

GROTHENDIECK'S DREAM OF THE RISING SEA

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This is a dramatisation of the tragedy of the mathematician Alexandre Grothendieck. It embroiders—around some of the known facts about Grothendieck's life, and the life of his parents—a speculative portrait of the man and his relation to his past. Like all biography—perhaps also like all autobiography—it is an hypothesis, and should be treated as such: not dismissed, but not mistaken for fact either. It takes place in 1985 when he wrote *Récoltes et Semailles*—Reapings and Sowings.

The play takes place on a single stage, which represents one room. Nevertheless parts of the room can be selectively lit to show events that take place at different times, juxtaposed. Thus in the main part of the room, to the right, the action shows Grothendieck usually in the present (1985) There he has conversations with two visitors: a mathematician and a girl named Sylvie. There is a bed, a desk with a chair, a full-length mirror, but very little else in the way of furnishing. (There is an old valve radio by the side of the bed (left side) that can be used to indicate time period, where necessary.) Lighting the bed and the left side of the room, shows Grothendieck's father in dialogue with a Gestapo officer (or SS, it makes no matter), in the detention camp Le Vernet. There is a simple wooden chair for the Gestapo officer, Gr.'s father sits on the bed. At other times the bed is lit centrally to show Grothendieck's mother, speaking to Grothendieck while convalescing (late 50s, and indicated by the music on the radio). By a simple change in lighting we move through these three scenarios and time periods. (I should note that Gr. occupies only the right

side of the stage, his father only the left.) There are doors symmetrically placed on the left and right hand sides.

It should be noted that Grothendieck has his head shaved, as does his father. Indeed they should resemble one another as closely as is feasible (they may even be played by the same actor). Sylvia should be a girl in her early twenties—clearly intelligent, attractive, but unconfident. Her confidence grows throughout the play. (I think of Picasso's portrait Sylvette). The mathematician, I should emphasise, is not modelled on any actual person at all. Like Sylvie, he is fictional. The play has three acts—of roughly equal length.

Dramatis Personæ

Grothendieck	Grothendieck's father (also Alexandre)
Grothendieck's mother	Gestapo officer
Girl (Sylvie)	Mathematician

Act I

[The light opens up on the right side of the room with Grothendieck sitting sideways at his desk and the mathematician and his girlfriend, Sylvie, sitting on the bed. She starts the scene sitting close to him. We start with a harangue.]

Grothendieck: The stench of it fills my nose, my eyes, my ears, so that I am never free of it. It sickens me so that I think I will die of it! It is the simplest, emptiest, lightest thing the universe knows—more common than hydrogen, and so much more inflammable—every empty-headed fool's lantern, held aloft in the blinding daylight, every terrible idea that promised so much and in the end gave so little. Do you know what it is: it is *The False*. That's right! I tell you *The False* has mixed itself in

with the world so thoroughly now that when we look about us almost everything that falls beneath our eyes is it. You need to be an eagle of veracity to see the real world wriggling below in the blades of all that is wrong and deceitful. You plunge down to it—out of a kind of love! Your eyes are fixed, your blood quickening, your senses insane with keenness. And then it is yours. . . yours alone. Some real thing in this sea of sham and pretence and idiocy and lies. A new truth.

Mathematician: (*Slightly oblivious.*) Yes, it is all very well, but a man must also *deal* with this false world. There are grants to apply for, classes to teach, administration to do. We are not saints in a monastery, you know. I get up, I read the paper. I hold this creature in my arms. These things could also be said to be real.

Sylvie: (*Catching the implication, not liking it.*) I am real enough when we make love.

Mathematician: I am sorry my dear, I didn't mean. . .

Grothendieck: This does not interest me! I don't even know why you are here. Have I not made it plain that I regard all of this time spent away from mathematics as time wasted. Do you not understand the great quest that I'm on? Have I not made it plain? Your sordid bedroom farce does not interest me. . . .

Mathematician: I'm sorry Alexandre, allow me to get to the point. . .

Grothendieck: If you wouldn't mind!

Mathematician: Well as you know, things are difficult at the Institute these days. Not enough funding for everybody. . . too much politics. . . too much political interference. We can barely do our work without having to fill in forms as to what we are doing and why we are doing it. . .

Grothendieck: Of course, I understand. It is a pestilence!

Mathematician: Exactly, a pestilence. Very bad. Who can work in those conditions? And so I thought. . .

Grothendieck: Yes?

Mathematician: Well I . . . well I didn't want to bother you, but I just wondered what you yourself were working on at the moment?

Grothendieck: I?

Mathematician: Yes. I just thought that if you were to let me have some idea then I might be able to do something with it you know. Work on it for you. Share the labour. . . uh comrade. After all, we are all in it together. Communism is community. Smash the Fascists.

Grothendieck: Up the *Internationale*.

Mathematician: Quite so.

Grothendieck: Property is theft.

Mathematician: In a manner of speaking. . .

Grothendieck: . . . So intellectual property is intellectual theft.

Mathematician: Well, I wouldn't go that far. . .

Grothendieck: No, my friend—comrade—you are correct. I should share with you what I have been working on. I should not keep it to myself like the greedy capitalist in his great Chateau. Here it is!

(From by his side, previously hidden from the audience, he hoists onto the table a very thick manuscript of a thousand pages or so. It is Récoltes et Semailles.)

Mathematician: *(Eyes lighting up.)* What is this?

Grothendieck: This, comrade, is my latest work, rich with ideas—which I beg you to steal.

Mathematician: No one spoke of stealing.

Grothendieck: Well, borrowing, let us say. You may borrow 'in broad daylight'.

Mathematician: Is it on Geometry? Algebra? Schemes?

Grothendieck: It is on all of these and none. It is on everything that I have ever thought and have never said. It is my judgement on the world—or perhaps my defence of the world's judgement on me. It is my valediction, and my eulogy. It is my *Une Saison en enfer*.

*I have been patient so long
That I have no memory left. . .
May it come, may it come,
The time we will fall in love with.**

Mathematician: But is there any mathematics in it?

Grothendieck: All of my ideas are hidden in it somewhere. One would just have to. . . *fish* for them. By the way, I call it *Reapings and Sowings*, because everyone mentioned in it has reaped what they have sown. All of the work that has been stolen from me over the years and claimed by others, all of my work that has been neglected and sidelined, all of the people who have made careers from my blood-work: all receive their recognition and 'thanks' in this poem of mine.

Mathematician: I hope you know that I have always born you the greatest friendship and respect. . .

Grothendieck: Quite so. . . The way one respects the dead.

Sylvie: You seem very much alive.

Grothendieck: Appearances can be deceiving. In fact I've been buried by my friends and erstwhile colleagues.

Mathematician: Oh come now Alexandre, this is absurd!

Grothendieck: (*Unperturbed.*) It came to me last year as a thunderbolt from the sky. I was being buried! My reputation. . . my creativity. . . everything that I'd achieved. I dreamt of it every night for a week, and every day it was as if, at the back of everything, I could feel the earth being shovelled in on top of me, the sky darkening with it, little. . . flecks. . . of earth. My

*From Rimbaud's *Song of the Highest Tower*.

lifetime's work was being buried. My *life* was being buried.

Mathematician: This is ridiculous!

Grothendieck: Not ridiculous, but the truth. My work is being used without crediting me; the vision that I had has been scattered to the wind—no one is pursuing it anymore.

Mathematician: But just listen to yourself! With one breath you lament that everyone is stealing your work, and with the other that they are not stealing it enough. Which is it?

Grothendieck: It is that to the extent that my work is used at all, I am being erased from it. My identity! My life! Everyone *wants* to forget me.

Sylvie: But why would they? Why would anyone want to forget you?

Grothendieck: Because my very existence accuses them—of careerism, of mendacity, of triviality; but most of all—of not *loving* enough.

Mathematician: But we are talking of mathematics. It is simply a job. It is something you do, like being a house painter. Or a mechanic.

Grothendieck: It was never that for me! Never! In fact the very idea that it could be that disgusts me. Really I want you to get out! We have nothing in common clearly.

Mathematician: (*Very calmly.*) It seems to me I hear the deviation of elitism.

Grothendieck: Mathematics is life and blood; it is the music of galaxies; it is God's poetry. It is not akin to painting a damned house!

Mathematician: *Dulux will* be disappointed.

Grothendieck: So—is this your idea of passion? Tell me, do you make love like a house painter? (*To Sylvie*) Well, does he? (*She gives a rather helpless shrug.*)

Mathematician: My lovemaking technique is second to none.

Grothendieck: Mathematically speaking, 'second to none' does not sound like much to boast about.

Mathematician: Your mathematics has not shown much passion in recent years. Perhaps you *have* died.

Grothendieck: I'll show you passion. *(He goes over to Sylvie, bends down, takes her face in his hands, and kisses her. She is completely stiff at first, but after a while there is just a hint of a response.)*

Mathematician: You are out of control.

Grothendieck: *(Goes and sits back down.)* I must be. *(After this the mathematician seems to grow remote, like someone for whom a shock is sinking in. His confidence seems lost. Sylvie on the other hand loses that sense of remoteness and increases slightly in confidence. G. seems a little remorseful. Thus after an awkward silence—)*

Sylvie: Is that you? *(Pointing to a photograph in a frame.)*

Grothendieck: No, it's my father. *(Passes it across to her.)*

Sylvie: You look so much alike.

Grothendieck: I suppose we do.

Sylvie: Was he a mathematician also?

Grothendieck: No, he was an anarchist revolutionary.

Sylvie: How romantic!

Grothendieck: Yes—my mother too.

Sylvie: Both! What was that like for you?

Grothendieck: Lonely—mostly. Very lonely.

Sylvie: I'm sure.

Grothendieck: I can tell that you'd like to hear my life story.

Sylvie: Yes, if you would like to tell me.

Grothendieck: I don't mind at all. . . You see they had no time for family—the Cause always came first, the great Cause. They were married in the 20s—both had been married before, my father had a son and my mother had a daughter—and I came along in 1928. And I *think*, I don't know, that for a while we must have been happy. We were living in Berlin, and. . . well, I can still remember the apartment block where we lived. So imposing, so grey! But then, in 1933, Hitler and the National Socialists came to power and my father knew that he had been marked out as an undesirable. So he fled Berlin. And a few month later my mother decided to join him.

Sylvie: But she took you as well!?

Grothendieck: No, no she didn't. She felt they needed to travel light. So she put me into a foster home: a very generous family called the Heydorns. I was there for five years.

Sylvie: How awful.

Grothendieck: In that time I had four letters from my mother and no word at all from my father.

Sylvie: My God!

Grothendieck: My sister—half-sister—Maidi, was put into a home for handicapped children.

Sylvie: She was handicapped?

Grothendieck: No, not at all. She was perfectly normal. Then, in 1939 I was sent to France to join them, because suddenly it was too dangerous being a Jewish child in Berlin. One brief summer was really all I knew of them as a child. One summer in Paris, in 1939, when I was 11. Then my father was put in the detention camp at Le Vernet, and I never saw him again.

Sylvie: What happened?

Grothendieck: He was sent to Auschwitz in 1942, at the age of 53—and he never came out again.

Sylvie: That is awful. *(She looks at the photograph again.)* You really do look like him you know.

Grothendieck: So my mother used to tell me.

Sylvie: So she survived?

Grothendieck: Yes, she survived. We were in and out of French internment camps during the war. And for the last years of the war we were separated. But it was there, you see, that I learned to love mathematics. In a world of death one loves the thing that is undying.

Sylvie: But what of your mother?

Grothendieck: She lived with me until she died. Travelled with me everywhere but kept to herself, writing endlessly. An enigma of a woman, even to me.

Sylvie: Did your mother ever try to find her daughter?

Grothendieck: No—she never did. Once she put her in the home she never saw her again, and I'm not sure that she ever thought about her. She assumed her children would just stand by themselves.

Sylvie: I can't understand such a mother.

Grothendieck: My mother had a cause—but it was not the cause that she thought she had. She thought she was working for all humanity—but in reality she was working for the glittering, bohemian life that she loved more than anything. Her life was her work of Art, and she never lost sight of herself as a great heroine battling mediocrity.

Mathematician: *(Suddenly piping up—as if by a reflex)* Let us not forget who are the true enemies here—the Fascists.

Grothendieck: Who could forget this? Who?

The stage goes black and after a moment the lights come up on the left hand side of the stage to reveal Grothendieck's father sitting on the bed with a Gestapo officer sitting across from him on a simple wooden chair.

Gest. Officer: Let us begin with your name.

Gr's father: Alexandre Tanaroff.

Gest. Officer: And so you are Russian, yes?

Gr's father: Um. . . yes.

Gest. Officer: Is there some doubt?

Gr's father: No—I'm Russian.

Gest. Officer: And the city where you were born?

Gr's father: St Petersburg.

Gest. Officer: A lovely city I believe.

Gr's father: Yes, quite lovely.

Gest. Officer: And your occupation?

Gr's father: I'm a street photographer.

Gest. Officer: Ah yes, Leica. Click click.

Gr's father: Fotokor. . . from Leningradskoe Optiko.

Gest. Officer: (*Mock disappointment*) Oh dear. And you take photographs of. . . ?

Gr's father: Families. Children.

Gest. Officer: You like children?

Gr's father: Of course.

Gest. Officer: Of course. . . . Do you yourself have any?

Gr's father: (A hesitation.) No.

Gest. Officer: No? Why is that?

Gr's father: No time.

Gest. Officer: Too busy with the photographs.

Gr's father: I suppose so.

Gest. Officer: Are you married?

Gr's father: No.

Gest. Officer: So—you are a lonely, itinerant, Russian photographer, taking photographs of children that you yourself do not have.

Gr's father: Yes.

The Gestapo officer looks at Gr's father with a long hard look. As it goes on it becomes more and more saturated with menace.

Gest. Officer: Alas, what you have told me is a pack of lies. Your name is not Tanaroff it is Shapiro, and you are not a street photographer you are a professional troublemaker, a fighter for Causes—which unfortunately for you are always the *wrong* causes. You are married—to one Hanka Grothendieck, who is like-minded. You have recently returned from Spain together where you fought against the Nationalists and General Franco, and were allied to Solidarios and other Anarchist groups. But indeed you specialise in this sort of meddling. You spent ten years in prison in Russia, and since then have interfered in the politics of Germany, France and Spain. No place is immune from your attentions. And yet, are you a German, or a Frenchmen, or a Spaniard? No.

Gr's father: I am a citizen of the world, of all humanity.

Gest. Officer: Ah yes, a 'citizen of the world'. And yet as the body politick gets larger so your say gets proportionately smaller. Indeed it diminishes to nothing, does it not? And so you compensate for your

insignificant vote by blowing up market places, or government buildings, or the odd train. All in the name of. . .

Gr's father: Of the future. Of humanity.

Gest. Officer: But who has elected you to change the world in this way? Who?

Gr's father: I didn't know that the Nazis were such enthusiasts for democracy?

Gest. Officer: (*With irony.*) Please! The German people *elected* their Führer.

Gr's father: I saw what you Germans think of democracy in the Spanish Civil War. You speak of blowing up market places and trains. I saw your planes tear people apart.

Gest. Officer: (*With a slight shrug.*) Eggs and omelettes—as the Americans say.

Gr's father: People need freedom, not governments—and certainly not Fascist governments. Governments divide people, divide Humanity.

Gest. Officer: What is this Humanity that you speak of? I cannot see it. I see Germans, I see Spaniards, I see Frenchmen—but I do not see Humanity. We Germans are different from the French, and more different still from the Spaniard. Whatever we have in common is so basic that it is meaningless. Governments must govern for what is less basic: for Culture, and disposition and temperament. That is why we need a Nationalistic government. Germans need a government for the *German* people.

Gr's father: If that is so then I wonder why you have invaded France and Poland. Don't they need governments specific to their people too?

Gest. Officer: (*Smiles, acknowledging that this was a good move.*) Perhaps.

Gr's father: You see, you claim that there is nothing general in humanity that is governable—and yet, paradoxically, you want to take over the world. You call yourselves National Socialists and yet you have ambitions

to be so much greater than national. You say you are socialists, and yet there is no socialism in what you believe. Where are the people in it all?

Gest. Officer: You forget—the people are the *Volk*.

Gr's father: Ah yes, the *Volk*. Where the Germans took peasants and stuck fairy-wings on them—and then paraded them about as mythical creatures: as trolls and elves. All this to Wagner's farting wind music.

Gest. Officer: You seem rather contemptuous of the *Volk*. Is that just the *German Volk*, or do you despise all *Volk*?

Gr's father: If you ask peasants anywhere who they want to lead them they will vote for some strutting dictator in a false military uniform. They are cattle. They need to be shown what they really want.

Gest. Officer: Quite so. Cattle.

Gr's father: It is our task—our great task—to reveal to them what they really want, if they were not too afraid to ask.

Gest. Officer: And that is. . . ?

Gr's father: To be free! To be truly free!

Gest. Officer: And what will they do with this freedom?

Gr's father: Why they will become what they truly are: writers, artists, free-thinkers, Anarchists.

Gest. Officer: (*Sardonically*) Of course: writers! I wonder who now is sticking fairy-wings on peasants.

There is a pause as they are locked into this combat.

Gr's father: My faith in the future cannot be shaken.

Gest. Officer: Of course not. It is perfectly child-like, and so it is as unshakable as a child's faith.

Gr's father: It is a child's faith shared by a great many men. You will see.

Gest. Officer: Oh I have no doubt that we will see a great many more of your type. In Germany we have already seen a great many.

Gr's father: There. . .

Gest. Officer: . . . And we know what to do with them.

Gr's father: I wonder if you do.

Gest. Officer: Oh we do. Troublemakers of your sort must be removed for the good of the State. You see, a country is not a random collection of people. It is a unity of Culture, of background, and of purpose. And with such purpose, it moves forward to a great, shared goal. But it may happen that, one day, it finds itself stalled, and it looks around, and lo! it finds that in some moment of forgetfulness it has admitted strangers into its midst. Perhaps at some earlier point it even *welcomed* them. But now this great act of hospitality has been repayed most bitterly. The strangers who were welcomed now actively work for the destruction of the very country that has given them sanctuary. They throw bombs, they demonstrate, they set fire to shops—they attempt to rob honest citizens. They even set up cells with the aim of destroying the government and the people. But ingratitude—as a philosopher once said—is the greatest sin of all, the thing a people find hardest to forgive. But they should *not* forgive! It should rankle with them as an intolerable burden, and an awful injustice—until they feel compelled to throw it off in one great act of self-remembering. One great lurching for air! As they restore the health of their nation, for the sake of its children.

Gr's father: If a man is in possession of the truth—a higher truth—what can he do but act on it? It is his duty. He would not be a man. . .

Gest. Officer: Ah yes, the Truth—that has been vouchsafed only to a few raggle-taggle street photographers. What should we say about this higher Truth? Certainly the intensity of your convictions is of no importance here. Intense convictions are all too plentiful in this modern world. But if one is going to work actively for the destruction of the very people who have given you hospitality does it not behoove you to be very sure that what you believe is indeed the Truth—some great weight of evidence,

some lengthy reasoning. But what do you have to offer?—nothing but a childish vision and mutterings of a higher truth. High Truths are easily got if one is a dwarf!

Gr's father: If a country admits a man then it admits him with his convictions as they are.

Gest. Officer: Are you saying that when you slipped across the border between Germany and Poland that Germany was agreeing to the proposition that you should work for the destruction of its people and institutions? I must say I have never met a man less capable of seeing himself as morally bankrupt.

Gr's father: I wonder have you met the Führer?

Gest. Officer: (*Smiles.*) No, I have never had that great honour.

Gr's father: I think you should—then my moral bankruptcy might not seem quite such an achievement.

Gest. Officer: Let us talk more about your 'activities'.

Gr's father: I won't give you any names. You're wasting your time. . .

Gest. Officer: No, we shan't worry about names, just the nature of your activities. For example, what were you *doing* in Germany in '33?

Gr's father: Doing?

Gest. Officer: Yes, what was your aim at that time?

Gr's father: My aim?

Gest. Officer: Yes,

Gr's father: Why to bring down the government and to replace it with. . .

Gest. Officer: Yes, what?

Gr's father: Why an Anarchist government?

Gest. Officer: And to bring about that goal?

Gr's father: I've already told you—any means possible.

Gest. Officer: Within the political framework?

Gr's father: Any means possible *except* within the traditional political framework. That is tainted with reactionary Jacobinism. No, the path to the worker's paradise must be paid for in blood. To rouse the monster of the people from the indifference spawned by centuries of oppression one needs alarms and explosions and gunshot. There is no other way, the people were silenced with gunshot, they must be awoken in the same way. The German people must be made to realise that they are not Germans, they are people who own no country at all. *We* decide who lives where. Humanity decides.

Gest. Officer: (*Smiles murderously.*) As I have said, you have the faith of a child. Perhaps that is because you have known so few.

Lights go to black. When they come up we have a different scene: we are no longer in the detention camp but in Grothendieck's bedroom again. Only this time his mother is in bed and G. is attending to her. He is slightly younger—it is the late fifties; as indicated by a radio by the bed side playing late fifties music, something awful. He enters from the right with a tray.

Grothendieck: Your supper, mother.

Gr's mother: What supper? I've forgotten—did I ask for that?

Grothendieck: Yes, you did.

Gr's mother: Wasn't that an hour ago? Two hours?

Grothendieck: It was fifteen minutes ago.

Gr's mother: It was so long ago that I've forgotten. Time weighs heavily on a poor invalid woman. (*She seems anything but infirm.*)

Grothendieck: It was only fifteen minutes. (*He places the tray on her lap. Fluffs the pillows behind her.*) How has your writing gone today?

Gr's mother: Slowly. Slowly. Tell me, if it takes two years to write of one year how long can I expect to live? Forever?

Grothendieck: Yes, a divergent sequence. That is the well-trodden path to immortality.

Gr's mother: At any rate, today I only managed half a page. Half a page and a wet day in 1933.

Grothendieck: (*Stiffening*) Which day?

Gr's mother: It was sunny in the morning—so bright. The day felt as though God had made a new pact with the world. But around noon it all darkened, And then it rained. I loved that rain! Your father, had already fled Berlin. I was all alone. I had felt so useless those months: the struggle for liberty was going on somewhere else, somewhere without me—and what was I doing? Wiping noses, washing floors, cooking for children.

Grothendieck: I don't ever remember you washing floors. . . or cooking.

Gr's mother: You don't remember, you don't remember! Who were you not to remember? Great spirits walked the Earth and you crawling between their legs! Just a child!

Grothendieck: I only ever remember you writing—telling us to *ssshhhh*, because you had to write.

Gr's mother: Well, you always went on so. 'Mama this' or 'Mama that'. I needed peace! And when it was time to talk, we talked. There was no lack of discussion at our table! The talk flowed all around us. Beautiful words!

Grothendieck: You only ever talked when Papa was around.

Gr's mother: Well what did I have to say to children? What can one say? Except *Become interesting!*

Grothendieck: I *was* interesting Mama. But you were not interested. There's a difference.

Gr's mother: Well what does it matter, you're interesting now. My successful mathematician son! What have you proved today?

Grothendieck: Today I proved that C^* -algebras have unique tensor products when they are nuclear.

Gr's mother: 'Nuclear?' I don't like the sound of that. I don't like that at all. You're not going to destroy us all are you Alexander? Blow us up in our beds?

Grothendieck: It's just a word, Mama—just a name.

Gr's mother: So it has nothing to do with bombs?

Grothendieck: No.

Gr's mother: And nothing to do with atoms?

Grothendieck: No.

Gr's mother: Then it seems to me a damn silly choice of a name! Why couldn't you choose a name that doesn't sound as though it's about bombs?

Grothendieck: Well, can you think of anything better?

Gr's mother: What about 'central'?

Grothendieck: 'Central.'

Gr's mother: Yes.

Grothendieck: Mmm. Not bad.

Gr's mother: Never underestimate the value of a good name. I shall tell you a great secret. What drives the world, what makes it run, is sex and poetry. Sex is the gasoline, but poetry is the air which makes it combust. When the world forgets this—as I fear they are forgetting it now—we will wake to a life that is brittle and hollow. Then we will have a world of insect shells and insect thoughts. Buy, sell—who cares. We need a world that whispers in the soul of the things that matter: liberty, brotherhood and truth.

*When the silent one comes and beholds the tulips:
Who wins?
Who loses?
Who walks to the window?
Who's the first to speak her name?†*

Grothendieck: I will try to be the first to speak her name, Mother.

Gr's mother: Good boy. Names are important.

Grothendieck: So what was the day that you've been writing of?

Gr's mother: It was the day I realised that I had to rejoin the struggle, rejoin your father living in Paris. A day of awakening! Of the brain prickling to life again! By two in the afternoon I was already rushing from neighbour to neighbour, trying to find a place where I could leave you children. Where you'd be safe. That was my first concern.

Grothendieck: We didn't want to be safe, Mama—we wanted to be with you.

Gr's mother: How could I have taken you with me? What good would I have been to the struggle if I had had three children in tow?

Grothendieck: It was heartless.

Gr's mother: Heartless? Never! I had the fight to consider. The fight for the soul of all mankind! That is something greater than petit-bourgeois concerns of family and children.

Grothendieck: Really? Isn't the fight a fight for all families, for all children? Isn't it to allow petit-bourgeois life to flower everywhere, uninterrupted, undisturbed. You were fighting for the reign of normality.

Gr's mother: No, it was fighting for the extraordinary, for the brilliant, for that which was more than human.

Grothendieck: For yourself, in other words. For you and Papa.

†From *Chanson of a Lady in the Shade*, by Paul Celan.

Gr's mother: No—you don't understand—for *all* mankind. For everyone. But not as they are. Not the insect mass that they are, but for they as they can be. To set them free. . .

Grothendieck: . . . So that *they* can be you too.

Gr's mother: I'm horrified to hear you say this. I didn't raise you to speak ill of the Cause.

Grothendieck: You didn't raise me at all, remember. I was raised by the family on whose doorstep you left me—the Heydorns.

Gr's mother: But, a good family, Schurik. I chose well for you.

Grothendieck: A very good family. And no less dedicated to the Cause than you. But who managed to look after their own children—and me as well.

Gr's mother: You are misunderstanding, Alexander. It was too dangerous. Much too dangerous.

Grothendieck: (*Not listening*) And your daughter you put where, Mama? Into a home for retarded children. She as bright and cheerful and trusting as a child could be.

Gr's mother: I didn't have time to find her anything more suitable.

Grothendieck: And how safe was she from the Nazi's there? Didn't they exterminate those who were mentally defective. And what must it have been like for her, day after day, year after year? Only one or two letters a year to remind her of the parents she once had.

Gr's mother: The struggle demands sacrifices. Don't you think I suffered too?

Grothendieck: That's just it. I don't think you did. I think you loved it—all the intrigue, the spying, the plotting. Printing pamphlets in a dank basement and then distributing them on the street, always one step ahead of the police. As the times became more political, so you became the times. The truth was it simply bored you being a mother. It bored you

being normal.

Gr's mother: Yes, it did bore me! I could tolerate it while your father was there, but when he left it bored me senseless. I was not made for conversing with babies. I wanted to escape to where life had some meaning. (*A beat*) But Schurik, I do love you now.

Grothendieck: Now? Now? What does that mean? Now that it's too late?

Gr's mother: Now that you are older. You. . .

Grothendieck: What?

Gr's mother: You look so much like your father.

Grothendieck: (*Runs his hand over his shaved head.*) Well. . . that is fortunate for me, I suppose.

Gr's mother: He was so handsome, so intense. And so provocative. We shared death as other couples shared bread. You cannot know, you with your books, what that is like!

Grothendieck: Yes—but whose death did you share?

Gr's mother: What?

Grothendieck: *Whose* death? Not yours obviously. So whose?

Gr's mother: (*Exasperated. After a beat—*) It was a *war*, Alex! People will die, people will be killed. How much history do you need to know before that becomes an unimportant platitude?

Grothendieck: Sorry Mother, there are no platitudes in mathematics. That is why I like it, I think.

Gr's mother: You don't know what it was like!

Grothendieck: Really? Don't I? During the war you left me a second time—this time with Pastor Trocmé. Every few weeks, when the Germans did a sweep through the school, all of the Jewish children had to hide

in the woods for several days. Did you have to do that when you were twelve, Mama—or did you have a family? Did you have people looking after you, caring for you?

Gr's mother: There were a lot of Jewish children who did not make it through the war. Remember *them* when you are making comparisons. Their parents were unable to keep them safe—though I'm sure they wanted to. You survived, Schurik. You are alive! That is testimony, surely, to your parents' good sense.

Grothendieck: I think it is testimony to good luck—nothing else.

Gr's mother: You are an ungrateful boy. Be grateful for life, for every hour of the day. Only by wasting not a second will you repay your debt to your parents and all those who died. When I look back on my life I see that it was full—full of commitment and passion. I have no debt to those who died. My debt is clean. May yours be too!

Grothendieck: I *do* work, Mother. I work every hour of the day. I have a vision in my mind of something so grand and wonderful. . . .

Gr's mother: Then *do* it, Alex. Make me proud!

Grothendieck: I will do it. But not for the living, and not for the dead. I will do it for those caught in between.

Act 2

Fade to black. Lights come up on the right hand side of the stage. It is now 1985 again. Grothendieck is sitting at his desk writing. There is a knock at the door (right side).

Grothendieck: Just a minute! (*He goes on thinking, and writing. After a longish wait there is another, softer, knock at the door.*) Yes, who is it? (*Said as he is walking to the door to open it. It is Sylvie.*) Hullo, where's. . . ?

Sylvie: He's not here. I hope you don't mind. I came alone.

Grothendieck: Mind? No, why should I mind? One second rate brain is better than two. (*Sylvie looks upset.*) I'm joking. Just joking.

Sylvie: I shouldn't have come. I'll go.

Grothendieck: Nonsense. You're here now, and without. . .

Sylvie: He doesn't know I'm here. I didn't tell him.

Grothendieck: Well—that's good.

Sylvie: I should have, I know.

Grothendieck: Why spoil his day? Come in. Sit down.

Sylvie: Just for a minute.

Grothendieck: A minute, an hour: an interruption cannot be measured.

Sylvie: Your work. . . You were working.

Grothendieck: (*More graciously*) Nothing that I can't do tomorrow. (*He waits for her to speak—there is an awkward pause.*)

Sylvie: I came. . . I wanted some advice.

Grothendieck: I'm not very good at giving advice.

Sylvie: To tell the truth I'm not very good at taking it. (*There is a smile of recognition between them—he suddenly begins to appreciate her.*)

Grothendieck: Well we're even then. We can dispense with the advice.

Sylvie: I'm interested in mathematics, you see, but I don't think I can do it. But I'd *like* to know more.

Grothendieck: Who says you can't do it?

Sylvie: Well. . . (*By a gesture manages to indicate the absent mathematician.*)

Grothendieck: Ha! What would he know? I don't think he's done a day

of real mathematical work in his life—he’s a gnat, sucking blood from the great rump of mathematics; a pretender and a fraud. Why, if all you do is chum up to other mathematicians and find some tid-bit that you can steal, if you attend conferences just to ‘borrow’ the work of graduate students, before they have a chance to publish, then you are not a mathematician, you are a parasite! Great ideas need their great flourishing, they need to be tended—not stripped apart, dismembered, strewn to the four winds.

Sylvie: Like Orpheus.

Grothendieck: Indeed, just like Orpheus! That is what has happened to me, you see! Just that. I was not simply a mathematician—I was a *singer* of mathematics, in the Greek sense. But the Furies are everywhere now—not one place, but all around us. They are the fabric of reality. And so, when my song reached the height of its beauty, they reached out to destroy it, and me with it. My great vision was torn to pieces, chopped up into smaller problems, my name was erased. The yoga that was mine alone, suddenly became the plaything for somnambulists like your. . .

Sylvie: But why do you speak of yourself in the past tense? You are very much alive. You still do mathematics, don’t you?

Grothendieck: Not as I once did. In 1970 I gave it all up to become a hippie. I was 42.

Sylvie: You! A hippie!

Grothendieck: Yes, hard to believe isn’t it?

Sylvie: Impossible!

Grothendieck: In my defence I must say I made a particularly bad hippie. If there had been a test on it I’m sure I would have failed.

Sylvie: I can’t imagine it.

Grothendieck: Strange, I find it hard to remember those days now. They’re all become one day. Anyway, when I wanted to climb back on board I found that the ship had sunk. Or sailed away: choose your own metaphor. All I could get was a bad job at a provincial university. So much less than

I deserve.

Sylvie: But why did you do it? What made you quit?

Grothendieck: Oh politics was the ostensible reason. But now, I think it was that I wanted to know what it was to live. Simply live—the way other people seemed to be able to *live*. You see for so long mathematics had been my life: every waking thought had been dedicated to it. I knew nothing else. And suddenly that didn't seem to be enough any more. When I touched my lover's breasts I wanted to *be there*, touching her breasts. I didn't want to be a thousand miles from her with a deep sea of mathematics between us. I didn't want to see topoi and schemes and elliptic curves.

Sylvie: *(She gets off the bed and walks across to the desk where G. is sitting. She stands close to him, almost touching him.)* Touch me—I am real. *(He hesitates, then his hands go up towards her. He hesitates again. She takes one of his hands and places it on her breast. Lights go slowly to black. When they come up again they are in bed—post coital.)*

Sylvie: So tell me, did you see schemes and curves and those other things?

Grothendieck: Topoi. No, I didn't see them. Only you.

Sylvie: That's good. Isn't it?

Grothendieck: Not really. I don't see them as vividly as I once did.

Sylvie: You're insulting me?

Grothendieck: No... I don't mean to.

Sylvie: What are those things? Topoi.

Grothendieck: They are spaces—mathematical spaces. But they do not have any points. They are rather... abstract. I discovered them.

Sylvie: You invented them?

Grothendieck: I *discovered* them. They really do exist *out there*.

Sylvie: Really? How? What kind of spaces are they?

Grothendieck: It is hard to say because they are very general. Actually it's more like they are Universes—and there are many of them. All existing together.

Sylvie: You mean all existing at the same time?

Grothendieck: I'd prefer to say simply that they co-exist.

Sylvie: But where? Can we see them?

Grothendieck: (*He sweeps his hand about them.*) All around us. Everywhere.

Sylvie: Are *we* part of a Topos?

Grothendieck: Yes. Of course. Many.

Sylvie: Well then that's good then. (*Pause.*) So all these universes exist at the same time. . . but—no, I don't get it, *where* do they exist?

Grothendieck: They exist here. Right here. (*Gestures to the left and right sides of the stage.*)

Sylvie: I don't understand it. I'll never understand it. I've been told that I don't have the brain for it.

Grothendieck: That is nonsense! Everyone has the brain for it!. Do you want to know the secret—all you really need to understand mathematics? Patience! That's it. You just need to be able to think at it for a while—let it soak into you. That is all I've had, all my life: patience. It's patience that solves mathematical problems. I liken it to the rising sea: the sea advances insensibly, in silence; nothing seems to happen, nothing moves, the water is so far off you hardly hear it, yet it finally surrounds the resisting substance, the earth, and. . . dissolves it away.‡

Sylvie: That sounds rather sad.

Grothendieck: There *is* something sad—I'd almost say tragic—about

‡Incorporated in this is a quotation from *R & S*.

mathematical proof. There are all these Universes. . .

Sylvie: Toposes!

Grothendieck: Yes, toposes. . . that are all tremendous mysteries, and we mathematicians advance through them and. . . change them forever. Where there was black night we leave colour and differentiation. We show the landscape that was there all along, its rich vegetation, and. . . it is so beautiful and marvelous and intricate and surprising that we can forget. . .

Sylvie: What?

Grothendieck: . . . That the further we go in this the more a mystery we become to ourselves. There is a kind of Principle of Conservation at work here, like conservation of energy, that dictates that the mystery that you dispel around you comes to inhabit you. The more I understand integers and primes the more I slip away into obscurity and mystery. I feel that I've been invaded by darkness. One I can't even think about.

Sylvie: That sounds terrible!

Grothendieck: I suppose it does. But it's interesting: I no longer even know how it sounds. It's just become an impenetrable fact.

Sylvie: You know, I think you're just lonely.

Grothendieck: A man my age is always alone. It's a condition of nature. I think after a certain age one just can't bear one's continual disappointment in people. You stop expecting anything else—stop trying, stop hoping. And then again. . . You see, the people I admired most in my life were my mother and father. I revered them as Gods. When they left me, when I was young, the only thing I wanted in this world was to be with them again. I would say it over and over again at night in bed until I fell asleep to it. 'Please, come back and take me.' Every night for years. By the end I could no longer remember anything about them, couldn't remember their faces, but I was still saying it, over and over.

Sylvie: And you want to meet people who are like them.

Grothendieck: No. I know I'll never do that. But when I'm alone. . . when I'm alone, I can really *feel* them near me.

Sylvie: (*A beat. Moved.*) I don't know what to say.

Grothendieck: There's nothing to say. I'm long used to that. I have nothing to say to myself about it.

Sylvie: (*Trying to change subject.*) What about your current work? Do you still get joy from it?

Grothendieck: Yes. Yes, I do. But I feel more that I am drawing a map for others to follow.

Sylvie: (*Deliberately playful*) A treasure map!

Grothendieck: Of sorts.

Sylvie: And where does it lead?

Grothendieck: To the golden palace.

Sylvie: (*Still playful*) And does it have a tower?

Grothendieck: An ivory tower.

Sylvie: Mmmm. An *ivory tower*. I've never heard it called that before. But. . . what is this treasure map. Could *I* follow it?

Grothendieck: Follow it? Yes, I could certainly explain it to you.

Sylvie: Please.

Grothendieck: Well, it all started with the Weil Conjectures—Weil was the mathematician older brother of the mystic Simone Weil; he was one of the greatest mathematicians of this century; a truly towering figure. At any rate, these Weil Conjectures say that there is a deep connection between p -adic number fields and the topology of spaces: in a sense between the discrete and the continuous. It was an astonishing idea. My great friend and mentor, Serre, explained this connection to me in terms of cohomology and since then I have been working to create the correct

generalised cohomology, called *motivic cohomology*, that will establish. . .

Sylvie: Stop! Stop!

Grothendieck: What's the matter?

Sylvie: You lost me back at the pea addicts.

Grothendieck: (*Correcting*) p -adic number fields.

Sylvie: Yes.

Grothendieck: Well, they are. . .

Sylvie: No, it's all right. I'll never remember it all anyway. But—I mean, what are you enthusiastic for right now? (*A beat.*) Besides me.

Grothendieck: Besides you?

Sylvie: Yes. There must be something that keeps you going, through everything that you've experienced. Some precious idea.

Grothendieck: Yes, there is.

Sylvie: Tell me. I want to be closer to you—to who you are now.

Grothendieck: Well I have been working on a different aspect of this grand unification of number theory with geometry, but this time with the centrality of the moduli of curves—and again Galois theory takes centre stage. Here, I'll show you. . . (*He is excited by the thought of his own work and gets out of bed to go over to his desk and sort through papers.*) It is here somewhere—an interesting idea to make all of this work by using n -dimensional categories. . .

Sylvie: n -dimensional? Do they really go that far?

Grothendieck: What was that?

Sylvie: Nothing, I just said. . .

Grothendieck: (*Halts. Suddenly suspicious.*) You're a spy aren't you? You're here to spy on me.

Sylvie: No, not at all!

Grothendieck: Yes you are. You're here to steal my work, steal my work and bury me. Bury my reputation.

Sylvie: No, I'm not. I'm here because I liked you, because I'm attracted to you.

Grothendieck: *(Not listening)* I'll bet he sent you—that worm. He couldn't get his hands on my work himself, so he sent you.

Sylvie: No, it's not true. He doesn't know I'm here.

Grothendieck: I'll bet you know a lot of mathematics really. Come on—what is Galois Theory?

Sylvie: The theory of smoking? I don't know. I really don't. *(Getting out of bed now.)* I should really go.

Grothendieck: Oh no wait, I haven't told you my best ideas yet—the ones that are really worth stealing.

Sylvie: I have to go. *(Getting dressed hurriedly)*

Grothendieck: But if you don't steal anything worthwhile he'll only make you come back. We wouldn't want to have to go through that again.

Sylvie: You're cruel. I'm leaving. I came here of my own free will.

Grothendieck: Wait! Here's something on schemes and homotopy groups. here's something on stacks.

Sylvie: Goodbye. *(She leaves. Lights go to black.)*

Act 3

We are back now in the late 50s, with G.'s mother in bed, but this time she does seem sick. She coughs frequently into a handkerchief (though we can be

spared the tubercular feathers of blood). Despite this, she has lost none of her fire. The radio by her bedside is playing a late 50s popular song. G. is sitting working at his desk.

Gr's mother: Schurik! Schurik! Turn it off. Turn it off. This modern music makes me feel like I am already dead. The devil plays drums in Hell I'm sure of it—no melody, no harmony, no pitch. How one must long for music there! But no! *Bang crash bang*. Forever. Anyway, it's true—I've been dead for fifteen years. So drums are what I get. Drums and disease: the dry racket of old age. *(There is no indication that he is listening to her.)* Alex, turn off the radio please. Turn it off and talk to me.

Grothendieck: *(He gets up and turns off the radio. But he has brought one of his papers with him, and he sits on her bed reading it.)* It's interesting.

Gr's mother: What is? Disease?

Grothendieck: *(Not listening, apparently)* Hmm.

Gr's mother: Decrepitude?

Grothendieck: Hmm.

Gr's mother: Drumming?

Grothendieck: Yes, all three. *(Listening after all, but still seems not to be)* Everything beginning with 'd'. No, it's this idea here.

Gr's mother: What idea?

Grothendieck: This paper by Segal. It is hinting at something truly vast: a non-commutative world! I feel as though a veil were dropping from my eyes. What was it Macbeth said "By the prickling of my thumbs, something wicked this way comes."§ Only it is not wicked—it is a revolution such as we have never seen before.

Gr's mother: A revolution! Pah! What do you and your generation know of revolution?

§The author of course knows that it was not Macbeth who said this.

Grothendieck: This is a revolution of the mind.

Gr's mother: There are no revolutions except of the heart. One day you will understand that.

Grothendieck: (*Enthusiasm dampened*) I think what you really mean, Mama, is that nothing I do can ever compete with what you tried to do.

Gr's mother: A revolution is something you die for. Would you die for this?

Grothendieck: I would die to see my mathematical vision realised, yes.

Gr's mother: Then you can be sure that it will happen, Alex. There are always people who will see to it that the price you are prepared to pay is the price you *do* pay.

Grothendieck: The way you talk of people, I wonder that you ever fought for them.

Gr's mother: When you are young you fight for a better world. But gradually, by invisible steps, you realise that now you are fighting for people you can *know*. An end to the greed, the lazy stupidity, the boorishness, the concupiscence—you now want a world where there are people you might wish to exchange more than two words with. When I met your father I realised that such people were possible. He was so fierce in his beliefs, so courageous. I thought: *now I have met a man*. He was Ahab, fighting the whale that would swallow him whole; he was the whale fighting against the rising sea. But soon enough I learned that there are very few such men—not enough to make a New World. Not by a long way.

Grothendieck: So you ended up wanting a revolution that would create the kind of people who were worthy of your revolution.

Gr's mother: Put as only a mathematician could. (*She has a coughing fit.*)

Grothendieck: Are you all right?

Gr's mother: Yes. No. What does it look like? I'm dying.

Grothendieck: No. Not you. You will live forever.

Gr's mother: Really—you think I can break the unbroken run of human deaths?

Grothendieck: If anyone can, you can. I have faith in you.

Gr's mother: What a dutiful son you are.

Grothendieck: Of course.

Gr's mother: But the truth is that I cannot live much longer. You cannot live in a world that is too different from the world of your youth. That is what you are made for. And the world of my youth was one of bustles, corsets, Sunday church, silk gloves and hats with flowers. It was a world of hypocrisy, yes—but *civil* hypocrisy, *genteel* hypocrisy. We railed against it at the time, swore that we would change things, marched and scribbled, scribbled and marched. But how I would love to see it back again now! If only for a day! A world in which I am not wrapped permanently in a woollen cardigan, with holes in my slippers, a full bedpan under the bed, and a pillow and mattress that is stuffed with filthy, used, hospital bandages.

Grothendieck: You can go out in the street. How long has it been since you went outside?

Gr's mother: Oh I've lost track. Two years, I think. More. But outside is no better than in. Do we really need that many grey clouds? Do we really need (*contemptuously*) *laundrettes*. It seems to me the world has gone mad on *laundrettes*.

Grothendieck: People need to wash their clothes.

Gr's mother: Do they? What happened to washerwomen?

Grothendieck: (*Shrugs as if to say: you know perfectly well.*)

Gr's mother: (*Grudgingly*) A perfectly respectable occupation.

Grothendieck: Yet gone now.

Gr's mother: The world makes me so tired. Too much ugliness.

Grothendieck: That is why God gave us mathematics—so that there would always be something eternal and beautiful. Something ageless.

Gr's mother: Do you really believe that?

Grothendieck: Yes.

Gr's mother: Really?

Grothendieck: It is something to cling on to.

Gr's mother: (*Contemptuously*) Did I make a son who needs to cling?

Grothendieck: I'm surprised you need to ask.

Gr's mother: (*A beat*) Again!

Grothendieck: (*Quietly*) People need an Eden.

Gr's mother: Eden is not in the past, Schurik—for anyone! It is in the future.

Grothendieck: Is it in *your* future?

Gr's mother: (*She looks for the first time utterly distraught and lost.*) What is in my future is what is in my present: no love. That is all. No love ever again. There is a moment of realisation that every human being has when they pass a certain age: they know that they will never be loved again, never feel that excitement, never know a kiss. In my mind I am still a girl of twenty. No days have passed since then—no more moons have risen, no more suns have set. And yet everything has changed, everything is ruined, everything has gone—and I will never be loved again. I go out in the street and suddenly I see myself through strangers' eyes. They do not find me attractive, they do not desire me. To them I am old. I cannot bring myself to accept this, and I cannot change it. People die long, long before they are ever put into the Earth—they die when they know that they have seen the last of love. That happened to me years ago.

Grothendieck: (*Clearly moved, but unable to think of anything to say. He puts*

his hand on her hand and she takes hers away. He gets off the bed and walks over to the door but doesn't open it. He simply stands in front of it. He then pushes at it with one hand, as if testing its firmness. It doesn't yield. Then he goes to the desk and stands over it, looking at his papers.) I love you—you know that.

Gr's mother: (Coughing fit) You're sweet, Schurik.

Grothendieck: It's not enough, is it?

Gr's mother: No. It's not enough. But I'm tired now. So tired. Let me rest.

Grothendieck: (He goes to the door and pauses, his hand on the knob. He turns. Her eyes are already closed.)

When the silent one comes and beholds the tulips:

Who wins?

Who loses?

Who's the first to speak her name?

Well I will speak her name, Mama. *I will.*

Lights go black. When they come up again they show the RHS of the stage.

We are back in 1942 with G.'s father being interrogated in the internment camp Le Vernet. He sits on the bed as before, the Gestapo officer facing him.

Gest. Officer: Cigaretten? (Offers a pack—cigarette protruding.)

Gr's father: No... Thank you.

Gest. Officer: (Wryly) You should. The Führer's against smoking... And eating meat.

Gr's father: Are you going to offer me a steak?

Gest. Officer: (Smiles, ¶ and shrugs, as if to say 'if it were up to me. . .')

¶Of course none of these smiles are ever warm: they are always highly controlled.

Gr's father: If you're going to kill me, I'm sure there are faster ways than getting me to smoke.

Gest. Officer: Kill you? Who said anything about killing you? Why, you are a man of intellect, of culture!

Gr's father: (*A trace of hope, despite himself*) Do you mean I could actually survive this war?

Gest. Officer: Of course you can! *Dear Sir!* . . . You'd like that, wouldn't you? To see your wife again? Your family?

Gr's father: My wife, yes. . . .

Gest. Officer: And your family.

Gr's father: (*Suddenly realising*) What family?

Gest. Officer: Why your *family*. Your three children. The three children you are pretending you do not have.

Gr's father: I don't know what you're talking about.

Gest. Officer: Surely you have not forgotten them entirely? Were they so unmemorable?

Gr's father: I am a man for all Humanity; the times we live in have demanded it.

Gest. Officer: Yes, these troubling times.

Gr's father: These times that *you* have troubled.

Gest. Officer: I will not disagree with you. We Germans are impatient for the better world that you merely dream of—we wish our dignity returned, our minds met with like minds; we foresee a future in which we recover what is deepest in ourselves. And yes—we would, we *have*, troubled the times to see what is dearest to us returned to us. You see, we have looked into the past and seen the road we should have taken—and now it will cost blood to take us back there. But what else can we do? There is nothing more precious than the soul you can see you once had.

What wouldn't you do to recover it?

Gr's father: I hadn't taken you for an Ideologue.

Gest. Officer: I believe just as you do. I see a future in which the Germans remember who they are; but what future do *you* see? What is the soul of the Man that you wish to see in the future?

Gr's father: The man I see is transformed utterly. He is no longer a German, or a Russian. He is simply Man. His freedom is so complete it would kill us to have a drop of it even for a moment. He will be a scientist in the truest sense. A visionary of science—who imagines the world all the way through to its end, and who embraces what he sees.

Gest. Officer: (*A beat*) That is interesting. Because when I listen to your description it conjures up nothing—simply a void. Your man who is not a German, not Russian, not French, simply doesn't exist. In being everything, he is nothing at all. But you know—I think you cannot imagine it either. You are a man of culture—and you can no more imagine a man with no culture than I can. But you lie to yourself—I can smell the self-deception on you; how you sweat to deceive yourself! What you really see in the future is a world that is grateful to you personally, a world that congratulates you for what you have done for it. *Thank you, Herr Shapiro, thank you kind deliverer.* Smiling peasants, looking back into the camera, waving their hats, smiling through their broken teeth.

Gr's father: (*Unruffled*) You are wrong. It is simply that I can see further than you can see. I see your German of the future, I see him wrapped in the dung of the Steppe, coating himself with fantasies of what Man once was, his freedom, his heroism, his sturm and his drang. You want a world in which men are like wolves who have swallowed the milk of an angel; in which men are like blood drops of God raining down on the *Thuringenwald!*

Gest. Officer: Very good! *Blood drops of God* says it well.

Gr's father: I see what you see and I see beyond it. I see to Man simply become man again; not draped in the animal fur of the past, but in the raiment of Science. He is in outer space. . .

Gest. Officer: (*Laughing*) Please, please! Your man of science in space is too funny. Where I envisage man with the soul he once had, you see him with test tubes on the Moon!

Gr's father: How much sillier is it to think that you can return to the past?!

Gest. Officer: (*A pause—while he takes him in. Finally—*) You know, I like you Herr Shapiro—I enjoy our little chats.

Gr's father: (*Looks back, unresponsive.*)

Gest. Officer: This is where you say that you very much enjoy my company as well. Never have you had such stimulating discussions!

Gr's father: (*Still unresponsive.*)

Gest. Officer: I will take this as an embarrassed but manly agreement.

Gr's father: Perhaps if I were not imprisoned. . . .

Gest. Officer: I think that if you were not—well let us not say ‘imprisoned’, let us say ‘detained’, then we would not be having this chat at all. And I would find that regrettable.

Gr's father: I would find that ‘an opportunity’.

Gest. Officer: An opportunity for what? (*Catching on*) Oh, I see. To kill me. (*Laughs*) You live too much in the mind, Herr Shapiro—and not enough in the real world.

Gr's father: (*Obviously attempting to draw him out*) Here we are, such good friends, and yet I know nothing about you. Are you a married man?

Gest. Officer: No, not married. I have never found the time.

Gr's father: Too busy taking photographs?

Gest. Officer: (*A beat, then smiles, connecting the two interrogations*)

Gr's father: Click, click.

Gest. Officer: No, I had completed my studies in 1937, and from there I sensed the call, as we say, of the 'greater good'. This greater good has not permitted me the luxury of a private life.

Gr's father: But still—you'd like to be married. Some day. When this is all over.

Gest. Officer: No...no. I do not see that as the way for me. It is unfortunate perhaps, but I do not see it. You see, I *do* believe. I sense that you do not think this is true, but I can assure you I do. The great prize is the restoration of the world's soul and there is nothing else I want from this life. Nothing else matters. I heard it first when I visited Berlin as a student. Standing in the Alexanderplatz I heard, playing on a Victrola, Brahms's *Ein Deutsches Requiem*. It was coming from a boarded-up shop, but I could hear it clearly. I stood there transfixed by the vision that overcame me, a mountain on fire. I saw in an instant what had been lost from the world; I saw the fullness that Man *could* have, and the emptiness that he *did* have. And I knew that any sacrifice was worth the recapture of this soul. My own life is not important in the scale of things; I would gladly die to see Man himself again. But, alas, I know that it will not be *my* death that restores the World to itself.

Gr's father: (*Takes this in.*) All of this for a few bars of music.

Gest. Officer: Do you think your Marx's inspiration was any more profound? Was *yours*?

Gr's father: I no longer remember.

Gest. Officer: Whereas I will never forget.

Gr's father: You can't know that.

Gest. Officer: With the utmost certainty. But you are wrong too about music. In the greatest music the Earth sings to us of its love and loss. But it sings to us, not as we are, but as it wants us to be.

Gr's father: When I am free I will be sure to go to more concerts.

Gest. Officer: Alexandre...you know that you will go to no more

concerts.

Gr's father: On my word, I will. I will even go to hear Brahms if you insist.

Gest. Officer: *(More measured and emphatic)* Alexandre. . . you know that you will go to no more concerts.

Gr's father: *(Now taking this in)* And why would I not?

Gest. Officer: Because you will not live.

Gr's father: *(A beat)* I was sure that you said I would.

Gest. Officer: I enjoyed seeing the hope in your eyes, when you yourself knew that it was unreal. It was. . . touching.

Gr's father: I'm glad the spectacle was amusing.

Gest. Officer: Unreal hope is the child's prerogative. It does us good to be reminded of the child within.

Gr's father: And how many *have* you eaten today?

Gest. Officer: *(Frowns)* That was beneath you.

Gr's father: The point is that it *wasn't* beneath you.

Gest. Officer: I can see that you've lost your equilibrium. Perhaps you'd like some time to collect yourself. *(Moves to get up.)*

Gr's father: I don't need any time. *(Shouts with bitterness and fury)* I don't *need* any more time!

Gest. Officer: *(Sits back down and stares directly)* Are you done?

Gr's father: *(Fury merging into distress, which he is trying to control. Shouts—)* Yes! Yes. . . I'm done!

Gest. Officer: That is good. . . good. I have these papers for you, you see. *(Takes papers from his coat pocket, unfolds them.)* They are your transfer papers to another camp: Auschwitz. *(Gr's father is looking down.)* Look at

them. . . . They are the bullet that will kill you. (*Gr's father looks up.*) That is right, Herr Shapiro: this is your death.

Gr's father: (*A moment where he takes him in.*) Just tell me why.

Gest. Officer: Herr Shapiro, you know why.

Gr's father: Is it because I have fought for humanity and justice?

Gest. Officer: No—I am tempted to lie to you and tell you that that is the reason—but, no, it is not so.

Gr's father: Then why? Because I was not a good father? Is that it?

Gest. Officer: No, that is not it either.

Gr's father: Then why?

Gest. Officer: You *know* why Herr Shapiro. There is no need to pretend ignorance. You are a Jew.

Gr's father: A Jew. . . . a Jew. Yes, of course I knew it. Of course. But I wanted to hear it come from your mouth. . . . I wanted to hear you say the words. And you've said them.

Gest. Officer: Why? I don't understand you.

Gr's father: Because in saying the words, you have killed yourself. You will never be able to reconcile your saying those words with your lofty ideal of the German Soul. You have lost it, don't you see? One day when you are sitting by the fire, comfortable after the war, it is those words that will mark the day when your precious ideal moved away from you forever, when it shrank back into the darkness like Eurydice. You have lost! You have killed yourself, whether you know it now or not!

Gest. Officer: (*Getting up. Acting as though these words have not affected him, though they clearly have.*) I admire you, Herr Shapiro—right up to the end you pretend that it is words that determine our fate.

Gr's father: It *is* words. Words and nothing else. It is words that echo in the deep well—*words*; not actions, not pieces of paper.

Gest. Officer: (He reaches the door that is stage left and puts a hand upon the door knob. Turns—) We will see I suppose.

Gr's father: We will see. (The Gestapo officer turns the handle.) But did you never think. . . ?

Gest. Officer: What?

Gr's father: . . . That the music that you heard in the Alexanderplatz coming from that boarded-up shop. . . (A beat) Did you never think that it was boarded-up because it was a shop that was owned by Jews?

Gest. Officer: (The Gestapo Officer looks thoughtful—he plainly hadn't thought of this. He recovers—) Quite possibly. (A beat) But now we shall never know.

Lights to black. When they come up again we are back to 1985, with Grothendieck alone in his room. He sits on the bed clearly depressed, a reversed image of his father in the previous scene. A suitcase is on the chair near the desk, with clothes being packed. There is a timid knock at the right hand door.

Grothendieck: Go away.

(The knock occurs again.)

Grothendieck: Go away. This is the house of the dead.

Sylvie: (From beyond the door.) It's me—Sylvie. I must talk to you—it's important.

Grothendieck: There is nothing to say.

Sylvie: Please. It's important.

Grothendieck: (Reluctantly going to door. Warily—) Even the dead get no peace in this life. (Opening the door, turning, and going back to the bed.) What is it?

Sylvie: I had to see you again. I didn't want to. But I had to try. (She

sees the suitcase.) You're leaving?

Grothendieck: Yes.

Sylvie: Where are you going?

Grothendieck: Away. Just away.

Sylvie: You can't just go *away*. You have to go *somewhere*.

Grothendieck: I'm disappearing. One disappears to nowhere. That's how it's done.

Sylvie: Where?

Grothendieck: I don't know. Mountains. I want mountains. I want to be able to see a long way. I feel I haven't used my eyes my entire life.

Sylvie: I grew up in the mountains.

Grothendieck: Where?

Sylvie: A little place called Tarascon. It's down south. In the Pyrenees.

Grothendieck: Don't you miss it—living here?

Sylvie: Sometimes. But—you know—I want to live. I want to meet my prince.

Grothendieck: And he doesn't live in the mountains?

Sylvie: No—he lives here.

Grothendieck: (*Deflecting her implication*) Then he's a fool.

Sylvie: Don't say that.

Grothendieck: He wouldn't like it I suppose.

Sylvie: I wouldn't.

Grothendieck: To hell with both of you.

Sylvie: You're...

Grothendieck: ... Cruel, yes I know. You told me. I am too tired to be anything else. Too tired to hate anyone. Too tired to love anyone. Too tired to hope for something more. (*A beat*) And yet... It's funny you know. I saw my mother give up on people... when she got older; never going out, wrapped in her memories. And I swore to myself that I would never be like her in that. That I would always *care*. (*Shrugs*) And yet here I am.

Sylvie: It doesn't have to be like that. It doesn't.

Grothendieck: But it does. We can choose anything but who we are.

Sylvie: (*Excitedly*) But that is what I came to tell you. You *can* choose. It's not too late.

Grothendieck: It is, I'm afraid.

Sylvie: It's not. I've solved it, you see.

Grothendieck: Solved what? What are you talking about?

Sylvie: The maths problem.

Grothendieck: What *maths* problem?

Sylvie: The maths problem that is at the heart of your life.

Grothendieck: What are you talking about?

Sylvie: I've *solved* the problem.

Grothendieck: You're just raving.

Sylvie: No I figured it out. Listen: how old were you when you quit your job?

Grothendieck: I was 42.

Sylvie: Right. And what year was your father born?

Grothendieck: He was born in 1889—in Russia.

Sylvie: So how old was he when he and your mother abandoned you and your brother and sister?

Grothendieck: It was 1933, so he was. . . 43.

Sylvie: You see.

Grothendieck: That is nothing but a ridiculous coincidence. It means nothing.

Sylvie: Doesn't it? How long ago did you start having these feelings of being buried by the world?

Grothendieck: I told you: about three years ago: 1981.

Sylvie: And what year was your father sent to Auschwitz?

Grothendieck: 1942.

Sylvie: And how old was he then?

Grothendieck: *(Doing the maths in his head)* He was 53.

Sylvie: And how old were you in 1981?

Grothendieck: I was. . . 53.

Sylvie: And how old was he when when he died?

Grothendieck: All we know is that he was dead by 1945.

Sylvie: And by 1945 he would have been 57. And how old are you now?

Grothendieck: *(Pause)* I am 57.

Sylvie: Don't you see?! Don't you see? You are a mathematician, surely you can do the calculations! Your father disappears from this world when he was 57 and you must disappear also. Your father is buried then and you can feel the earth falling on your grave. Don't you see? It is so obvious!

Grothendieck: *(Looks shocked—as though the awareness of all of this is creeping up on him, by degrees, infecting his body.)* Yes, it is obvious.

Sylvie: He had his head shaved, and you also shaved your head.

Grothendieck: Yes.

Sylvie: It is so obvious!

Grothendieck: Yes, it is obvious. The isomorphism is so clear.

Sylvie: Exactly!

Grothendieck: It follows as a mathematical certainty. My father and I are one and the same man.

Sylvie: No! no!—that is not the lesson!

Grothendieck: Yes, in mathematics isomorphism is identity you see. If two structures have exactly the same properties then they are the same. There can only be one of us. There is only room for one.

Sylvie: No! It means that you can escape all of this—you don't have to go through with it! You can be free. You don't have to relive your father's life. You can choose your *own* life. Don't you see? Once you see the pattern you are freed from it. You are free to be yourself. You no longer need to keep your father alive in your own life.

Grothendieck: I am free you say?

Sylvie: Yes, you are free. That's right!

Grothendieck: I am free to be who I am.

Sylvie: Yes! Yes!

Grothendieck: Well, then if I am free I choose that *he* should live. I am free to choose that.

Sylvie: No!

Grothendieck: You see, he was such a great man, such a very great man, that he deserves a chance to live. Finally.

Sylvie: But it is too late for that. So *you* live! Don't throw it all away!

Grothendieck: There really is no choice. The whole thing was set in motion long ago. You are too young to understand. You think a life is a series of little choices: little choices and little accidents. But the calculations are made by night, in the darkness, and no one can escape them. The functions produce their values, the numbers multiply without us, the schemes flex and unflex like great birds, and there is nothing that we can do about them. If some life is the shadow of another life, if some life is blighted and ruined—who cares? Who is there to care?

Sylvie: I care!

Grothendieck: You are a sweet child. But you do not realise what you are up against. When you are outside in the darkness, look up at the sky and think about the stars. Think of all of the galaxies that there are, all of the vast distances—and this is nothing but the visible edge of it—think of all of that silent *monster* that the universe really is, and imagine your concern put in the scales against it—and you will see how little it matters.

Sylvie: But you can't give up like this. I won't let you!

Grothendieck: I am not giving up. I am giving *in* to the silent calculation at the back of things. There is one life that we can have, one thought that we can acquiesce in. And I am acquiescing in mine.

Sylvie: No, this is too horrible.

Grothendieck: Alone in the mountains I expect things will be clearer. I will stand face to face with this monster, feel its breath on me. I will be camped permanently outside its door, waiting. When it whispers to itself in its sleep I will be there to hear. For years I did the same thing through mathematics: I *mapped it*. Now I want to be there when it bleeds. I want to take the same interest in it that it has always shown in me.

Sylvie: (*Resigned now*) When? When are you leaving?

Grothendieck: I'm going now. I was sitting here trying to muster the courage to leave. You have given it to me. (*Standing up and going over to the suitcase. He closes it after putting in some books that were on the desk. He puts on his long overcoat.*)

Sylvie: *(She sits down on the bed.)* That wasn't what I came here to do.

Grothendieck: *(Picking up the suitcase)* Ready, I think. *(Looks around.)*

Sylvie: *(Taking him in.)* You look like a refugee.

Grothendieck: Appropriate don't you think?

Sylvie: I can see you as a boy—with your suitcase.

Grothendieck: If you're going to bring up the past then I'll have to leave.

Sylvie: Don't go.

Grothendieck: It's too late. They are coming for me with guns. *(He exits.)*

(Sylvie sits on the bed staring at the door.)

Sylvie:

*I have been patient so long
That I have no memory left. . .
May it come, may it come,
The time we will fall in love with.*

*I have been patient so long—
May it come,*

The time we will fall in love with.

THE END