Time Bomb, a play in one act

An extremely untidy room. There is a desk, piled high with papers. There is a bench of some kind, covered with intricate and improbable equipment, gutted computers, and so on. A modified radio has pride of place. Perhaps a couple of chairs. Much of the floor space is taken up with more papers. There is a door stage upstage centre.

Alex enters from the door. He is disorientated and looks wildly around, then begins searching with increasing desperation amongst the papers.

Alex Where is it? Where is it? It must be here somewhere. Ah. Over here perhaps. Where did I last see it? Maybe not. There? Yes, yes, of course. That must be where it is. Or maybe not. Where can it be?

Rosie enters via the door. She stands and watches Alex as he searches, rubbing her head. He is oblivious to her presence.

Alex Where? No, no, not there. In here? No. Then where? Damn it. Damn it!

Rosie My head is sore.

- Alex Help me find it Rosie. It must be here somewhere.
- Rosie I think you need a cleaner.
- Alex A cleaner? Good god, no. A cleaner would only move things.
- **Rosie** Yes, that is what a cleaner does.
- Alex But then I wouldn't know where anything was. No, I don't need a cleaner. I need a research assistant.
- **Rosie** What is a research assistant?
- Alex A research assistant is just like a cleaner, except that they don't move anything. They just know where everything is.
- **Rosie** I thought you knew where everything is?
- Alex Huh?
- **Rosie** That's what you always say whenever I try to clean up in here. Not to touch because you know where everything is.
- Alex I do know where everything is.
- **Rosie** Then what are you doing?

- Alex I'm looking for something. (*returning her reproachful stare*) It must have been moved. Have you been in here, cleaning?
- **Rosie** No I have not. More's the pity.
- Alex My research assistant used to know where everything was. Back in Geneva. In the good old days.

Since 'back in Geneva', Rosie has begun to mouth the words along with Alex. This is clearly a common complaint.

Alex Before my little...

Alex turns to Rosie, who quickly stops her pantomime. Alex is not sure he has seen her but he is suspicious.

- Alex Well, you know.
- **Rosie** Before your little mishap with the super-cooled magnets nearly destroyed the entire world you mean?
- Alex It wouldn't have destroyed the entire world. It wouldn't even have destroyed the entire city. And anyway, we got to it in time.
- **Rosie** And what caused your little mishap?
- Alex Well, it was a very complicated chain of events, and after all, what really causes anything?

Alex meets her reproachful gaze, but less confidently this time.

- Alex OK, OK, a misplaced calculation. It could have happened to anyone.
- **Rosie** But it happened to you. Really, father, the second law of thermodynamics is quite well established, and it works very well on its own. You don't have to try and demonstrate it in your own room. Besides, tidying up is not contrary to the law. A cleaner would not constitute a physical aberration.
- Alex I'm not sure I like your tone young lady. Aah.
- Alex lifts up a large pile of papers. He is disappointed.

Alex Damn it.

- **Rosie** What is it you are looking for?
- Alex My watch. It was given to me by your mother.

Rosie Yes I know.

Alex sits down on the floor defeated.

Alex Where is she Rosie?

Rosie sits down next to Alex.

Rosie Father, she is dead.

- Alex I know that, child. I'm not stupid you know. I haven't lost my marbles.
- **Rosie** (*sotto voce*) Surprising in all this mess.
- Alex I mean, is she out there somewhere, looking down on us do you think?
- **Rosie** No I do not think that. You have always taught me that this world is all there is.
- Alex Yes, I have haven't I. It's just that sometimes I wish that it wasn't true.
- Rosie I know you do.
- Alex I miss her Rosie.
- Rosie I know you do.
- Alex I would give anything to turn the clock back and see her one last time.
- Rosie I know.
- Alex Which is why it is so important that my work succeeds.
- **Rosie** (*more sceptically*)Yes, father.
- Alex You still don't believe me do you?
- Rosie Believe what?
- Alex That I can do it?
- **Rosie** I know how important it is to you.
- Alex That's not what I asked you Rosie. Well, do you?
- **Rosie** What does it matter what I believe? You are my father and I love you, and I want to see you happy.
- Alex You think I am crazy. All this, trying to –
- Rosie I think you still miss her. But ...

- Alex What? What is it child? Spit it out.
- **Rosie** Mummy died a long time ago.
- Alex How long ago?
- **Rosie** A long time.
- Alex The blink of an eye.
- Rosie Half a lifetime.
- Alex For you, maybe. But not for me. You'll understand when you're older.
- Rosie You always say that. And now I am older.
- Alex My darling. How old are you?
- Rosie I am older than I was ...
- Alex That is true.
- Rosie ... and I do understand.
- Alex What do you understand?
- Rosie You need to move on.
- Alex Move on? What is it, this move on? Move on where?
- **Rosie** Really, father, your English is perfectly good. You don't have to pretend that you don't understand me. I remember Mummy. People said that the memories would fade, but they haven't really. I only have a few memories of her, but they are still vivid. It's like I have to keep them in a box in my head. Like photos. And only get them out now and again. Not because they would fade if I got them out more, but because I would. Do you understand what I mean?
- Alex Yes, yes I do.
- **Rosie** Don't fade Daddy. Put your memories in a box and get them out on special occasions.
- Alex I think Rosie that you have grown older than I realised. My beautiful girl. You have become very wise.
- **Rosie** It's only because I love you.
- Alex I know. But my darling.
- **Rosie** What? No buts, please.

- Alex You don't understand.
- **Rosie** She isn't here.
- Alex Time doesn't flow like a river Rosie.
- Rosie Father.
- Alex It is not a tunnel that we travel along from start to finish.
- Rosie No more.
- Alex Past, present, future, they all exist.
- Rosie Please.
- Alex Physics tells us this.
- **Rosie** (*shouts*) Enough! (*more gently*) You can't go back and see her again. You can't.
- Alex Ah but Rosie that's just it. I think I can. And I think I can prove it.
- Rosie Madness.
- Alex Not madness. Science.
- **Rosie** Everyone knows that time travel is impossible.
- Alex Ah, no, no, no, no, no. Not true Rosie.
- Rosie What do you mean?
- Alex Everyone *believes* time travel is impossible, sure. But that is not the same.
- Rosie What?
- Alex Let me tell you a story. You know Gallileo?
- Rosie Yes, he was locked up by the Pope wasn't he, for saying the earth wasn't flat?
- Alex He had trouble with the church yes, but not for saying that the earth was round. For saying that it moved.
- Rosie Stupid church.
- Alex Stupid Galileo! Look around you Rosie. Does it look as if the earth is moving?
- **Rosie** Well no, but

- Alex Does it feel as if the earth is moving?
- **Rosie** I don't know what you mean.
- Alex When you are in a car, or a train, you can feel the movement, can't you, in your stomach, in your body?
- Rosie Yes, I suppose so.
- Alex Well, you should feel that all the time shouldn't you if the earth was moving?
- **Rosie** Maybe, I, er, I don't know.
- **Alex** What about this. Suppose the earth is moving. And suppose that I drop an object, a cannon ball say, from the top of a tall tower. Well, then, in the time that it takes for the cannon ball to travel from the top of the tower to the ground, the earth will have moved a certain distance. Yes? The cannon ball falls in a straight line through space, and since the earth is moving, the tower along with the land it is attached to moves away from the line of the cannon ball's trajectory. And so the cannon ball strikes the ground a certain distance away from the foot of the tower, yes?
- Rosie Er, yes?
- Alex No! It falls at the foot of the tower. Just as we would expect if the earth does not move.
- **Rosie** Are you trying to tell me the earth does not move through space?
- **Alex** No. I am trying to tell you that Galileo was the crazy one. You don't *know* time travel is impossible, you only believe it, and whatever reasons you have for believing it only appear to be good reasons because you don't understand properly.
- **Rosie** My reasons are entirely logical.
- Alex Exactly!
- **Rosie** Don't you think logic important?
- Alex Logic? Pah! It only tells you what you already know. The Evening Star is the Evening Star. That's logic. The Evening Star is the Morning Star. That's science.
- **Rosie** If you had succeeded in going back in time to see Mummy again, don't you think she might have mentioned it?
- Alex Logical trickery.

Rosie And?

- Alex Perhaps she kept it a secret.
- **Rosie** Why would she do that?
- Alex Perhaps I will ask her to.
- Rosie But what if you go back and change the course of history?
- Alex Really Rosie, I would have thought you would have outgrown these silly little puzzles by now.
- Rosie It's not silly. It's a perfectly good question.
- Alex I'm a scientist. You can't expect me to spend my time thinking about philosophy. In any case, all your clever logical reasoning can now be put to the test.
- **Rosie** How come?
- Alex I have built my machine.
- Rosie You've done what?
- Alex My time machine. It's finished. Ready to go. Ready to turn on.
- Rosie What? Where?
- Alex Here on the table.
- **Rosie** This thing?
- Alex Yes.
- **Rosie** It looks like an old radio.
- Alex That's because it is an old radio. With a few, minor adjustments.
- **Rosie** Such as?
- Alex Well, you can't get the cricket on it any more. Scientific advance doesn't come without sacrifice.
- **Rosie** But that can't –
- Alex Can't what?
- **Rosie** Where do you sit?

- Alex Oh, this is just the gravity generator. It creates the gravity well. This apparatus here localises and focuses the gravity well onto a particular location.
- **Rosie** Where is that?
- Alex (gesturing theatrically towards the door) The cupboard.

Rosie laughs despite herself.

- Alex Once I turn this on, going through that door will lead to an area of spacetime that is so bent by the gravitational field produced here that you will be able to leave before you go in.
- Rosie Oh father, if you could only hear yourself.
- Alex Lets see if works shall we?
- **Rosie** What?
- Alex I'll turn it on.
- Rosie Are you sure?
- Alex I thought it was complete nonsense.
- **Rosie** It is. It's just, remember Geneva.
- Alex Oh that was just carelessness on my part Rosie dear. I've been much more careful this time. My calculations are flawless.
- **Rosie** Yes? Where are they?
- Alex Somewhere. I don't know.
- **Rosie** With mother's watch?
- Alex Perhaps. That is not important right now. What is important is that I have finished my machine. All I have to do is press this button here.
- **Rosie** And then what will happen?
- Alex The gravity field will be activated.
- Rosie And then what?
- Alex I don't know. This is a historic moment Rosie. We are about to enter a new era in human history.
- Rosie Or blow ourselves up.

Alex No progress is without risk. I'm going to do it.

Rosie Father, no. You could kill us all.

Alex I'm going to do it Rosie.

Rosie No.

Alex Yes.

Alex presses the button. Rosie screams, but then catches herself and is quiet. Nothing whatsoever happens. A look of triumphant determination is frozen on Alex's face, which is slowly replaced by uncertainty as nothing continues to happen.

Rosie Has anything happened?

Alex I don't know.

Rosie At least you didn't blow us up.

Alex (*inspecting his machine*) It all looks to be working properly. Where are my calculations?

Rosie Turn it off.

The door upstage centre rattles. Rosie screams. The door rattles again.

Rosie What is it?

Alex I don't know.

Alex approaches the door. Another rattle.

Rosie Daddy, don't. Be careful.

Alex Don't worry, child. There's nothing to be afraid of.

The door flies open, knocking Alex over. Another Alex (who we must now call Alex2) has pushed the door open. Alex2 looks confused, sees Alex on the floor, looks at Rosie, looks confused briefly and then bursts out laughing. Rosie looks at Alex2, frozen in astonishment and fear. Alex struggles to his feet, looks at Alex2 and jumps with surprise.

Alex Aah!

Alex2 That's right. That door is sticking a little.

Alex What?

Alex2 The door. It is sticking.

Alex Really? I thought I had fixed it.

Alex goes to the door, tries the handle. It seems OK, but to check he walks inside the cupboard, closing the door as he does so. As soon as Alex does this, Alex2 roars with laughter again.

Rosie (*finally snapping into action*) What's so funny you beast?

Alex2 continues roaring with laughter.

Rosie Stop it. What have you done with my father?

Alex2 Oh Rosie.

Rosie Get away from me. Father!

Alex2 Rosie, don't you see?

Rosie goes to the cupboard, tries to open the door but it is stuck.

Rosie Where is he? What have you done with him? Father?

Alex2 Rosie, it's me. I am your father.

Rosie Get away from me.

Alex2 grabs her.

Alex2 It's me. Can't you see? Look at me child.

Rosie No, it can't be.

Alex2 Don't you see? It worked. It worked.

Rosie I don't understand.

Alex2 It worked! Rosie, what did you see?

Rosie What?

Alex2 What did you see? What just happened?

Rosie My father just went in to the cupboard and now it is stuck. He is trapped inside. We must get him out.

Alex2 I'm not inside Rosie. I'm right here.

Rosie But how?

- Alex2 Jesus, child, it works. It works. I went in to the cupboard, shut the door, and the bloody thing stuck. It took me a few seconds to open it, and when I did, I saw you, and me, both gawping at me. I came out of the cupboard before I went in!
- Rosie But -
- Alex2 You saw it with your own eyes. Rosie, child, I travelled back in time. It works! It works!
- Alex2 takes Rosie by the hands and dances around with her.

Alex2 It works! It works!

Rosie Stop!

Alex2 What is it?

- **Rosie** I'm sorry. It is just a little, overwhelming, that is all.
- Alex2 Rosie, it works. I have travelled back in time. My god. It is incredible. I must write this up. For the *Physical Review*? Or *Nature*? And a conference, of course. There will be a Nobel. Oh Rosie, good lord, there will be a Nobel. Not immediately of course, these things always take time, but a Nobel. Think of what I could do with the prize money. What is it Rosie?

Rosie is staring over Alex2's shoulder with a mixture of horror and wonder. Alex turns round to follow her gaze and shrieks as he notices Rosie2, who has come out of the cupboard during his Nobel musings.

Ros2 You're right, it is a dream.

Rosie This whole thing is like a dream.

Ros2 Amazing.

Rosie I don't like this one little bit.

Ros2 I can't believe it. Amazing.

Rosie Can I?

Rosie approaches Rosie2, goes to touch her.

Alex2 Don't touch her. Good lord, Rosie.

Rosie Why, what will happen?

(Rosie touches Rosie2)

Ros2 Nothing.

- Alex2 Apparently, nothing.
- Rosie I don't believe it. Like a dream.
- Alex2 Yes, yes, quite incredible. Now go on girl. Get in the cupboard.
- Rosie What?
- Alex2 (manhandling her) Into the cupboard with you.

Alex2 pushes Rosie into the cupboard, closes the door, and leans against it.

- **Ros2** What did you do that for?
- Alex2 You came out of the cupboard. You had to go in.
- **Ros2** I wanted to go in.
- Alex2 Well there you are then.
- **Ros2** I was going to go in. You didn't have to push me.
- Alex2 How long was that?
- Ros2 What?
- Alex2 How long? Between you coming out and going in?
- **Ros2** Not long. I was in there just a minute.
- Alex2 Although I suppose it doesn't matter how long you were in there for. Not as far as we are concerned. Time dilation you see. Gravity does that. It could be years. No, what matters is this frame of reference. How long you were together. Both of you. How long you overlapped with yourself. In this room.
- Ros2 Not long.
- Alex2 Longer than me?
- Ros2 I don't know. I can't remember.
- Alex2 Perhaps it is warming up. Do my calculations allow for that? I don't know. Where are my calculations?

Alex2 begins searching through the papers on his desk. As he does so, Alex emerges from the cupboard.

Alex Ah, now I see.

Alex2 What?

- Alex Now I see.
- Alex2 See what?
- Alex But the time is getting longer. And it is getting harder to remember. It all seems a little hazy.
- Alex2 I'm out again. I must get back in there.
- Alex Don't panic. You don't have to rush.

Alex2 I don't?

- Alex Of course not. We have plenty of time.
- Alex2 We do?
- Alex We have all the time in the world. I guess it is warming up. Yes. That's it. It must be warming up.
- Alex2 Where are my calculations?
- Alex2 begins searching amongst the chaos again.
- Alex2 (to Alex) Where are they?
- Alex How should I know?
- *Alex helps Alex2 search amongst the papers.*
- Alex They're not in the cupboard.
- Alex2 Of course not. Why would they be in there?
- Alex I'm just saying.
- Alex2 Oh to hell with it.
- Alex Giving up old bean?
- Alex2 What's the point?
- Alex Don't worry. I'll find them.
- Alex2 How long then?
- Alex What?

- Alex2 How long have I got?
- Alex How long has any of us got? Oh I see, a couple of minutes. I think.
- Alex2 So what do we do?
- Alex What?
- Alex2 In these couple of minutes?
- Alex We talk. Yes, that's right. We talk.
- Alex2 Oh very good. We talk. About what?
- Alex Philosophy. Freedom. The future.
- Alex2 Philosophy? Really? Ah, so, what am I going to say next?
- Alex What?
- Alex2 What am I going to say next? Don't forget, you can see the future.
- Alex No I can't.
- Alex2 Yes you can. You said you can.
- Alex No I didn't. I said we talk about the future.
- Alex2 But this conversation we are having. You have already had it.
- Alex Yes, but it is not in the future is it? It's in the past. That's how I can remember it.
- Alex2 No, no, no, no. You have experienced what is in my future. The next sentence that I am going to say. The next thing that I do.
- Alex Yes, because it is in the past. Not the future.
- Alex2 (suddenly shouting) Boo!
- Alex starts.
- Alex2 (disappointed) Oh.
- Alex What did you do that for?
- Alex2 To see if you remember.
- Alex Of course. That's right. I remember doing that.

Alex2 There you are then.

- Alex That proves nothing. You'll see.
- Alex2 When?
- Alex When you come out.
- Ros2 But you already have.
- Alex What?
- **Ros2** Come out of the cupboard. See?
- Alex Yes, there you go. I know what's happened but you don't. Always the past. Never the future.
- Alex2 But it's not the same, is it?
- Alex Why not?
- Alex2 You are free aren't you? In a way I am not?
- Alex Why aren't you free?
- Alex2 Because I must get into the cupboard.
- Alex Yes, you must. I remember this conversation now. It's very strange. I'm saying this, I'm talking freely. But I remember it too. Like there's two parts of my mind. One saying, one remembering what to say.
- **Ros2** A prisoner of memory.
- Alex Yes. That's what its like. Your future is a memory to me. Which makes it the past. Not the future.
- Ros2 I'm not sure I understand.
- Alex How can I remember the future?
- Alex2 Is it time to go in yet?
- Alex You do what you want to.
- Alex2 Of course. Of course. What I want to do.

Alex2 goes towards the cupboard, hesitates.

- Alex2 Perhaps I only want to do this because I know I must. Philosophy! To hell with it.
- Alex2 enters the cupboard.
- Alex (*shakes his head*) This really is a fascinating learning experience. Now where are those calculations?
- **Ros2** What would happen do you think?
- Alex What?
- **Ros2** If you didn't go in.
- Alex What?
- **Ros2** If you came out, but then decided not to go in.
- Alex But that is impossible. I only came out because later I went in. If I did not go in, I wouldn't have come out.
- Rosie comes out of the cupboard.
- Rosie Oh I see.
- **Ros2** I'm not going to go in.
- Alex Of course you are. You already have.
- Ros2 No I haven't.
- Alex You can't come out without going in. This is not a teleportation machine.
- Rosie You will understand. When you go in.
- **Ros2** Don't you start. I'm not going to do it.
- Alex But you must.
- Ros2 Why?
- Alex Because it has already happened.
- **Ros2** Not to me it hasn't. I haven't gone in yet.
- Rosie Yes I have.
- **Ros2** You may have done. But I haven't.
- **Rosie** But I am you, remember?

- **Ros2** I realise that. I'm not stupid.
- Alex Well there you are then.
- **Ros2** I still have a choice, though, don't I?
- Rosie Well ...
- Alex Of course you have a choice. It's just we know what that choice is going to be.
- **Ros2** Then it's not a choice is it?
- Alex Of course it is.
- **Rosie** Choice is not the issue here.
- **Ros2** It's not?
- Alex I know what I am going to have for breakfast tomorrow. That doesn't mean I don't have a choice.
- **Ros2** Father, you have the same thing for breakfast every morning.
- Alex Yes, but I don't have to, do I? I could have porridge.
- **Ros2** We don't have porridge.
- Alex Not the point, Rosie. Not the point.
- **Rosie** Actually both of you are missing the point.
- **Ros2** And what is the point?
- Alex That choice is still possible.
- Rosie No, that ...
- Alex The future is not fixed?
- Ros2 Will you let me finish? I'm trying to tell you something.
- Alex (to Rosie2) What my dear?
- Ros2 Not me! Her. Um, me. Other me.
- Rosie Thank you. I don't know quite how it works in general, but in this case ...
- Alex My god! What is the time?

Both Rosies look for their watches. They expect them to be on their wrists, but they are not there..

- Alex Not clock time.
- **Ros2** (*to Rosie*) What does your watch say?
- Rosie It's not on my wrist.
- Alex I mean, how long since you came out of the cupboard?
- **Rosie** What time was it when I went in?

Alex No time for that now. It's been too long.

- Alex begins pushing Rosie2.
- Ros2 Father. Stop it.
- Alex We can't risk it. We don't yet know enough.
- Ros2 I don't want to go in.
- Alex You could initiate a temporal anomaly and then where would we be?
- **Ros2** I'm not going.
- Alex You must. You must.

Alex succeeds in pushing Rosie2 into the cupboard and closes the door.

- Alex Thank god for that.
- Rosie You see what I mean? In this case at least, choice had nothing to do with it.

Alex I don't know what would have happened. The longer you overlap, surely ...

- **Rosie** So what is the time?
- Alex Don't you see how dangerous that could be?
- **Rosie** What is the time?
- Alex I don't know. I've lost your mother's watch remember. I thought you had one?
- Rosie It's not on my wrist. I must have left it on my dressing table. Damn.
- Alex Language.

- **Rosie** What would our watches say though? If I go into the cupboard for five minutes, my watch.
- Alex It would tell you what the time is. As long as you keep it wound. You do keep it wound don't you? As your mother used to say, a stopped watch is no use to anyone.
- **Rosie** I mean. Listen. I go into the cupboard at eleven.
- Alex Is it eleven? Should we have a cup of tea?
- **Rosie** I don't know what the time is. I haven't got my watch on.
- Alex I thought you said it was eleven.
- **Rosie** For example. Suppose I go in to the cupboard at eleven. For example.
- Alex Shall we have a cup of tea anyway?
- Rosie Don't change the subject. This is bothering me. My watch will say eleven.
- Alex Because you keep it wound.
- Rosie Yes, yes, I keep it wound.
- Alex Although sometimes you forget to put it on.
- **Rosie** So after I have spent five minutes in the cupboard, my watch will say five past eleven won't it?
- Alex Of course. Provided it is working properly.
- Rosie Of course it is working properly.
- Alex Good. You look after that watch my girl. Your mother gave it to you.
- Rosie No, mother gave your watch to you.
- Alex Who gave you your watch then?
- Rosie Wasn't it you?
- Alex No. Was it?
- Rosie I'm not sure. I don't remember.
- Alex It must have been your mother.
- **Rosie** I suppose so. It doesn't matter. The point is. When I come out of the cupboard. Five minutes before I go in. It will be five minutes to eleven. Won't it?

- Alex According to the time in the room, yes.
- **Rosie** So my watch will be ten minutes fast.
- Alex So it will.
- **Rosie** But where have those extra ten minutes come from?
- Alex They haven't come from anywhere. You have lived through them.
- Rosie But I could come out hours before I went in -
- Alex I wouldn't advise it. We don't yet know enough to be sure it is safe.
- **Rosie** And then my watch would say it was the middle of the night but it would still be eleven o'clock in here.
- Alex Of course.
- Rosie So which watch is right?
- Alex They both are.
- **Rosie** But they are different. They can't both be right.
- Alex Einstein discussed this long ago. Using the example of twins. One twin sets off in a rocket, very fast ...
- **Rosie** Forget about rockets. What about my watch?
- Alex OK. OK. The watches. So. The one watch, the slower watch, the watch that stays in this room, provided of course it is working properly, which it is because you wind it every evening ...

The door rattles.

- Rosie Father.
- Alex That watch is right according to this frame of reference.
- **Rosie** This what?
- Alex This room. Here. It is eleven here. You can tell by the position of the sun in the sky, the shops outside are open, there are people about. Look out of the window, you'll see what I mean.
- Rosie There aren't any windows in this room.
- Alex Ah yes, quite right. The radio then.

Rosie The radio is not working.

- Alex Yes, I used it to make the machine. The point is ...
- **Rosie** What day is it?
- Alex ... the position of the sun in the sky is a sort of clock ...
- Rosie Can you remember seeing the sunlight?
- Alex Sunlight means nothing to me since your mother died. Oh Rosie, where is she? I've lost her. I can't even find her watch.
- Rosie I'm sorry. I interrupted you.
- Alex What was I saying?
- Rosie Something about rockets.
- Alex Rockets? Ah yes. There are twins, yes? So, one twin sets off in a rocket, very fast, and the other twin stays on earth.
- **Rosie** I'd like a twin.
- Alex The first twin flies her rocket for ten years.
- **Rosie** I suppose I have one now. (*The door rattles again*) In a way.
- Alex Are you listening?
- Rosie Sorry father. Carry on.
- Alex The first twin flies her rocket for ten years close to the speed of light before coming back to earth. Now, because she is moving so fast, relative to the earth of course, when she returns after ten years, on earth thousands of years have passed, and her twin has died long, long ago.
- Rosie How sad.
- Alex But how can this be?
- Rosie To be left alone like that.

Another rattle.

Alex The answer is that time moves at different rates. According to how fast you are moving. Or, and this is the effect my machine relies on, according to the strength of the gravitational field. Actually, it is misleading to say that time moves, as if it were water flowing through a hose. Only objects move, but

time isn't an object. It's not a thing. Nor is it a property that things have. It is very strange if you think about it. Perhaps the best we can say is that ten years' worth of ticks on the first twin's watch take thousands of years back on earth, although nothing seems wrong to either twin. It is not as if the first twin thinks 'time is moving slow', or the second twin thinks 'time is moving fast'. For both twins everything is normal. Has ten years passed or a thousand? The question makes no sense unless you specify a frame of reference. On earth a thousand years have passed. In the rocket, only ten. There is nothing more to say.

Rosie You are looking older, father. Don't ever leave me.

Alex And you are growing up so fast. You will leave me before I leave you.

Rosie I don't think I could ever leave.

Alex Nor me.

Rosie2 comes out of the cupboard. She has a cut on her forehead which is bleeding and she looks terrified..

- **Ros2** Oh thank god. Thank god.
- Alex (not looking at Rosie2) Language.
- **Ros2** I didn't think I would ever get out.
- **Rosie** What happened? What's the matter?
- **Ros2** That bloody handle.
- Alex My god, what happened to your head child?
- **Ros2** I was stuck. I was rattling it for ages. Didn't you hear me? It's been hours. It was dark. I was frightened. It was horrible. There were things in there, ghosts, I don't know. Noises in the dark. Moaning.
- Alex There, there, child, it's alright.
- **Ros2** I brought you this.
- *Rosie2 holds up a pocket watch.*
- Alex My watch. That your mother gave to me. Your mother's watch. Oh child. Where did you find it? In the cupboard? Incredible. What was it doing there?
- **Ros2** It was in my pocket.
- Alex In your pocket? What was it doing there? (to Rosie) Are you hiding it?

Rosie No.

- Alex But it is in your pocket.
- **Rosie** No it isn't.
- Alex It must be.
- Rosie How can it be in my pocket? It's there look. She's got it.
- Ros2 Here.
- Rosie2 hands Rosie the watch.
- Rosie What should I do with this?
- **Ros2** I would put it in your pocket. if I were you.
- Alex Perhaps you have my calculations too.
- Ros2 Of course. I nearly forgot.
- Rosie2 hands Alex a sheaf of papers. Rosie sinks to the floor crying.
- Alex What is it, my child?
- Ros2 Memories.
- Rosie Don't make me do it. Please, Daddy, don't make me do it.
- Alex Do what, child?
- Rosie Please.
- Alex Oh Rosie. Please. Stop. I won't make you do anything you don't want to do. Come here. It's alright.
- **Rosie** I don't want to go in the cupboard.
- Ros2 Father.
- Rosie It's so small in there. I don't like it. It's dark. And it smells of boot polish.
- Alex But Rosie. My darling. You must.
- Rosie I can't. I can't. I'm terrified.
- **Ros2** It was horrible.
- Alex But it turns out alright, yes?

Rosie I can't do it.

- Alex Who knows what will happen if you don't? A temporal anomaly will be created. A paradox. It will make Geneva look like a picnic. It will destroy us. Not just us. The whole world.
- Rosie I don't care. I'm scared.
- Alex There, there, Rosie, it is alright. Perhaps we can stay like this.
- Ros2 Not for ever.
- Alex For a while, for a while at least.
- **Ros2** What about me? If I don't go in I don't go out. Then what am I?
- Alex We can wait. For years if need be. Yes, why not, we can wait. For years.
- **Ros2** Look at me, father. I'm no older than she is. We can't wait for years. She has to go now.
- Rosie Don't make me go.
- Ros2 Shut up you cry baby.
- Alex (to Rosie2) Rosie!
- Rosie Shut up yourself.
- **Ros2** She will go in. Like you said. She must.
- Rosie I won't. You can't make me. Please. I'm scared.
- **Ros2** It's wasn't that bad. And look. I'm here now, aren't I? It's not like I died or anything.
- **Rosie** That's not the point you selfish bitch.
- **Ros2** Me selfish? How about you?
- Rosie I'm not being selfish.
- Alex Stop. Stop.
- **Ros2** Not being selfish? How can you say that?
- Rosie I can say it very easily thank you because it is true.
- Alex Will you stop it both of you.

Ros2 You just don't think do you?

Rosie Nor do you.

Ros2 I'm thinking very clearly right now.

- **Rosie** You're not thinking clearly, you're just forgetting. It's in your past, but it is in my future and I'm scared.
- Alex (shouts) Enough!

Rosie2 begins to cry.

Alex Oh god.

- **Rosie** Who's the cry baby now?
- Alex (to Rosie, as a warning) Rosie. (to Rosie2, gently) Rosie. Come now. What is it?
- **Ros2** You know I'm right. Don't you? You know it. She has to go in there. She just has to. It's not selfish, how can it be? I am her and she is me. And that is why she has to. Because I am here. There is no escaping it. Why can't you say so?
- Alex You're right. You're right. But what can I do? I don't want to hurt anyone. Tell me what to do.
- **Ros2** Make her go in the cupboard.
- Alex I can't.
- **Ros2** What's the difference? Bad things happen to people all the time.
- Alex I don't want to make her go in there.
- Rosie You don't have to.
- Alex I don't?
- **Rosie** She's right. I have to go in. There is no escape.
- Alex Rosie.

Rosie I have to do it.

- Alex You don't have to. The universe can disappear up its own backside. I don't care. I won't make you do it. I don't want you to get hurt.
- **Rosie** You're not making me do it. I need to. Don't I?

Ros2 No escape.

Rosie Father. (*referring to Rosie2*) Look at me, I'll be alright.

Rosie goes in to the cupboard.

Alex Come back safe.

Ros2 I already have.

Rosie2 and Alex embrace.

- Alex What happened in there?
- **Ros2** I'm not sure. It was strange. I felt so heavy. Strange noises in the dark. I couldn't get out. I don't really remember.
- Alex It must have warmed up. Full power. Perhaps it affects the memory. The gravitational force. Who can tell what that could do.
- **Ros2** What do your calculations say?
- Alex I don't know. Of course! I have them now. You gave them to me.

Alex begins to look at the papers.

Alex But this makes no sense.

- **Ros2** What's the matter?
- Alex It's crazy. Look.

Alex hands Rosie2 the sheaf of papers which she begins to read.

Ros2 Drawings of mother's watch. Is that all there is? But that can't be.

Alex My god. Oh my god.

- **Ros2** What is it father?
- Alex Where is the watch Rosie?

Ros2 It's in my pocket.

Alex Your pockets are empty.

Ros2 Because I gave it to her, to myself. She, I mean, I have it, in the cupboard.

Alex You gave it to yourself.

Ros2	Yes.
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- Alex When you came out of the cupboard.
- Ros2 Yes.
- Alex You had it when you came out because you gave it to yourself before you went in.
- Ros2 Oh my god.
- Alex Precisely. Where did the watch come from Rosie? It sprang into existence from nowhere. You created it. My calculations too. Oh god. I must turn this thing off.
- **Ros2** Father! Wait!
- Alex You can't go about magicking watches out of thin air. What about the second law? What about that, eh? I must turn it off.
- Ros2 Wait.
- Alex It could destroy us all!
- Ros2 Father, calm down. We're still here.
- Alex Yes, yes, we are. But still, what more havoc could we wreak?
- Ros2 That, father, is a good question.
- Alex What? It is?
- Ros2 Except I would put it like this. What else can we bring out of the cupboard?
- Alex I don't follow.
- **Ros2** I brought the watch out of the cupboard, yes? I conjured it into existence by thinking about it and then I brought it out of the cupboard.
- Alex I'm not sure that is quite right.
- **Ros2** I'm thinking of mother right now...
- Alex Oh Rosie. Do you think it could work?
- Ros2 Why not?
- Alex A human being. Your mother.

Ros2 A watch is a complicated thing.

- Alex There is still something that feels wrong. Was it working?
- **Ros2** What?
- Alex The watch. Was it working?
- **Ros2** I don't know. I didn't check.
- Alex Pity.
- **Ros2** I'm going to do it. I'm going to go in. I'm going to go in and bring mother out.
- Alex Wait! If you go in, then you should be out already. Where are you, Rosie? You're not here.
- **Ros2** Once I come out, that means I have to go in, right?
- Alex Right.
- **Ros2** Well, then, surely it works both ways. If I go in, then I must have come out.
- Alex Then where are you?
- **Ros2** I don't know. Perhaps I go further back. Yes, that must be it. I came out with mother earlier this morning. Right now we are eating lunch in some pretty café in town. Laughing. Talking. Like it used to be.
- Alex I'm not eating lunch with mother, Rosie. I'm standing here talking to you.
- **Ros2** So come in with me now.
- Alex Rosie, I don't know.
- **Ros2** We can be together again. Please. All we need to do is to go in and bring her out. Come on, father. What are you waiting for?
- Alex Who will mind the machine? We don't know what happens if it is left alone.
- **Ros2** We'll come back and turn it off. Once we've had lunch. Turn it off and take it apart. Then it will be over and we'll all be together, you, me, and mummy, and no-one else need know this ever happened.
- Alex Rosie, Rosie, do you really think it could be?
- **Ros2** I'm sure of it. We just need to keep her in our minds when we go in. Are you coming?
- Alex (makes his decision) Yes, yes. I'll come in with you.

Ros2 Hold my hand. We'll go in together.

Alex takes Rosie's hand.

Alex And if we forget?

- **Ros2** We must try hard to remember. Just keep mother in mind. We'll be together. Just like we used to be.
- Alex Where's her watch?

Ros2 That doesn't matter any more. Just concentrate on mother. Come on. Lets go.

Alex and Rosie walk in to the cupboard together.

Blackout.