLY DREAMED
WE'LL BE RIDING A SHIP TO THE FUTURE
POWERED BY ATOMS NOT STEAM

(MORE)

LEO (CONT'D)

AND WHEN THIS PLANET'S TOO SMALL TO SUPPORT US
WE'LL FIND OTHERS TO HARBOUR OUR RACE
WITH ROCKETS THAT FLY ON FOREVER
THROUGH ENDLESS FRONTIERS OF SPACE

THE FORCE THAT LIGHTS THE STARS
IMAGINE IF IT WERE OURS
THE POWER THAT IGNITES THE SUN
COULD LIGHT THE WAY FOR EVERYONE

TRUDE

Sounds impossible.

LEO

The experts all agree with you.

TRUDE

So prove them wrong.

IF THERE'S AN ANSWER OUT THERE
I KNOW YOU'LL FIND IT
AS SURELY AS THE DAY FOLLOWS THE NIGHT
YOU HAVE THE MIND
I'VE SEEN YOUR WORK TIME AFTER TIME
YOU GET THINGS RIGHT
YOU'LL GET THIS RIGHT

LEO

THE FORCE THAT LIGHTS THE STARS

TRUDE

YOU'LL FIND IT

LEO

IMAGINE IF IT WERE OURS

TRUDE

FOLLOW YOUR DREAMS

LEO

THE POWER THAT IGNITES THE SUN
COULD LIGHT THE WAY

BOTH

THE FORCE THAT LIGHTS THE STARS
IMAGINE IF IT WERE OURS
THE POWER THAT IGNITES THE SUN
COULD LIGHT THE WAY
FOR EVERYONE

TRUDE

Seems you've chosen your path.

LEO

I wish I knew where to start.

TRUDE

(laughs)

Don't look at me. I wouldn't know a neutron if it hit me in the face.

LEO

(amused)

Of course you wouldn't. A neutron has no charge. It would pass right through your --
(lost in thought. Music out.)

My God.

TRUDE

Leo?

LEO

A neutron. A neutron has no charge. No resistance! Split the atom with a neutron! That has to be the solution. But if I can think of it, the Germans can too. We need to go.

TRUDE

Go?

LEO

America.

TRUDE

Leo. I left my home. My family. You said England would be safe. And you were right. You probably saved my life. But America? I have friends here now. My work is here. I'm not like you. I can't live out of a suitcase that's always packed.

LEO

(excited)

Trude, America is the new Berlin. Everyone including Einstein is either there or on their way. Besides I don't have a choice.

(on a serious note)

War is coming and this idea could decide it. I'm an enemy alien here. I can't work in England if there's a war. Not on any war effort.

TRUDE

I won't know anyone in America. Besides you.

Leo holds out his hand to Trude.
She takes it.

Travellers enter wearing coats and holding suitcases. Leo and Trude join them.

ENSEMBLE

AAAAH

LEO

A RISK YOU TAKE
A HEART CAN BREAK
WHEN YOU TIE YOUR DREAMS
TO THE LIFE OF ANOTHER

ENSEMBLE

A RISK YOU TAKE
THE EARTH CAN SHAKE
WHEN THERE'S SOMETHING NEW
THAT YOU DISCOVER

TRUDE

MY HEART IS YOURS FOREVER
I HAVE NO CHOICE BUT FOLLOW
I PUT MY FAITH IN YOU
THE PROMISE OF TOMORROW

LEO

AND NOW WE SAIL TOGETHER
UNCHARTED OCEAN
NO LIFEBOAT ON THIS VENTURE
WE'LL SINK OR SWIM AS ONE

TRUDE (CONT'D)

SAIL TOGETHER
UNCHARTED OCEAN
OH
SINK OR SWIM AS ONE

LEO

WITH EVERY STEP YOU TAKE YOU RISK A FALL
SO MANY DREAMS HAVE FAILED TO SCALE THAT WALL

BOTH

BUT THERE'S NO GREATER RISK YOU TAKE
THAN NO RISK AT ALL

ENSEMBLE

DREAMS CAN MAKE YOU
LOVE CAN BREAK YOU
DREAMS CAN BREAK YOU
LOVE CAN MAKE YOU

ENSEMBLE (CONT'D)

DREAMS CAN MAKE YOU
LOVE CAN BREAK YOU
DREAMS CAN BREAK YOU
LOVE CAN MAKE YOU

TRUDE

TAKE CARE NOT TO FALL
WE MIGHT LOSE IT ALL

Interlude as Trude and Leo arrive in America.

ENSEMBLE

DREAMS CAN MAKE YOU
 LOVE CAN BREAK YOU
 DREAMS CAN BREAK YOU
 LOVE CAN MAKE YOU

ENSEMBLE (CONT'D)

DREAMS CAN MAKE YOU
 LOVE CAN BREAK YOU
 DREAMS CAN BREAK YOU
 LOVE CAN MAKE YOU

LEO & TRUDE

TAKE CARE NOT TO FALL
 WE MIGHT LOSE IT ALL

LIGHTS FADE.

7

KING'S CROWN HOTEL LOBBY - NY (1939)

7

Leo is at reception on a public phone.

LEO

Of course I know how cyclotrons work. I designed one myself. (pause) So there was no knock-on effect with indium. Can you run the test again? Oh. I see. That's disappointing.

ENRICO FERMI walks past. Leo notices and ends the call.

LEO (CONT'D)

I have to go.
 (chasing Fermi)
 Enrico Fermi! Welcome to New York.

FERMI

You know me?

LEO

The man who just won the Nobel Prize in physics? Of course. I'm a physicist myself.
 (extending a hand)
 Leo Szilard.

FERMI

(ignoring the hand)
 Szilard. You wrote me from England. You were trying to get Nobel laureates to boycott Japanese academia.

LEO

You got my letter then.

FERMI

You crossed a line.

LEO
We're scientists. It's our job to cross lines.
Break new ground. Push boundaries.

FERMI
Not all boundaries.

LEO
I heard you're starting at Columbia. Professor
of Physics. There's a concept

SONG 5: THERE ARE LINES

LEO (CONT'D)
I've been working on that will surely interest
you --

FERMI
Some lines must not be crossed. Not ever.

The banter plays out like a tango,
with the speaker approaching the
listener, who retreats till it's
his turn to speak.

FERMI (CONT'D)
MEN HAVE IDEAS BUT THERE'S NO PROOF
ONLY WITH SCIENCE CAN WE FIND THE TRUTH
UNDER THE OCEAN OR IN SPACE
THERE IS NO CHALLENGE THAT WE CAN-NOT FACE

BUT DANGER STALKS THE UNAWARE
AND KILLS YOU IF YOU'RE NOT PREPARED
SO LISTEN CLOSE BEFORE YOU'RE LOST
THERE ARE SOME LINES THAT CAN'T BE CROSSED

LEO
YES LINES WERE CROSSED
WHEN HIROHITO WENT TOO FAR
SENDING AN ARMY
INTO POOR MANCHURIA
IF THERE ARE LINES FOR WHAT
WE CAN OR CANNOT DO
DON'T YOU THINK THAT THERE
SHOULD BE LINES FOR OTHERS TOO?

FERMI
No!

STAND THERE AND ARGUE IF YOU MUST
THE RIGHTS AND WRONGS AREN'T UP TO US
YOU WANT TO TALK MORALITY?
GO TO YOUR SYNAGOGUE DON'T PREACH TO ME

AS SCIENTISTS WE NEED TO LEARN
THAT POLITICS WILL GET YOU BURNED
(MORE)

FERMI (CONT'D)
IGNORE MY WARNING AT YOUR COST
THERE ARE SOME LINES THAT CAN'T BE CROSSED

LEO
IT'S UP TO US TO STAND AGAINST INJUSTICE

FERMI
IF WE CHOOSE SIDES
WHAT GOVERNMENT WOULD TRUST US?

LEO
ISN'T OUR ROLE TO BUILD A BETTER WORLD?

FERMI
OUR JOB IS SCIENCE
NOT CRYING LIKE A LITTLE GIRL

LEO
I TOOK A PATENT OUT IN THIRTY-THREE
LODGED IN SECRET WITH THE ADMIRALTY
A SIMPLE CONCEPT THAT COULD SAVE MANKIND
I'D LIKE YOUR HELP WITH IT IF YOU DON'T MIND

FERMI
AAAAAAAYAA!

LEO
WHAT?

FERMI
LOOK WHAT YOU DID, YOU MADE ME SCREAM
A SECRET PATENT IS BEYOND OBSCENE
IF WE DON'T PUBLISH OUR IDEAS ARE LOST
THAT IS A LINE THAT CAN'T BE CROSSED

WE'RE BUILDING KNOWLEDGE
FOR THE WHOLE HUMAN RACE
IDEAS FOR MAN
NOT FOR YOU TO STUFF YOUR FACE

LEO
FERMI YOU'RE WRONG THAT PATENT
WAS NOT FOR ME
IT'S TIME YOU STEPPED OUT
FROM YOUR DARK LABORA-TRY

LOOK AT THE WORLD
THAT'S WHAT YOU NEED TO DO
WE'RE STANDING ON THE BRINK
OF WORLD WAR TWO

WE BEAR THE DUTY
FOR SOME THINGS WE FIND
SOMETIMES YOU HAVE TO
CROSS A LINE

EDWARD TELLER enters.

FERMI
NO WE CAN'T

LEO
BUT WE MUST

FERMI
NO WE CAN'T!

LEO
WHERE'S SOME TRUST?

FERMI
GO TO HELL!

LEO
IF I MUST!!

FERMI
THERE ARE SOME LINES THAT
CAN'T BE CROSSED!

LEO (CONT'D)
THERE ARE SOME LINES THAT
MUST BE CROSSED!

TELLER
Gentlemen. We left Europe to avoid war. Not
start one.

LEO
Teller. You're a neutral party. Help us settle
this.

FERMI
He's not neutral. He's Hungarian like you.

TELLER
I'm not like Leo at all. I'm employed. At
Princeton. Professor Neils Bohr just gave a
talk there this morning. I thought you might
want to know. Your colleagues in Berlin split a
Uranium atom.

LEO
(alert and excited)
Hahn and Strassman?

TELLER
Yes.

LEO
Using neutrons.

TELLER
You heard?

LEO
Split it? You mean it transmuted to lighter elements?

TELLER
That's right.

LEO
So neutrons may have been released.

TELLER
Perhaps.

LEO
How many?

TELLER
(guessing)
I don't know. Maybe one or two.

LEO
(firmly)
One? Or two?

TELLER
Who cares?

LEO
(insistent)
One? Or two?

FERMI
(suddenly getting it, excited)
One neutron that can split another atom, releasing one or two more. And if it's two. If it's two...

LEO
Exactly.

TELLER
The energy release would be exponential!

FERMI
(to Leo)
That was your idea! An atomic chain reaction!

LEO
I started at the wrong end of the periodic table. We need to learn the number of neutrons. Fermi?

FERMI
(excited)
I have the setup.

LEO
I'll warn others in the field not to publish
anything that might alert the Germans --

FERMI
A line!

LEO
Forget your lines!!

TELLER
Szilard is right. With an atom bomb Hitler will
be unstoppable.

FERMI
A remote possibility. Perhaps ten percent.

LEO
A one-in-ten chance that Hitler could level a
city. Perhaps this city. I vote for secrecy.

FERMI
We do not keep secrets!

TELLER
I also vote for secrecy.

LEO
That's settled. Two to one.

FERMI
What? That's not scientific.

LEO
No it's democratic. America is a democracy.

FERMI
A democracy! How the hell is it a democracy
with only three people in the whole world
voting?!

8 COLUMBIA LAB

8

SONG 6: DARK DAYS

The men put on lab coats. Leo and
Teller set up a wooden box on the
table.

LEO
The cadmium/radium source will fire slow
neutrons into the uranium target.

TELLER
If a chain reaction is possible, it will light
up like a Christmas tree.

FERMI
Gentlemen. The moment of truth.

They put on goggles.

FERMI (CONT'D)
IF NEUTRONS ARE PRESENT THEN WE SHOULD SEE

TELLER
FLASHES APPEAR ON THE CATHODE RAY SCREEN

LEO
FIVE YEARS I'VE CHASED THIS ELUSIVE DREAM
NOW I'M HOLDING ON TIGHT
TO THE HOPE I WASN'T RIGHT

ALL
TERRIFIED OF WHAT WE'LL FIND
DARK DAYS FOR MANKIND

Trude out carrying some medical books.

TRUDE
I FOLLOWED YOU HERE TO
THIS GREAT UNKNOWN

ALL I HEAR IS TALK
OF A WAR BACK HOME

IN A CITY OF FACES
I'M ON MY OWN

Fermi opens an aperture on the box. Nothing happens.

TELLER
WELL I GUESS WE WERE WRONG

FERMI
IT MIGHT HELP TO SWITCH IT ON

Fermi flicks a switch. The screen starts flashing and clicking to a fever pitch.

TRUDE
AM I BEING LEFT BEHIND?

ALL EXCEPT TRUDE
DARK DAYS FOR MANKIND

The men stare intently.

FERMI
NOW THAT WE'VE DONE IT
CAN'T KEEP IT TO OURSELVES

LEO
IF WE PUBLISH THE WORLD
IS GOING TO HELL

Teller walks in, waving a copy of
Science magazine.

TELLER
SEEMS LIKE THE FRENCH

DO NOT COPY

NEVER HEEDED YOUR WARNING BELL

Fermi and Teller read from the magazine
in shock.

LEO
(Reads from journal aloud)

FERMI WHAT
DID I SAY?
THEY PUBLISHED ANYWAY

LEO
HOW CAN THEY BE SO BLIND?

ALL
DARK DAYS FOR MANKIND

LEO
THE WORD IS SPREADING RIGHT ACROSS THE GLOBE

SFX
Radio tuning static.

US ANNOUNCER
News from the Currie Institute of France has the
world of science buzzing with the promise of a new
source of energy.

LEO
IN NO TIME THE WHOLE WORLD IS GOING TO KNOW

ENGLISH ANNOUNCER
Extremely powerful bombs capable of leveling any
building in a ten mile radius could soon be
possible.

LEO
IT'S GOTTEN TOO BIG FOR US ALONE