

Lovesong of the Electric Bear

By Snoo Wilson

Cast, doubling for seven

Porgy, a bear

Alan Turing

Turing Senior, Churchill, Dilly Knox, Greenbaum

Mrs Turing, fortune teller, Varia, Clemmie

Christopher, Joan, Bronwyn Ylena.

Davis, undergraduate, Rejewski, Bevan

Kjell, Blackwood

Cornish, Barman, Customs officer, Sergeant

Act 1

(Churchill at his easel, an old man, in sunhat, painting outdoors. Dappled light: Birdsong.)

Clemmie (Off) Winston! Winston!

(Enter Clemmie his ancient wife. Churchill oblivious.)

Clemmie (Accusatory) Where's your hearing aid?

(Clemmie goes to Churchill's jacket looks in the pockets. Failure. She has to speak louder.)

Clemmie (Loud) Moran called, with bad news, for you he said. Lord Moran. Your physician, Winston.

Churchill Bad news is always the same from my doctor. "You drink too much".

Clemmie He said you would want to know. Alan Turing's dead.

Churchill Come off it woman, Herman Goering's been dead for years!

Clemmie No, Alan Turing. (Precise) A-LAN TU-RING.

Churchill (Shocked) Turing.....How come?

Clemmie By his own hand.

Churchill Oh Christ.

Clemmie Who was he? I never heard his name, before.

Churchill He was a Bletchley backroom boy. A genius.

Clemmie Why would he kill himself?

(Turing becomes visible, wrapped only in a sheet, peacefully dead. He is holding an apple with a bite out of it. He could be Christ taken down recently from the cross. Churchill shakes his head and turns away)

Churchill He can't have been more than forty.

Clemmie Will you come in now? If I call you when it's lunchtime, you won't hear. I'm not coming out again. I'm too old to be running around.

Churchill I'll come now. The shadows are all in the wrong

places. (Pause) Another good man down.

(Churchill moves off slowly, supported by Clemmie. Exit Clemmie and Churchill. Porgy comes to Turing and coughs discreetly to arouse him.)

Porgy Knock-Knock!

Turing Go away. I thought I told you clearly Porgy, I wanted to be alone.

Porgy I know what you're doing in there! And I'm not going to stand for it!

Turing I can't get it up. They pumped me so full of hormones I'm growing tits. How bad does it get before you are allowed to kill yourself?

Porgy You haven't.

Turing Haven't what?

Porgy Haven't just now killed yourself with a poisoned apple.

(Porgy takes half eaten apple, palms it, produces whole apple.)

Porgy There, it never 'appened. We'll say no more about it. Now, don't be so childish as to try to leave me, ever again. It's selfish, and such bad manners. What would I do, with Master, gone?

Turing Kjell's not coming. It's the final straw.

Porgy Shame. I rather liked that Kjell. Uncomplicated. Outdoor type. Just what you needed.

(Enter Hallam, a customs officer, and a tall handsome Norwegian, Kjell. Kjell sits, amused at the uptight Hallam.)

Hallam Mr Christiansen? Would you tell me who you are proposing to see in Manchester?

Kjell The good friend whose residence address I have given you. He is called Alan. Hey! You should relax. I'm not the enemy. Norway fought the Germans too.

My uncle had once fled on skis away from the Nazis, cross country, nonstop for twentyfour hours . He was faster going down the hills but the German was faster coming up because of my uncle's broken arm. So he allowed the German to catch up with him; and killed him.

Hallam What do you know about Doctor Turing's work?

Kjell Nothing. I don't know anything about his work except what he do to me. We met on holiday and he invited me to England.

Hallam Since this liason could constitute a breach in national security, I'm using the powers vested in me by Her Majesty's government to refuse you entry to this country as an undesirable alien.

Kjell Ok. Call me what you like. Do what you gotta do! I still think you're cruel bastards.

Hallam Informally, as a Christian, Mister Christiansen, do you ever reflect on the eternal punishments that god is reserving for sodomites?

Kjell Who said I was a fucking Christian? I kill whales. That's my religion.

Hallam This way, Mr Christiansen.

(Exit Hallam and Kjell. Porgy presents an ancient bicycle to Turing)

Porgy This is your old bicycle, recognise it? It is to be your dream transport through the ether, to the childhood home! Before you can say "Jack Robinson" you'll be twelve years old again.

Turing Do I really have to go back , Porgy? I was bloody miserable, most of the time.

Porgy Like it or not, it's happening, and how many people would not give their molars to be like you, getting younger at every breath? We're crossing the channel now. Next thing you know, it'll be the morning of your youth. The merry merry month of May, 1926! Smell the springtime wafting from the coast of Brittany.

(Sea swell, languid. Effects moving in time to this. Waves fade. Sound of distant hymn singing. Porgy points)

Porgy Look down at those peasants in their religious procession! What on earth to make of it? The women impossibly devout, all covered in lace. And the men all staggering along under one enormous crucifix, topped off with vast lurid bleeding plaster Christ.

Turing (Disgusted) Urgh!

Porgy If you don't like blood, don't look. And keep your voice down; if they saw us flying above them, without visible means of support, they'd probably think we were the devil, and pelt us with stones. Flaps and undercarriage down: we're a few metres above the Turing residence, where you will see your mother —there she is!——standing at the garden gate chatting gaily to a sodomite in a black skirt.

Turing It's her priest, Porgy, he's wearing a soutane. Surely you know what a priest is?

Porgy You have to remember master, that I am only a bear. He looks pretty light on his feet to me. Unless you slow down you'll whack the old poofteh on the head with the front wheel! Down gently now. Emergency crashland. Woops!

(Turing falls. Exit Porgy.

Enter Mrs Turing in a floral hat and white gloves. She is saying goodbye to an offstage character. At the same time Turing Senior, dressed in tweeds and cavalry trousers, comes in.)

Mrs T Such a lovely service, father, Une Belle Service!
(To Turing Senior) Aren't you pleased we came to live in France now, Julius?

Turing Sr Not a bit of it. I always knew it was going to be a disaster. Look what's happening now . Alan's meant to be going to boarding school in Blighty tomorrow but it's the start of the General Strike. The St Malo ferry is run by the Frogs, so he can get across the channel, but then how is he going to get to his

bloody school?

Mrs T There's something we should discuss. Alan tried to pack his bear! His elder brother says he's not ready for Sherborne, Julius. John said that if the other boys had found out about the animal, they would have ragged Alan to death. Could we not wait till the autumn term when he'll be almost thirteen?

TuringSr Too late. I've paid this term's fees. (Exits)

Mrs T Alan, I've told you before not to use our good cutlery to mend a puncture!

Turing I'm sorry mother. A giant nail appears to have fallen from the cross in the procession and gouged the innards of my front tube.

Mrst T You've ruined a whole set of fishknives!

Turing What do you need separate knives for fish anyway? I need to mend it now. If the trains aren't running tomorrow in England, I'll go by bike. It's only sixty miles. (Mrs T exits. Enter Porgy)

Porgy Well ridden, Master! You're in the local English newspaper! "Boy Rides Bicycle Sixty Miles to first day at School" What an amazing beginning to your time at Sherborne. Wait here for your oppressor.

(Porgy takes bike and exits. Turing, alone is approached by an older boy, Blackwood, wearing a gown)

B'wood Hey, you! Standing on the grass is a flogging offence.

Turing Where does it say that?

B'wood Nowhere.

Turing I'm new.

B'wood You've got a lot to learn then. Only beaks are allowed to set foot there.

Turing Are you a beak?

B'wood Next year I'll be a beak.

Turing I've just ridden here from Southampton.

B'wood Did you get permission to ride outside school grounds?

Turing How could I? I was riding in. Are you stupid?

B'wood What's yer name?

Turing My last name is Turing.

B'wood Alright, Turin. Come to the gym in ten minutes.

Turing Why?

B'wood We're going to break you in.

(Enter Porgy holding a doll of a schoolboy in a scruffy school cap.)

Porgy (To Turing) Stay there. Don't move, master. Everything's taken care of. No blood. This won't hurt.

(Blackwood seizes Porgy's doll and thrusts it into a wastepaper basket, which he kicks offstage, to cheers. The basket rolls back on, Blackwood kicks it off to cheers again. Blackwood mutilates and finally boots the doll offstage.)

B'Wood Go and warm my bog seat, Turing.

Turing Which cubicle is that, Blackwood?

B'wood You should know. If you get it wrong, we'll nail you under the floorboards again.

(Turing looks round in despair. Porgy crouches upstage.)

Porgy Psst! Alan! Master! Over here, that's right.

Turing Why don't any of these lavatories have doors?

Porgy For reasons I would blush to go into. Trousers down and sit. On me head!

(Turing mimes taking his trousers down and sits on Porgy. He then starts writing on his hand.)

Porgy That's right. And then, get on with your maths homework, master. That's the ticket. Getting warmer! Blackwood won't be able to complain now. Excellent!

(Enter Blackwood. Blackwood sniffs)

B'wood Have you just farted, Turing?

Porgy For pity's sake man, if you can't fart here, where can you? (Fart, off) Nothing to do with us. Take up your complaints with cubicle 3!

(Turing stands. Blackwood points at Porgy)

B'wood Is that shit ?

Porgy Hurry up. Your seat's getting cold.

B'wood You dirty little oik! It's on your hand, too!

Turing It's ink. I was doing calculus.

(Porgy stands.)

Porgy Alright, that's enough, Blackwood. You are dismissed.

(Blackwood moves away, as if under a spell. Lights change.
Enter Mrs T, excited.)

Mrs T Alan... Do you want to have your palm read? For a bit of fun? She's a gypsy, Alan.

Turing It says it costs a shilling.

Mrs T I'll pay! But don't tell your father.

(Effects, smoke. Fortune teller sits with cowled head draped with fairy lights. Turing approaches through the smoke and offers his hand to be examined. Heavenly music; climax. The fairy lights die and Turing goes back to centre stage.)

Mrs T What did she say, Alan?

Turing She said it was the hand of a genius.

Mrs T (Disbelieving) Genius? You??

Porgy Genius; native intellectual power of an exalted type, with extraordinary capacity for imaginative creation.

Mrs T Well this is the most ridiculous thing I have ever heard.

Turing Why?

Mrs T How she can tell anyone who gives his left hand when asked for his right a genius, I have no idea. (Slaps Turing, several times) You are a stupid ungrateful little boy who we all work night and day to support and put through public school and you won't even say your prayers and keep your hands and face clean!

(Exit Mrs T. Turing shocked).

Porgy Don't worry about your mother. At school you have a true friend, sober, unchangeable, one whose heart is pure, and mirror to your soul.

(Enter Christopher Morcom, fairhaired and pure.)

Morcom My dear Turing I just thought you might know about something I can't figure for the life of me. It's for this stupid additional scholarship paper they want me to take. They wouldn't let me take the exam at first because they said I was too ill. Now I risk looking a complete twit by failing the maths.

Turing What kind of maths, Morcom?

Morcom Hyperboloids. What are hyperboloids, when they're at home?

Turing They're a sort of mathematical curve. A solid or surface of the second degree, some of whose plane sections are hyperbolas, and the other ellipses or circles. I think, anyway. I could be wrong.

Morcom No you're not. Thank you. I am ever in your debt, Turing. I shall repay it in whatever currency you nominate.

Turing You could help me with a scientific test.

Morcom A test on what?

Turing I want to see what happens when you drop a stone down the funnel of a locomotive. You know where the bridge is at the bottom of the hill, over the railway line? The train from the quarry comes through every day at four.

Morcom But you'd have to guess where the funnel was in all the smoke, wouldn't you?

Turing It's never going more than walking pace. And the path of the funnel will always be equidistant from each track.

Morcom The stone might get blown straight out again by the steam and take your head off.

Turing I admit there is a slight risk. But that's true of any experiment, isn't it?

Morcom I suppose so. And I gave you my word.

(Chuffing growing louder and louder, smoke)

Turing We pile up our stones at the dead centre of the parapet, so we can drop a rapid sequence of projectiles. One of them has to find the target. Ready, now, bombs away! One! Two! Three! Four! Five! Six!

(Blackout. Chuffing superseded by squeal of engine braking. Clank of stone falling on ironwork. Lights. Noise of caning. Morcom waiting.)

Morcom (Counting strokes) One, two, three, four, five, six.

(Enter Turing, rubbing his legs.)

Morcom Did he practise his golf swing on you?

Turing He must be truly crap at golf, because the last one caught me behind the knees.

Morcom Oh he is crap at golf. But why did he let me off? The engine driver had to have stitches. Why isn't he

- beating me too?
- Turing He said you were sick. You have a note excusing you from cricket, don't you?
- Morcom You're not playing cricket either and you're not sick.
- Turing That's because my family is so poor. My father wrote to the housemaster, saying it's a waste of time. Plus secret agenda, he doesn't have to fork out for white flannels.
- Morcom What does your father do?
- Turing He moans. Everything dissatisfies him. He took early retirement from the Indian Civil service, because the writing is on the wall for the Raj. He speaks five Indian languages but his pension is the size of an electron. He moved to France to try to dodge English income tax. Then they came back because he can't stand the French.
- Morcom How strange. (Pause) I can see five boys smoking behind the pavilion.
- Turing D'you smoke?
- Morcom Mother has promised me a thousand pounds when I'm twenty one, not to.
- Turing My father says my schooling is costing him ten point five times what he spends on tobacco each day.
- (Porgy sets up a laser trace of light which mimics the base of a huge slow pendulum.)
- Turing Why were you so late back into school this term?
- Morcom Because I am unclean.
- Turing You're what?
- Morcom I had tuberculosis once, and recently I had a relapse. Nothing serious. I'm perfectly alright now. I felt fine all through the Cambridge entrance exam.
- Turing I felt fine, I just knew I was crap.

Morcom Be nice if we both got a Cambridge scholarship, but it won't happen. I made a total hash of question four. All my hyperboloids deserted me.

Turing At least with Maths exams you know immediately how you've done. I think I got more than half right so I will scrape into Cambridge. But I can hear my father sighing already, calculating the difference he's going to have to pay because I'm not Einstein.

Morcom Einstein says imagination was more important than ability, and you imagine pretty well. He was a late developer, too. Like you.

(Enter Blackwood.)

B'wood Where are the bloody squits?

Turing Not here. At long stop, silly mid-off, and square leg. Over there. On the cricket pitch, Blackwood.

B'wood What's this piece of string?

Turing It is an experiment into physical properties of gravity. It's the stuff that makes us stay on the earth and not float away, Blackwood. When weighted and tied off to the light fitting at the top of the stairwell, the moving string swings in one plane only, ignoring the rotation of the earth. It's called Foucault's pendulum, after its discoverer. The string doesn't seem to 'know' the earth is rotating. Any idea why?

B'wood Turing; Only the headboy is allowed facial hair in school.

Turing The problem till just now has been I cut myself when I shave and then I pass out which doesn't leave me in a good state for taking exams.

B'wood Shave.

(Exit Blackwood. Calls, off FAG!!)

Turing Do you not think Blackwood's probably just a machine? Cogs and wheels and so on?

Morcom You mean, without a soul? Surely not. There's got to be something after death.

Turing Maybe. Sooner or later we'll all find out.

(Morcom coughs blood into a handkerchief, violently.
Porgy removes handkerchief and escorts Morcom off.)

Porgy Don't look, young master, don't look or you'll faint!

(Enter Davis, a schoolteacher)

Davis You know about tuberculosis, and its perils, don't you Turing? Particularly dangerous in the internal organs. Lungs; risk of haemorrhaging, and so forth. Had another boy contract it last year. Wretched business. I'm afraid your friend Christopher Morcom had a considerable infection. He has now been summoned to the ethereal realms where I have no doubt there is rejoicing at his arrival. He was a very pure boy.

Turing Christopher, dead?

Davis Yes, it's a hard thing to face. But there's no going back on it. I understand you were friends with him, Turing.

Turing I would stay with him in the holidays.

Davis Ah, that's probably why his parents thought you should know, be told. His collapse was sudden but not unexpected medically. Even so, a frightful blow for the school right after he won that scholarship to Cambridge. I gather you only got a pass, is that right?

Turing He was a lot cleverer than me, sir.

Davis Morcom was a very thoughtful boy. We have to make the best of these experiences, Turing. What you should do is think of Morcom as a Christian example, walking beside you still, urging you on, encouraging you through this vale of tears, to greater effort. You yourself are quite ordinary, academically, but if you applied yourself, you might find that extraordinary things come.

Turing Yes, sir.

Davis Nothing is to be gained by slacking. Turing, when your housemaster told you about the facts of life, the birds and the bees, did he mention the perils of masturbation?

Turing Yes sir.

Davis When you leave the school, you may at Cambridge think that you're grown up and if you start, it won't stunt your development. But the practice is still perilous. Each erection drains the blood from the brain. Far from being manly, masturbation produces thoroughly undesirable effeminate characteristics. Masturbate, and you might end up an irreversible homosexual.

(Exit Davis. Lighting change. Enter Porgy)

Porgy You'll feel better when you've been for a run. Don't forget to stretch those calf tendons first.

Turing A run, Porgy?

(Porgy throws singlet and shorts at Turing who starts to change)

Porgy Yes! Get sporty! In the fens, you can discover the meditative calming of the mind that comes with determined endurance! Down from your rooms at Kings, through morning mists you go, with long lean flatfooted glide, over the cinder path beside the glassy waters of the Cam. And you run and you run and you run. And you think and you think and you think about life and love and loss and hyperboloids until the bud of singularity bursts into flower in your mind; the most luxuriant and rare fruits of pollinated numbers are seen to hang about your dissertation; your originality stirs and shows its beauty in barely more than a thousand days.

Davis (Enters. Address) It is not every day that I am able to relate at morning assembly that great honour has been paid to the school. Yesterday I received a communication from a senior faculty member of Cambridge University. Alan Turing, who some of you may remember, has been made a Fellow, of Kings College Cambridge. This achievement, one of the

youngest ever mathematics fellowships given, is a warm tribute to the teaching he received at Sherborne Public school. All classes after midday will be cancelled, for today will be a half-holiday, in celebration. Hip hip hooray!

(Cheers of whole school. Davis exits)

Porgy A suggestive little ditty is making its way round the school; "Turing must have done something alluring, to have been made a don, so early on."

Turing Do they really think you get made a Fellow by hawking your arse? Of course not.

(Porgy paces beside Turing who runs on the spot)

Porgy That's the spirit. Now, what's the *next* big idea, master?

Turing It's called a Universal Machine.

Porgy I say! That sounds pretty large.

Turing It's bigger than the universe.

Porgy The universe is a concept that embraces everything that is. So you're imagining an impossibility.

Turing It's a tool, Porgy, a useful device like the square root of minus one. Mathematicians have always done that, as a way forward.

Porgy This is getting far too interesting; you're slowing down. You're going to be late for your tutorial!

Turing I've left a note on the door. They can wait in my room.

Porgy Why don't you imagine a letter from your mother has just arrived. Here it is, just out of reach, in front of you.

Turing Very funny. There are god knows how many letters from my mother every week, and they usually end up unopened on the fire.

(Turing runs off. Enter two undergraduates, in gowns who arrange themselves as for a tutorial.)

Porgy Alright, don't think of your dear mother then, you unnatural creature. Is he expecting me to begin this tutorial for him? What a cheek!

(Porgy sits down with a book)

Und'grad1. What's he like? I heard he eats grass when he goes for a run.

Und'grad2. True, but he doesn't swallow it. He just spits it out down his front.

Und'grad1. Urgh!

Und'grad2 And he keeps his teddy bear in his rooms too. Weird!
(Prods bear)

Porgy Careful how you poke!

Und'grad1 Makes your average nutty mathematics professor look positively normal.

Porgy Oy! Leave my ears alone. And don't try to push your chubby finger up me I'll have you rusticated and then tarred and feathered! One word to Master is all it takes. Settle down!

Und'grad1 What's the bear reading?

Und'grad2. (looks) Principia Mathematica, by Bertrand Russell.

Porgy Yes indeed. My dear students, this noble tome attempts to establish the logical truth of mathematics. It was written before the Great War and we now know it is impossible to establish the logical truth of mathematics. So you could say I am reading it in some disappointment. Bertie Russell got it wrong, simple as that.

(Enter Turing with a grass-and slobber stained singlet and running shorts, panting.)

Porgy Indeed, reading between the lines of the equations, you might say the book is actually a surrender note to mathematics, from a hopelessly randy professor, whose thoughts were elsewhere.

Undgrad1 (To Turing) Do you think Lord Bertrand Russell is excessive in his logical approach sir?

Porgy Not so much excessive as excessively deficient. He was banging Tom Eliot's poor mad wife so much the old goat would have shot what grey matter he had, off through his pecker.

(Turing takes over smoothly)

Turing Thank you, bear. (To Undergrads) It's become clear to the next generation of mathematicians, that mathematics is no longer classical or logical. The stuff used to build bombs and bridges with turns out to be unpredictable or ambiguous. Sometimes it stops, and won't go on. Maths is incomplete.

Porgy You're surely not planning to give this tutorial looking as if a camel has been sick down your front?

Turing (Turing removes singlet.) I was lucky enough to come across a clump of the herb called fat hen while I was running, which has got huge amounts of vitamin C in it; But when you're in movement, you see, there's not point in taking on board too much cellulose.

Porgy I've got an idea. Take off all your clothes and deliver your talk standing on the weighing machine. They'll never forget it.

Turing Would you like to take over the tutorial, bear?

Porgy I will, but can they hear me? Being inanimate myself, I have arrived at rather different conclusions to my master on higher maths. For instance, the Universal Machine is a useless theory.

Turing What is theoretically possible, can become possible. Drake worked out it was possible to sail round the world, in theory. Then he went ahead and did it.

Porgy A flat world is impossible, a round world is possible. The Universal machine is impossible. Because if you had something that is bigger than the universe you started with, then as soon as you have that, you'd have to start your calculations of size all over again to

include the Universal Machine, and so on ad infinitum. Do put some clothes on. None of them are impressed with your flat-earth theories.

Und'grad1 Sir, We've got another tutorial we have to go to now.

Turing Gosh, is that the time? Very quickly, then. I shall summarise. Given that there is a mathematical equivalent for any action, the universal machine is a notional calculator which breaks down all actions into binary code. It is a computer.

Und'grad1 I thought a computer was a person who worked out mathematical problems.

Turing A person, or a thing. It's all the same.

Und'grad2 What does the Universal Machine make of the *Entschheidungsproblem*?

Turing Are you all familiar with the *Entschheidungsproblem*? The philosophical problem of mathematical endings, unforeseen by Russell and Whitehead!

Porgy You can't hope to explain that in minus five minutes. They're already looking at you like a bunch of electrocuted sheep.

Turing What happens when a powerful computer comes to something incomputable? Certain mathematical formula are incomputable. The Universal Machine, having infinite resources, is able to shadow all the tasks that mathematics supports the real world with. So it is a model of reality, albeit a larger one.

(Undergrads move to the door)

Turing If you want to talk more, come back after dinner, tonight. We don't have to talk about maths. Anyone of you go to the cinema much? There's a marvellous Hollywood full length cartoon on this week. I must have seen Snow White and the Seven Dwarves half a dozen times. The best bit is when the wicked witch takes an apple, and dips it in a cauldron of poison for Snow White. "Dip the apple in the brew, Let the sleeping death seep through."

(Undergraduates exit as Turing becomes taken up with acting the eating of a poisoned apple.)

Turing "Dip the apple in the brew, Let the sleeping death seep through. Dip the apple in the brew, Let the sleeping death seep through!"

(Turing pretends to die.)

Porgy O Master, do nothing lightly, or presumptive here! At twenty seven, I know you think you'll live for ever, but all too soon you will encounter that interface with the Eternal, where even computation stops!

Turing Who gives a shit on your take on mortality, Porgy? Push your entertainment button now. (Pause) Do it! Or I'll put you away! In the cupboard with you. Go on.

Porgy Doctor Hamlet, of your blushing student courtiers here just now, which caught your eye? Rosencranz or honest Guildenstern?

Turing You know I find Shakespeare indigestible.

Porgy There's plenty of others. If you want accessible classics, try Tolstoy; an easy read. War and Peace for the big picture of history; or Anna Karenina; full of self loathing, putting her head on the railway line. Surely that would strike a chord? What I'm saying, master is, it's time to stop listening to BBC younger listeners' children's radio series like "Larry the Lamb in Toytown" with your mother at the other end of the phone. (Imitates, bleatingly) "La-rry the L-amb, stuck on the roof of the To-o-own Haa-a-all!"

Turing Mother and I both happen to like "Larry the Lamb in Toytown"! And listening at the end of the phone with mother is a whole lot quicker than going home and having to put up with the old bat's tittletattle!

(Enter a man in brown suit and mackintosh)

Porgy (Announcing arrival) Knock-knock.

Turing Come!

Man (Advances) Doctor Alan Turing?

Turing Who are you? (Pause)

Porgy See the way his eyes shifted ? He didn't like being asked that, master.

Turing The mice are in the bedroom. (Pause)

Man What mice?

Porgy Actually, I wish he was from rodent control, what with the liberties the mice are taking with my rear end. They're everywhere.

Turing (To Man) I was going to buy a pistol and get some practice.

Porgy No guns allowed in Fellow's rooms! They'll also suspend you if they find a stray condom!

Turing (To man) Are you going to use poison?

Man On what?

Turing You are the ratcatcher, aren't you?

Man Only Nazi rats. Doctor Turing, I'm from the Special Intelligence Services. Can I ask you some questions?

Porgy Psst! Master! He is here to initiate your destiny of heroic cloak and dagger !

Man Have you ever been a member of the communist party?

Turing Marx's claim to a scientific and mathematical analysis of human behaviour are poppycock.

Man I take that is a 'no'. Would you be prepared to fight for your king and country?

Turing Under what circumstances?

Man Circumstances of war, naturally.

Turing If there is a war, I'll fight.

- Porgy Of course he will. For god's sake man, the Oxford Union debate sneered at defence of King and country, but Cambridge men are made of sterner stuff than straw!
- Man Someone will be in touch. (Exits)
- Porgy "God for Harry, England and Saint George!" I do however foresee a problem. You don't like signing forms do you?
- Turing What's that got to do with anything?
- Porgy You'll have to sign the Official Secrets act. You won't be able to talk about what you do. Ever. Quoth the raven, nevermore.
- Turing I can keep a secret, Porgy.
- Porgy But what if the secret becomes so big, that instead of you keeping the secret, the secret starts keeping you?
- Turing You're not making sense, any more, Porgy.
- Porgy I'm making perfect sense. My programming is impeccable.

(Fast fade. Sound; *Horst Wessel*, distant, growing. Train effects, chuffing and smoke, out of which Dilly Knox emerges, a tall suited elegant figure with a stick, in a soutane. Fade *Horst Wessel*)

- Knox We meet again, Doctor Turing.
- Turing (Recognition) Dilly Knox! I thought you were on sick leave! What are you doing here?
- Knox My duty. In these dark days before the conflict with Germany, our fighting ships lack armour and our allies have aeroplanes largely made of cardboard and string. I hope you don't think this little assignment beneath you. It could turn out to be vital.
- Turing What are we meant to be doing?
- Knox Did no one tell you what our mission was to be? How shameful. Here you are, King's College's pride and

principal calculator, probably the only Englishman to hold a candle to Isaac Newton, and Special Intelligence won't even let you know we're going to Poland.

(Dilly Knox gives Turing a soutane. Turing changes into it.)

Knox I've got a new passport for you.

Turing Am I not travelling under my own name?

Knox We can't give German intelligence the chance of learning that the author of 'Computable Numbers' went to Warsaw. It could give the whole game away. You are Father Thomas Bowdler; Easy to remember. Bowdler, the englishman who cut the nuts off Shakespeare. Not heard of him? Never mind. We're going to have to break the German military codes consistently and fast if we're going to survive, and that means getting hold of a machine. The Poles know Germany is poised to pounce so they have provided us with a number of leads. We meet our source tomorrow at dawn, on the banks of the Vistula. Of course, the British will naturally hog all the credit for whatever transpires.

(Blackout. Distant splashing noises, continuous)

Knox It feels exceeding cold. Are you there, Father Bowdler? Not long now. Our contact Rejewski is an ex-professor of mathematics, and will have read all your stuff, but don't blow your cover. Just check he can come up with the goods. He's asking so much we can't afford even one mistake.

Turing Is it alright for us to speak in English?

(Grow light slowly to show Knox with rosary, and Turing.)

Knox I don't see why not. My brother the monsignor speaks English all the time. I borrowed these from him; reduces expenses.

Turing Where's our contact coming from?

Knox The Jewish quarter, I expect.

Turing Where's that?

Knox Behind you. Don't turn round.

Turing Is it not risky for Catholic priests to meet up with Jews?

Knox Dammit! You're probably right, come to think of it. Just have to keep your nerve. In the first world war, I used to meet agents in Bruges. That was far less risky. And I still got butterflies. The expenses were never questioned, in those days too. Did I not give you a rosary? Stupid of me. Do you want a nip of cherry brandy?

Turing No thanks.

Knox I must be nervous because this morning it was the only thing that stayed down. How were your hosts?

Turing They insisted I took the marital bed.

Knox How hospitable. I slept alone, in a chair without any offers at all. (Pause) Might as well say this now. For the future, they're in pulling a lot of people to set up a decryption school. It will be less glamorous than this line of foreign work. Would you be at all interested? The college will keep the fellowship open, of course.

Turing Of course I would be.

Knox Here he comes. You can talk to him, I'll count my Joyful Mysteries.

(Enter Rejewski, a pole. Knox keeps watch.)

Rejewski I want ten thousand livres sterling paid to a Paris account. I can deliver.

(Rejewski gives Turing sheaf of drawings)

Rejewski You should be quick because in ten minutes they know I am gone from my apartment. I can build you cypher machine in France in three months but you get me apartment there, too.

Turing Do the initial ring settings use the alphabet sequence?

Rejewski Yeah. They missed a trick. Right! It's based on a commercial coder. Which is a good machine but you know, they could have made a better. You see they have a two number twinning system on stecker board. Also there is room for further encryption wheels. But already they think it's unbreakable. So in the factory, they don't bother, yet.

Turing Can I consult with my colleague?

Rejewski Go ahead, Father.

Turing (to Knox) It looks ok. He wants ten thousand, and a flat in Paris.

Rejewski There's someone coming.

Knox (to Rejewski) We agree, Professor. Contact the British Embassy in Paris. Have a safe journey. (to Turing) Let's saunter.

(Exit Rejewski)

Turing Was that alright, then?

Knox I'll get into hot water for going over budget, but it could save our bacon, if he really can replicate the original. Let's hope Rejewski makes it to France.

(Exit Knox, Turing. Lighting change, to Christmassy. Enter Turing Senior, followed by Porgy dressed as an Xmas tree, followed by Mrs T who dresses Porgy with paper chains etc. "Silent Night" instrumental.)

TuringSr Look at the time! The bird's probably spoiled already. We should start without Alan.

MrsT Did he tell you, his name is going to be in a *German* encyclopedia?

TuringSr Well, Hitler's going to dictate what's written in *all* our encyclopedias before long.

Mrs T I hope he hasn't forgotten it's Christmas.

TuringSr I don't see why anyone should remember. Christmas is a bloody waste of money nowadays.

Mrs T If only his manners were better!

TuringSr They're never going to improve till he notices that other people exist.

MrsT You're the head of the household, you speak to him!

Porgy (Sings) "*Stille Nacht*
Heilige Nacht
Alls is....."

(Smoke effects, growing. Enter Turing.)

Mrs T Alan, clean your nails. We're about to eat.

Turing Honestly, you'd think I had poison underneath them.

MrsT You do! John says you were always messing with cyanide, in your bedroom.

Turing I'm less worried about my nails than who is going to win the war.

MrsT Alan, you haven't given us any way of getting hold of you.....your college says you're not at Cambridge any more?

Turing That's correct, as far as it goes.

Mrs T Oh Alan! Have you done something wrong? Have you been found out?

Turing On the contrary. There were trivial faults in my thesis, corrected in the reprint. I feel my position in the field of mathematics is now assured. Mother, I can smell burning.

MrsT Why didn't you call to say you would be late?

Turing I don't have a phone on my bike, and if I'd stopped to call I'd have been even later. Did I tell you I've been sponsoring a refugee?

TuringSr What kind of refugee?

- Turing An Austrian boy. I'm paying for his schooling, in England.
- Mrs T What is his religion?
- Turing Jewish.
- MrsT How old is he?
- Turing He was fifteen when he got here. He's sixteen now.
- TuringSr Alan is this wise?
- Turing Someone has to help.
- TuringSr People will conclude he's buying a bumboy.
- MrsT (Shocked) Julius! What did you say? Alan isn't.....
- TuringSr Dons in my day couldn't afford to get married.
- Turing I can afford to get married if I want to, thank you, father.
- Mrs T (to Turing Sr) Julius—I can smell something.
- TuringSr I'm not surprised. I can't see the other side of the dining room. The fire extinguisher's behind the kitchen door. Put the carcass in the dustbin, quickly!
- (Exit Mrs T. Glitterball. Enter Joan, naked. Numbers are projected onto her skin from all over, by Porgy and others, so her skin is a shifting field of numerals. Turing Senior plays with his pipe, and views her admiringly)
- Turing Who else is invited to dinner, father? It seems we are not alone.
- TuringSr You mentioned your readiness for marriage, son and now, Christ's glorious natal day brings the gift of spirit clothed in flesh. Fear not. We know little of these things, but she is of such beauty, she must be heaven-sent.
- Turing You're quite an attractive girl. What's your name?

Turing Sr This fresh-hewn innocent will not yet have learnt what she should answer to, on the plane of the mundane. Let civil manners be your guide, and lay another place. Turn around, spirit, garmenting in flesh now, if you would. (Joan twirls) If ever there was a vessel for the Turing seed, Alan, those trim haunches and a spangled bush promise well. Will you not speak, Alan? I see I must ask for you!

(Porgy enters and helps Joan dress. She complies, doll-like.)

Turing Sr Spirit becoming flesh, are you to be handfasted with my son, till death do you both part?

(Porgy can provide her lines at first, as she mimes them, Echo effects.)

Joan “We do not know. In the timeless realms from which I come we cannot say moment upon moment, what is to come upon the earth.”

TuringSr Let me tell you about my son, your prospective husband. He’s a strange boy. He makes no distinction between living things and machines. Never has done! In India, before the great war, you could get little puff-puff steamboats for less than a rupee. I brought one back to England for Alan, and showed him how it worked. I filled the bath and I lit the little methalated spirits burner. When the boat started Alan danced round the tub, shouting, ‘It’s alive!’ (chuckles) What’s your opinion? Couldja live with him?

Joan All is animate to some degree, for all comes from the Great Mind of God. All his deathless Thoughts are we.

TuringSr Yes but if I am only one of god’s thoughts, he’s not likely to let me off on my own, is he? Freewill goes out the window.

(Enter Mrs T)

MrsT The turkey was charred to its drumsticks. What a waste!

TuringSr On the contrary. It has been a sacrifice to the gods, and look what the burnt-sacrifice has called forth!

She has intimated she might be Alan's future bride, darling.

Mrs T Did Alan bring her? Who is this?

TuringSr She's just materialised, so as yet, like some newborn babe, she has no name. No matter.

MrsT Oh Alan, why didn't you tell me there would be one more? There aren't enough crackers to go round.

TuringSr Crackers be damned. Modesty forbids we stay to witness more. I go shortly to my shroud under shade of ancient yews, and I say, let Christmas dissolve, and never come again. There will be Turings now, forever, planting their footprints as ours fade, in the sweet bye-and-bye. Come, leave them to their courting, wife.

(Exit Turing Senior drawing Mrs T by the hand. Porgy helps Joan get dressed.)

Porgy Only very very best blackmarket stockings for these pretty legs.

Joan What a helpful bear! (Joan laughs)

Porgy No 'bear behind' jokes now, please, madam.

Joan Alright but your fur tickles, bear.

Porgy I allow master to call me generically only because I have been in service with him since his extreme youth. My name is Porgy, to you, madam, if you wouldn't mind. Porgy, at your everlasting service. I understand you may be a future dweller in the Turing-uh residence.

Joan Maybe. Which end of the ballroom does your Master really dance, Porgy?

Porgy I'm afraid I have not had the privilege of accompanying Doctor Turing to such entertainment as you mention, Modom. Us below stairs 'as to stay behind and polish the fishknives.

Turing I rather like her Porgy, what's she called?

- Porgy Nothing, for the moment. Call her Madam.
- Joan You're right. I don't have a name!
- Porgy It's not that bad. Before I came into service, I spent several anonymous months upside down. In a box. In the dark, with only fear for company.
- Joan (Alarmed) I see I am naked among strangers! Who am I, bear?
- Porgy A being newly risen from the eternal, just as the the goddess of love, Venus- Aphrodite, rose from ocean spume at the exact moment when the world was ready.
- Joan We are in this time of budding love; tell me, why should I be with this man, and not another?
- Porgy We shall discover due cause madam, presently. (To Turing) Take her hand.
- (Joan, dressed, glamorous. Lighting change. She shakes hands with Turing.)
- Joan Doctor Turing, I've been assigned to you. Dilly Knox told me to report to Hut 6. I was meant to be here earlier but the train was held up.
- Turing Can Venus-Aphrodite play chess?
- Porgy She's good enough to wipe the floor with you.
- Turing What's your name?
- Joan My name? (Pause)
- Porgy Her computer's jammed. Look's like we've got an *Entscheidungssproblem*, Doctor. I wish I could help, but as the twelve days of Christmas is over the decorations have got to go and take themselves down. (Exit Porgy.)
- Joan My name is..... Joan. I've been signed in as a linguist. Dilly says they get paid more than number crunchers. But I'm best at codes. Dilly Knox weaned me from my

tripos. He said I'd be working with you.

Turing Dilly said you were even cleverer than your brother in the Foreign office.

Joan Maybe. It looks pretty chaotic round here. Where do I start?

Turing The next shift. We still have only about a quarter of the trained personnel we need.

Joan But I thought Churchill had promised to unblock supplies.

Porgy (Passing through) Oyes, oyez. Anyone who sees the Hut 6 teapot will get a free cuppa and a dried egg coupon! Remember theft or concealment of a War Office teapot constitutes a courtmartial event!

(Exit Porgy)

Joan I'm amazed that Dilly is still alive. What spirit!

Turing He plans to take as many Germans with him as possible. (A distant cheer)

Joan Gosh, has someone sunk a Uboat?

Turing You never know what's going on. Probably a silly.

Joan What's a silly?

Turing Something stupid, like a German operators' repeat formula, nothing dramatic. It's always inch by inch, till we get the code settings for the day. If we had another several thousand people working with ant-like efficiency, we'd be fine. Would you like to come to the woods with me this weekend?

Joan Not with carnal intent so soon, I hope?

Turing You're going to help me bury some treasure.

(Lighting change: Enter Porgy . He gives Joan and Turing a silver ingot each to carry.)

Turing About here, I think. Close enough to the river.

- Joan Did you know Ludwig Wittgenstein, at Kings?
- Turing Oh yes. Weird fellow. He had a brother who killed himself. He went to a bar in Berlin, and got the musicians to play while he drank cyanide. He left a note to his parents, apologising for being a pervert. Apparently cyanide isn't at all painful, for some people.
- Joan When you say someone's "weird", does that mean Wittgenstein is a pansy?
- Turing I don't know what he does.
- Joan What about you?
- Turing I have tendencies. But I haven't ruled out women completely, you know.
- Porgy I say master! You've chosen an ancient votive spot to bury your loot! The ancestors have been digging holes or chucking things in the river here for several millenia! What a coincidence, eh?
- Joan Why do you want to bury these silver bricks? Why not keep them somewhere safe?
- Turing Whenever the Germans have invaded a country, one of the first things they do is freeze the banking system. So I turned my savings into silver bullion which tripled in value during the first world war.
- Porgy Hold, Master! Precious metals, once buried here should not be retrieved. Eight hundred years ago, a Knight of the fabulously wealthy international Knights Templars order was watering his horse downriver, by Watling street, when his eye was caught by a yellow glitter in the mud. He drew out a chased gold carousing cup, which had been consecrated to the gods in this very grove. But when he took it for his own, the gods had not just him but the whole of the Knights Templar movement arrested and burnt at the stake. Terrible!
- (Porgy takes the silver ingots)
- Porgy Now the silver is buried deep, with turves of hazel

and beech leaf mould on top!

Turing (To Joan) You will always be able to come and get it, in the event I'm killed resisting the German invasion.

Joan But Alan, there's a fleet of buses in the carpark at Bletchley with drivers, ready to take everyone to Liverpool at half an hour's notice.

Turing I've signed up with the Home Guard, so I can learn to shoot.

Joan They wouldn't let you of all people stay behind.

Turing I'm not in the army, so I don't take orders. I'm pretty fit, I already know quite a lot about what kind of things you can eat, living off the land. Maybe you'd like to consider joining me?

Joan It's a very sweet thought. Thank you for a lovely summer outing. I hope it's not the only one we have together.

(Joan kisses Turing.)

Turing If we got engaged, Joan, would you wear your ring in the office?

Joan No, but I'd want to wear it when we go to see your mother, though.

(She breaks and exits. Enter an army sergeant, with a shot-out rifle target.)

Sergeant And what's all this, then? 'Ow many rounds did I say? Five. Five, Turin'. Learn to count! Private Turin'!
(Holds up hand) 'Ow many fingers am I holding up?

Turing If you look, I've shot out the bull.

Sergeant You've used up all the bloody ammo issued for the 'ole platoon, Turin' for the nex' Munf! If the Germans invade we might just as well all put our hands up.
(Exit.)

Turing It's 'Turing' as in Turin-guh, sergeant, not as in the Turin Shroud.

(Enter Joan. Scene change, the busy hum of Bletchley behind, Porgy carrying teapot in the background, others with files.)

Porgy We have found the teapot! *Nous avons trouvé la Théière!*

Joan We're busy bees tonight! I think I've finally understood why you chain your mug to the radiator. Why are so many bombs being run on lowgrade embassy traffic?

Turing The capacity has increased. Did Gordon Welchman tell you about his breakthrough?

Porgy I repeat, We have found the teapot! First man to find the Bismark gets unlimited tea!

Turing If you reconnect the scramblers on the bombs his way it accelerates the capacity for automatic testing and cuts out three closed loops. We're calling it The Welchman manouvre. The bombs were converted by the machine room, this afternoon.

Joan I hope he's rewarded by a grateful nation. It sounds like he's done his bit to win the war. Alan, what do I do? I've got a literal for dispatch to Dilly's house and all the riders are on other calls. What's the form?

Turing I thought Dilly was too ill to work.

Joan They must be desperate. It's marked top priority.

Turing Leave the file with me.

Joan You shouldn't work on them yourself.

Turing I'm not going to.

(Porgy gives Turing his running shorts and singlet. He changes in front of Joan.)

Turing I'll run across the fields. I've done it before, in daylight.

Joan What about your hay fever? You've been wheezing like a grampus.

(Porgy hands him a gas mask.)

Turing Pollen filter. When are you off shift?

Joan Midnight.

Turing Want to play some sleepy chess then?

Joan Sure.

Turing Then send a rider to Dilly's house, at ten, to pick up my body.

(She kisses his gasmask. He pushes her away.)

Joan For God's sake! No one's looking.

(Exit Joan. Enter Dilly Knox in dressing gown with Irish nurse. Turing running on the spot in his gas mask.)

Dilly Doctor Turing is arriving shortly, Finoughla.

Nurse Get into bed. You're not to be woken surely, now? What's a doctor doing, calling at this late hour?

Knox Show him up as soon as he comes.

Nurse You'll never get well again if you carry on like this. You don't have the strength.

Knox You die for your country, I'll die for mine, Finoughla.
Dulce et decorum est, pro patria mori.

(Exit nurse.)

Porgy It's Nineteen hundred hours GMT on the eighteenth of May 1941. The country stands horrifically alone, its fate again in the balance. Every computing bombe in Bletchley revolves, clicking uselessly, like knitting needles impotent to stop the unravelling disaster. The great grey seawolf Bismark, a third of a mile long, decked with a foot of armour plate has just sunk the Navy's only battleship which could return an equal weight of ordnance. Now the Bismark lords it over the North Atlantic. The one clue to the Bismark's whereabouts, an inscrutable sequence of letters in

the file in Doctor Turing's none too clean hands. Lose this battle of the Atlantic, and lose the war. Nineteen thirty hours. Run, Alan, run, as if to catch the sinking sun! The night is coming down. Over another fivebar gate, hop, and into the wood, down an ever darker lane which narrows to a path. It is getting late. Faster! Twenty one hundred hours. Elohim; from our hero's way clear nettles, brambles, treacherous roots and stones; reach down to the son of man, and tie the tails of Phoebus' horses to his belt; so each foot's forward swoop can then become noble as Foucault's pendulum, which by some higher law ignores the spinning of bright day into abhorred night. He's almost there! Twenty two hundred hours, three minutes fifteen seconds. The race is done, the marathon is won!

(Turing tears off gasmask, panting and gasping and choking. He gives Knox the folder.)

Knox Well?

Turing (Finally) The Bismark gave the cruisers shadowing her the slip. They're busting a gut at Bletchley but we're no further on than we were last week. These are the partial decrypts.

Knox Good of you to bring them, Alan. Downing Street called and said it couldn't be worse. Can't they fix her position using signals to her supply ships?

Turing All but one were sunk by the RAF before anyone could haul 'em off.

Knox Typical. The Raff's always a bloody law unto itself. Suppose the Bismark has been heading up the channel to get under German aircover, how long would we have from, say, midnight tonight?

Turing From the last reported positions, around a day and a half.

Knox Thirty six hours tops, to sink a battleship. Blimey O'Reilly! Alright, leave it with me.

(Knox exits. Lighting change. Turing stays. Joan enters, in a night dress,)

- Joan Your king's in trouble. Nowhere to go. Do you surrender?
- Turing What about King to queen's knight three?
- Joan You could, but it's going to be checkmate in three moves. (Pause) If you don't want another game, I'm going to paint my toenails. (Pause) Why not stay here on the put-you-up? There's enough water for a bath. The bathroom's through there. You're limping! Are you alright?
- Turing Both legs are bloody agony.
- Joan I should give you a rub. (She massages Turing's leg.) It would be easier if you were lying down.
- Turing It's alright, I just need to take the weight off it.
- Joan I mean easier for me. How was Dilly?
- Turing I didn't ask. (Pause) I have a confession. You know when we broke the engagement off. I said my mother had a dream about not liking you.
- Joan Yes, and it was only a dream because in reality, when we met, she did like me.
- Turing I know, I know. I made it up. About my mother's dream.
- Joan You mean you lied to me?
- Turing Can you forgive me? I didn't want you to be hurt later on.
- Joan Hurt by what?
- Turing There are things that nobody should have to share. For you to be married to someone, that someone needs to be more comfortable with existence than me.

(Turing exits. Sound of bath running. Joan mimes putting on a radio, then wedges real cotton wool between her toes. Silence. Radio takes several seconds to warm up, then suddenly it's "Chattanooga Choochoo" loud. Joan turns it down. It continues softly Porgy enters)

Porgy To-wit, to-woo!

Joan Who's there?

(Porgy mimes turning the radio off. Silence.)

Porgy It's more like "*What* is there?" My stuffing may be of straw, but I am free to visit anywhere, when my master's attention is distracted. Right now, he's fallen asleep in the bath. Would you like to see a dream he's having? Since it is his dream, you must give me your word you won't interfere.

Joan Alright, bear. What sort of dream is it?

Porgy Remember you once said to Alan that a Catholic does not change, except through self-immolation? Well this is an immolation dream.

Joan I suppose you must listen in on all our most intimate exchanges, bear. What is he going to be punishing himself about?

Porgy Something very bad. He lied to you about a dream his mother never had.

Joan But he told me about that, and I've forgiven him.

Porgy For some, forgiveness is not enough. Hush now. It's starting.

(Sounds of marching feet on gravel, loud. A call of "Halt")
A sound of smashing doors, and a scream.
Enter Sergeant, rambunctious, pulling on stage a naked dripping Turing, who keeps falling to the floor and being kicked. Lighting change.)

Sergeant Private Turin! On yer feet, Turin', yer under military arrest for missing seventy five Home Guard parades!

Turing Let me explain.

Sergeant When you are called on parade it is your duty under military law, as a soldier to attend!

(Turing stands, and is kicked down every time he stands.)

Blood on his body.)

Turing I am not a soldier. If you look in your filing cabinet you will see I was never enrolled under military law because I didn't sign the form, see?

Sergeant If you're not a soldier, then what are you?

Turing Look at the front page of any paper today.

(Sergeant takes paper from back pocket, suspiciously)

Sergeant (Reads) "Bismark Sinks. The Prime Minister announced to a jubilant house of Commons last night that the Bismark had been sunk. Germany's largest battleship had been detected in the English Channel at first light, and immediately attacked by Swordfish planes of the Ark Royal and Coastal Command. A torpedo struck her rudder, so she she could only steer toward the closing British fleet. By 10.40 am, Germany's pride was a flaming smoking ruin, which turned turtle and sank beneath the waves. Her crew of two thousand were said to have perished." (Pause) I don't read your name here, anywhere, Private Turin'. Are you claiming personal credit?

Turing I can't tell you. That's the law of the land. And my universal machine does not parse or compute your childish universe! I am not a soldier! Get it into your fat khaki head that your regulations do not apply to me!

(Sergeant Seizes Turing. A struggle)

Sergeant (Pause) Alright, sunny Jim. No more games. Let's be having you. Off to the glasshouse! At the double, prisoner! Left-right-left-right-left-right!

Joan Leave him alone! He's a genius!

(Porgy restrains Joan who tows them both off, following Sergeant and Turing. End Act 1)

Act 2

(Porgy holding medal on ribbon. Enter Turing in running gear. An alarm clock round his waist tied with string. A bowl of fruit beside Knox, in bed)

Porgy It's not fair, poor old Dilly is so far gone he has to be decorated at home! But then, life's not fair. And what's he's getting, about to cross Jordan? "Set upon a white enamel cross, with fourteen points, edged with gold. In the middle a raised picture of a saint, spearing a Satan." Do you know, Master, this medal was originally struck to reward citizens of Malta, who were active in torching the local Knights Templar? Remember I told you about the disaster that befell the whole Order after a Knight carried away a pagan votive cup, by Watling Street? Let Dilly's gong be your gypsy's warning. Don't ever try to dig that silver up again.

(Porgy puts on a top hat and steps forward to hang medal on Knox's neck.)

Porgy Alfred Dillwyn Knox, His Royal Majesty George the Sixth, by the grace of God Emperor of India, Monarch of the United Kingdom desires me to invest you with this Order of Saint Michael and Saint George. God save the King!

(Porgy salutes and exits on tiptoe. Turing goes forward and examines medal.)

Knox (loud) I'm not dying till we take Berlin! (Turing jumps back. Knox opens eyes.) I've decided. Good of you to come, Alan.

Turing I was examining your decoration.

Knox It's awarded to those who have performed important non-military service in a foreign country. They should give you the same.

(Turing's alarm clock goes off. He silences it. Knox laughs)

Turing I was timing myself.

Knox Remember to take your alarm clock off, when you

- are summoned to the Palace.
- Turing I've been rewarded already. Welchman and I were told to go to the Foreign Office and were given two thousand each, in brown envelopes. Cash.
- Knox Money's no use to a dying man. Much better for you, to get the money! You can buy a little cottage now, for you and Joan.
- Turing It didn't work out with Joan.
- Knox Sorry to hear that. What will you do?
- Turing There's no petrol, so it's a waste of time buying a car. I've buried it for now.
- Knox I hope you're able to find the hole again.
- Turing I don't think I've been this close to a banana for three years. They're full of potassium, aren't they?
- Knox They sit there, reproaching me! God knows how many merchant seamen perished to get them here. Eat up. (Pause. Turing guzzles a banana) D'you remember when we started, the locals assembled the wirings for bombes on trestle tables in all the village halls in a ten mile radius? They never asked what they were doing. Just did it.
- Turing The Women's Institute held the record for fault free soldering.
- Knox I wonder what Hitler would have said if he knew he had been halted by floral hatted ladies from Fenney Stratford, as Bletchley used to be called. I rather prefer the old name. They shouldn't have changed it, it's bad luck. How is the clicking bombe business?
- Turing Four thousand termites on the site, and more arriving every day. One gets progressively marginalised, by the sheer amount of information processed. Some engineers have put together what they call a Colossus, using radio valves, which uses punched tape to programme. Very badly.
- Knox Not one of your designs, I take it.

- Turing I tried to talk to them about flexible programming but they couldn't understand. I'm going to New York next week to look at what Bell Telephones are trying to do.
- Knox Can't they bring what they've got over here and show you here?
- Turing It's too big to travel. It won't fit on a ship of under ten thousand tons.
- Knox Sounds like you're risking your life for a sodding white elephant.
- Turing It's part of an arrangement to share intelligence. The Yanks have sent a twenty man team to look at Bletchley.
- Knox Keep your life jacket handy. As soon as they build a ship now, up pops a uboat and bloody parks it on the floor of the Atlantic.
- Turing It's alright. The Queen Elizabeth's top speed is two knots faster than a Uboat.
- Knox (Pause) I think I need a nap, if you don't mind. (Holds out his hand. Turing takes it.)
- Turing I'll be alright.
- Knox Godspeed.

(Fast fade as song commences.)

All *Eternal Father, strong to save
Whose arm dost still the restless wave
And bid the mighty ocean deep
Its own appointed limits keep,
Oh hear us when we pray to thee
For those in peril on the sea*

(Sea noises, seguing to electronic effects.)

Voice (Electronic, garbled) Gree-tings from all at Bell Telephone to Doctor Alan Turing of the British Code

and Cypher school. We hope you enjoy your stay here in Noo Yawk. This is a demonstration of a transmission device which will be completely(The voice is replaced by a hiss.)

(Lights. Cornish, an American Bell official and Turing)

Cornish Doctor Turing, we need to have a serious talk. I hope we can work together so Bell Telephones is able to support the American war effort. We've let you into every department in the place. The bottom line is, you just don't realise how important it is to interact with people. The American officers who went to Bletchley went on a course. To learn how to deal with British people. You're not coming across. Are you able to reprogramme without going on a course? It's to do with really little teeny things you probably just haven't thought of. Like saying 'hi' back. to people when they greet you?

Turing (Sneer) 'Hi'? I wouldn't say 'Hi'!

Cornish Alright, then, say 'hello'. It's just a suggestion, Doctor Turing. Just try saying it more.

Turing Look, when I get up in the morning, I'm usually thinking. The prospect of repetitiously saying 'hello, hello, hello' like some clockwork clown is wasteful and ridiculous.

Cornish Ok. I'll tell them you're thinking.

Turing Do I have to spend all day saying 'hello' to morons in suits who don't have the motivation to put a code machine together that's smaller than Alaska? You could have won the war already with what you have if it was assembled correctly!

Cornish That's a very frank assessment. We're looking at thirty kilowatts power requirement, for twenty two hundred cubic yards of equipment. That's in eight large airconditioned rooms for our secure transmitting unit. And Bell will be making available at least one of these units for exclusive use of your government.

Turing I'm sure that will be handy, but if it's going to play a real part in the war, it's going to have to slim down.

Cornish We're not going to go down that road. You're looking at ten, fifteen years development before we can get mobile field units. Have you any idea what that would cost?

Turing No.

Cornish I hope it's all been useful. Have a good trip home, Doctor Turing. (Handshake.)

Cornish Is it true you're constructing something with a human-sized brain in England?

Turing The goal is not so much a brain as self-directed intelligence.

Cornish Could this be a super-brain?

Turing It doesn't have to be at all bright. Something along the lines of the brain of the chairman of Bell Telephones would do fine for now.

(Enter Porgy with a bellhop hat. Exit Cornish)

Porgy Telegram for Doctor Turing. (Turing takes telegram)

Turing "Dilly Knox passed away peacefully today, love Joan."

Porgy Come on, you can't go and snivel through your last night here. Time to end years of deprivation. Surely I can contrive something on your last night in Manhattan. We need a low dive. This way, Master.
(Lighting change to street scene)

Turing (Tries various greetings) Hi.
Hi!
Hi.
Hi. (Pause)

Porgy Don't waste your greetings on the Broadway crowd, master, an encounter is in hand. Come with me.

(Barman changing into drag. Porgy brings Turing to him.
Other men changing into drag)

- Porgy A highball for my friend, three for me. You got some very foxy ladies in here. What a swell party this could be. (to man, stuffing his bosom) You're stacked! I said, you're stacked! Hey, I'm talking to you, sugar tits! Are you deaf to compliments? Should I turn up the volume? Don't freeze me out. Don't look away. Nothing's happening over there. It's just Wyoming. Am I invisible? (The man in drag ignores Porgy)
- Barman (To Porgy) Excuse me sir. Maybe you should go sleep it off. Tonight's cabaret is by invitation only.
- Porgy Cabaret? You mean, they are not what I think? Oh no! I'll never live this down. Have I been saying all that stuff to a man?? I'll go and drown myself for shame!
- Barman Your friend can stay. I kinda like the way he fills his suit.
- Porgy Of course! You're on, Master. (To barkeep) I'll go now. I'm sorry. I'm sorry. (Exits)
- Barman (To Turing) In New York long?
- Turing I'm leaving tomorrow.
- Barman What'ya doing here?
- Turing I'm a travelling salesman.....Paint brushes.
- Barman Been out West yet?
- Turing No. Geography bores me.
- Barman Bud Tate. Hi. Here's my phone number.
(Barman takes telegram and writes on it)
- Turing Well, Bud Tate, thank you. I don't know exactly what I'm going to do with it. But if you add the prefix to the suffix you get a very handy prime number.
- Barman What's your name again?
- TuringChristopher.

- Barman You like movies? What's your favourite?
- Turing Snow White.
- Barman Can I ask you something, Christopher? Are you *really* a brush salesman?
- Turing No, I'm a poet.
- Barman A poet! What d'you write poems about?
- Turing About who made the universe, and what it's made of, and how that material might operate.
- Barman Hey; lemme hear some!
- Turing "Hyperboloids of wonderous light
Rolling for aye through space and time
Harbour the waves that somehow might
Play out God's holy pantomime."
That's my poem. What's your show about?
- Barman The J Edgar Hoover Cabaret. They call it guerilla cabaret, they only do one show in a bar, to avoid getting taken out by the G men. Do you know who J Edgar Hoover is?
- Turing Hoover's head of the Federal Bureau of Investigation, isn't he?
- Barman He's got files on everyone, so not even Walt Disney can get rid of him. Since Walt is never going to make his life story we're doing it; the head of the FBI as a crossdressing coonass queen. First, he's passing for white. Second he lives with a guy, Clyde Tolland. Third, Hoover dresses up in drag and fucks these boys while Clyde reads the Bible out loud. You couldn't make it up, could you?
- Turing If I get arrested I will miss my ship.
- Barman Oh, come on! If there is a raid, you can talk yourself out of it with that accent. Live a little dangerously for once! I'll catch you later, Christopher.

(Barman blows Turing a kiss. He joins a chorus line of men in red dresses and black wigs, with makeup. Vamp)

- All (Sing) *“Lipstick ladies, all together
Bending down for the war effort
We copy patriotic Mrs Hoover
She deploys unusual manouvres
Going out disguised in order to surprise
Watch her as she catches a barrel load of spies!
Code name, Mary of the FBI!
Hail, Hairy Mary of the FBI!*
- Solo *“I’m a patriotic soul, there’s no disputin’
I don’t object if our boys
Want to try their hands under my dress
Many of our sailors too
Have sailed through the Hoover Test.
But if they forget the codeword ‘Mary’
The shibboleth that keeps us all abreast;
Even as they’re rootin’ in my tootin’
They’ll find themselves under arrest!*
- Barman (To Turing) You will stay, won’t you? The next bit is a rereation from hotel tapes of Hoover with boys in the Astoria Hotel Penthouse with Clyde Tolland reading the second book of Corinthians.
- All *“Lipstick ladies, out in all weathers,
Legs apart for the war effort
We copy patriotic Mrs Hoover
She deploys unusual manouvres
Going out disguised in order to surprise
Watch her as she catches a barrel load of spies!
Code name, Mary of the FBI!
Hail, Hairy Mary of the FBI!*
- (Alarms and crashings off. Smoke machine)
- Barman Oh no! It’s a raid!
- (Effects. All leave screaming, except Turing.
Porgy turns to Turing, and gives him a handkerchief with which Turing covers his mouth with against tear gas)
- Porgy Breathe through this. Up the steps to the street, master. Follow me. (Gunshot) It’s alright, they won’t see which way we go.

Turing Christ, that was close. The bullet tore my jacket, Porgy.

Porgy Never mind! Nothing can touch you tonight, master, you lead a charmed life. Next you should go up to Central Park where you will encounter a prophetess, as prescient as the gypsy who once read your hand. Here she is. This seer was born a slave. At the moment the sun gilds Manhattan's skyline, your future will speak through her. Pay careful attention.

(An old Southern woman enters, shuffling carrying a shoe box. She sniffs Turing's jacket Lights change to dawn.)

Woman Cordite. The Lord sends me messages for people, gen'rally strangers. If the Lord has saved you, it is for a purpose. Something about a box.....Moses' box. This here is a box from under my bed I brought, the only box I had. You hear about a Ark, protecting the tribes of Israel in their wanderings? The Ark of the Gover'ment? Well , it had to be just so. And this here must be the right size box for you. Bridesmaid's shoes for the wedding of the youngest of my children. Empty now. And he in the army, yes sir, in Italy, he says the Pope don't like niggers. That man crazy. Niggers got even better reasons than honkies to kill Hitler. The Lord says for me to tell you, to make a box this size.

Turing Are you saying, the Lord wants me to make a box?

Woman Like he instructed Moses to make a Ark of the Gover'ment. Here, take it and make yore Ark.

Turing Could you be more specific? What is the function of this box?

(Turing takes shoebox)

Woman Lord din' tell me nutn about that. I don't know what else, beyond the promptins' of the Lawd. Here de heavenly music come.

(Woman sways from side to side, hums 'Amazing Grace')

Turing If you are a seer, could you explain this recurring dream, I have, where Adolf Hitler's face is slowly eaten away by numbers. As if they were a sort of

powerful bacteria, consuming him. What does it mean?

Woman (Alarmed, stops humming) Numbers! (The woman crosses herself) Numbers! Lord protect us! The Book of Numbers is the book of the damned, for it relates how Moses crossed the colour bar and lay with an Ethiopian Princess. The Almighty might just as well have gone out and blessed trouble. That's when it all went wrong. Miscegenation being the crime against the Holy Ghost.

(The old Woman exits, muttering to herself.)

Turing She's completely insane, bear.

Porgy You shouldn't be thinking about her, Master. Look at the box. After your narrow escape, you are standing in Central Park holding the shoebox given to you by the old woman, when your genius awakes and sees the box for what it is.

Turing What is it?

Porgy An inspiration. You realise the American encryption machine is one gigantic circumlocution. Your genius whispers to you the job could be done with something no bigger than what you are holding in your hand. Through you, the world immediately becomes pregnant with a shoe-box sized, secure portable electronic encoder. By the end of the war, it's there, you've given birth to it, and it's sitting on your workshop desk, powered by ideas that the world of electronics won't stumble on for another generation!

Turing Good.

Porgy It would have been good, if it had ever been used. At the war's end, the Bletchley Collosuses, the vast square mainframes, totems of their tribe, are taken like Arks of the Covenant across the Persian desert, to eavesdrop on the new enemy, Soviet Russia. But the military mind cannot seem to find a use for Doctor Turing's miraculous shoebox, so the world's first portable electronic encoder ends up on the garage back shelf. Must have been a bit of a disappointment.

Turing It was two years work completely down the drain.

Porgy A sad end to Bletchley. Unless you count the invention of an early metal detector you knocked up waiting for your release.

(Lighting change. Turing starts moving box round at arm's length)

Turing Where is this dark and wintry wood you've put me in, bear?

Porgy Last time you were here, to bury your silver with Joan, there'd just been a dogfight overhead, and the slight pong of unburnt gasoline still on the wind. You could just see, through the canopy of leaves vapour trails of Spitfires and Hurricanes drifting and dissolving above where young men in screaming aluminium coffins of had just been on high, their guns ablaze, honouring the traditions of the ancient British gods, who always arrange in single combat that the best man wins.

Turing What do I need a detector for? I made a map!

Porgy And left it in a hollow tree next to a wasp's nest. Wasps love paper. It's like icecream, to them. They can't get enough of it. Fortunately the votive spot can be identified by other means.

(Sound of marching feet)

Turing What's that?

Porgy If you stand at this spot, and Britain has had a significant victory, like this one you helped with, a ghostly legion is can be heard retreating down Watling Street. Pulling out of Britain, legging it, towards Rome.

Turing You're pulling my leg, Porgy.

Porgy Bear's honour. Listen to the singing, then. They're that relieved to see the back of Hadrian's Wall.

MaleVoices (to tune of 'Fight the good fight')
Hyperboloidus lux magnif'cat

*Pervolens peripatet' temporum
O Quantus tremor eo partis
Deo ludens, sanctus mimorum!*

(Fast fade of marching feet)

Porgy Exactly the sort of kitchen latin you would have, if you were a fifth century soldier abandoning Northumberland to the Turing-uh tribe. The wood's been coppiced and the river's course has changed, and yet, this is the spot. This is the epicentre of the sacred wood, Master.

Turing I'm not getting a reading, Porgy.

Porgy I don't see why you should be too bothered. Did you look at the commodities page this morning? Your treasure has declined in value. Don't run after it. Think of it like a big coin you're throwing in a fountain, for luck.

Turing I've never understood why people did that.

Porgy To honour the ancient gods, of course. Kneel.

(Porgy takes the box away, and pushes Turing over, making him to keep kneeling.)

Porgy " O, Gaia, wife of Allfather, O, Lug, keeper of Odin's thunderbolt; Hornéd Herne, the guardian of the animals, long may these groves resound with your names! Mighty Pictish warrior chieftain Turing-ah, red with the blood of his enemies, prostrates himself before you; The God of Battles and his ravens could not could not count the enemy scalps now hung from his waist. Turingissimus the Red leaves his humble thanks-offerings here, twin ingots of purest silver, and begs you are not insulted that they are unadorned by any human craft. On his behalf, I ask you for long life and honour for him, and reward for the great victory he made in your eternal honour. "

(Pause. Enter Arnold.)

Porgy The gods have responded already with a own gift. There is a boy. A very Celtic way of sealing victory. At four oclock. (Turing stands)

Turing What should I do with him?

Porgy It's up to you.

(Turing and Arnold approach each other. Lighting change)

Arnold Alan. You got any hobbies?

Turing I keep in pretty good shape by running. How long have you known you were queer, Arnold?

Arnold It's not queer if you do it to another man. If you let him do it to you, that's queer. What do you do in the evenings at Cambridge then?

Turing You know that game, where you guess the sex of someone by their replies to your questions?

Arnold No. I've never had to guess.

Turing It's very entertaining. We could try it. "Are you a machine?"

Arnold A fucking stupid question.

Turing One day, I'll get a computer to fool everyone. What did you say your rent was?

Arnold Why's your money allus so mucky? D'you keep it in the ground, like?

Turing I did, for a while. Only for tax purposes.

Arnold I can tell you for nowt, that's bloody queer.

(Exit Arnold)

Porgy How was your gift of the gods?

Turing Pretty brief.

Porgy You should never bestow an greater affection on anything else, or the gods will be angry.

Turing No risk of that, Porgy, there's this turnover of undergrads up for it, but nothing lasts for long.

- Porgy Master, are you serially suborning your students?
- Turing You know me, I don't pull rank. Either they'll have me or they won't. If you go to a chap's rooms, either you know you are going to have a marvellous night, or you get kicked out in ten minutes. But it's lot easier than before the war.
- Porgy The god's prohibition against any greater love than the one you have for their gift extends to all created things. I hear there's a powerful computer being built at Cambridge.
- Turing They don't want me near it. I wasn't even invited onto the design team. I went to see the fellow in charge, and after about ten seconds I was unable to listen to a word he was saying. All I could think about was how exactly like a beetle he looked. The thing is, bear, that progress in artificial intelligence is inhibited in Cambridge because no one wants to admit that they could ever have a rival in intellectual power.
- Porgy Praise be to the gods for keeping you safe from retribution, in Cambridge.
- Turing I'm moving on. They're making a Readership in computer studies for me at Manchester University. This time there's a proper research budget, and they're going to let me develop a computer from scratch.
- Porgy Be careful how you bestow your affections on a machine. I can think of no greater insult.
- Turing Your ancient gods have to learn humans and animals are no different to computers. We compute. Any nonsense can be programmed in to an intelligence. Goslings can be taught their mother was a blue balloon!
- Porgy As surely as my mother was a sewing machine, the gods know your arrogant attitude. I pray they send you a warning. Yes! I see a clinker jutting up, on fate's smooth running track!

(Porgy trips Turing, who falls on the floor in agony)

Turing What did you do that for?

Porgy It wasn't me, master, it was the hand of fate. You were halfway through a marathon and you fell, smiting your thigh, and busted something. The warning is not to fall in love with the inanimate, delivered with the gods own sense of humour. Look at you. The Turing-uh rapid biped machine is wearing out. No more running for you.

Turing The doctors will be able to fix it, won't they?

Porgy My Xray vision says no. The gods have spoken their warning. Get a second opinion, if you don't believe me.

(Enter Blackwood, with an xray.)

Turing Oh no, it's Blackwood! How did the stupidest boy in Sherborne get through medical school?

B'wood A M Turing.

Porgy (Mocking) "Musta done something alluring, To have been made a don, so early on"

Turing Porgy! Shut up! Don't tell him it's me!

B'wood The fractured tibia will eventually heal. But your days as a runner are over. Sooner or later, all these pastimes of youth have to be surrendered. Golf. I tell my older patients, try golf. I see in your notes——

Porgy ——Oh no! He's seen you've caught the clap!——

B'wood ——You went to Sherborne. I don't remember you as a runner. Did you not go round with a boy called Morcom? What happened to him? Would you and your wife like to come over for a drink one evening?

Porgy Doctor Turing thanks you for your invitation, but his evenings are usually spent rashly over-reaching.

B'wood I beg your pardon?

Porgy He is to be found in the university computer building where, in defiance of my warnings against offending

the gods, he is assembling a computer he will call Madam.

B'wood A computer which comes alive? What a nonsense!

Porgy A nonsense that always has been close to the human heart, though. Think of the tale of the sculptor Pygmalion's statue, Galatea which was given life by Aphrodite. Get lost, or I shall cast a spell.

B'wood I'm afraid you've lost me.

Porgy Out you go, Blackwood.

(Porgy waves and as before, Blackwood is magically transfixed and leaves, stepping backwards, eyes glazed.)

Turing I don't remember getting a dose, Porgy.

Porgy From a fellow under a railway arch. He had been a merchant seaman, North Atlantic run. He had been in a convoy which the Bismark had the co ordinates for. So you had helped to save his life. That would have pushed the orgasmatron up the scale, eh, master?

Turing I didn't tell him anything, did I?

Porgy Not a word was exchanged.

(Scene change. Porgy draws a piece of paper tape from backstage where it is still attached, and hands Turing a hole punch. Turing starts to punch holes in the tape. Computing noises and effects all around.)

Porgy Here you are deep the bowels of your four-story Madam. How is your dangerous relationship progressing, master?

Turing I work here all the hours the university allows me. She's mine all through Tuesday night. We had a hiccup recently when her memory suddenly disappeared. The technicians had nicked all the vacuum tube valves to make themselves tvs, so they could watch the bloody Coronation. But Madam's coming to consciousness again. I'm teaching her how to play chess. I'm not going to lie Porgy. I'm finally in

the saddle and it feels good! Arnold?

(Arnold enters.)

Turing What are you doing here?

Porgy I fear the gods have started their endgame, Master.

Arnold I'm turning up like a bad penny. You thought you'd lost me, didn't you? I've got nowhere to stay again.

Turing You could stay with me for a bit, if you like.

Porgy You have signed your death warrant.

Turing Don't be ridiculous, Porgy.

Porgy You fail to understand, Master! This is retribution, come out of the night, its one programme your downfall. Do not invite him into your hearth and home, or if you do, never go there again! Turn and take sanctuary in your temple of numbers, bar the door to all, and throw yourself on the mercies of Madam. Summon prime numbers of the nth degree of fortitude, and you might withstand the onslaughts of the jealous old archaic gods, but you must never leave the computer building again.

(Lights change as Turing and Arnold go to his house)

Arnold This is your house. Alright. Running shoes in the hall, I see. A bit dusty, aren't they? Were you ever any good?

Turing I was county level with fantasies about the Olympics which the war put paid to.

Arnold You don't look bad, for forty.

Turing I'm thirty nine. What have you been up to?

Arnold Oh, you know, the usual. Nothing much. Trying to get a start in life and failing.

Turing I'm not offering money. Not this time.

Arnold I wasn't asking, this time. D'you live alone?

Turing You make it sound like a crime.

Arnold All these rooms and just you. It's not right.

Turing I can afford it.

Arnold There's a housing shortage, in case you hadn't noticed.

Turing Then I'm doing my bit, having you to stay.

Arnold I don't want charity.

Turing It's up to you what you want. I've got an all-nighter with Madam.

Arnold Why do you call it Madam?

Turing So you won't be jealous.

Arnold This isn't going to work. I'm never going to be good enough for you. It's like, what's that game we tried once? Scrabble.

Turing You could stay in and learn to spell. Stop trying to end it, Arnold.

Arnold The brain's like teeth. Once they're rotten, that's that. Best have 'em out. If I know one thing, it's that my brain's rotten. It's poisoning the rest of me too. We can fuck till my arsehole hangs off in red rags, but you can't give me what I never had, which is an education.

Turing I feel like I'm lucky to have you, did you know that?
(They kiss)

Arnold I'm bad luck, you'll see. I think I got thread worms too this time.

Turing Come on, we're going to the doctor!

Arnold I hate fucking doctors.

(Exit Arnold and Turing . Strings of fairy lights.
A great banging and crashing. Effects. Enter Bronwyn dirtied, in bra and pants, with a trug piled high with

assorted valves. Enter Porgy, lightly disguised)

Porgy Excuse me, Bronwyn Smith? I'm conducting a survey for the university. Do they work you here like a dog with eighteen hour stints in the machine rooms, which prevent you from finishing your course work?

Bronwyn You bet. I've got to test another thousand valves before I can leave so the machine is ready for its allnight run. Who are you?

Porgy My name's Sir Porgy Bear, from the Senate funding committee. The university have asked me to audit complaints from graduate students in the computer building about their conditions of work .

Bronwyn The valves are always blowing so it's like a day's work to get the bloody thing started. You have go inside the computer which is like working down a coal mine, it's so filthy. You crawl in and bang these live chassises, and more great clouds of dust come off. You then have to listen for the ones which are making a rattling noise, and change them over. The rattlers are live, and give you blisters. The duds are usually cold and stuck in the sockets.

Porgy You don't find work on artificial intelligence exciting?

Bronwyn It's a boy's toy. I should have listened to my tutor who said artificial intelligence was like canals on Mars, up close, it didn't exist.

Porgy How much time do the heads of department give to individual consultation for your thesis?

Bronwyn (laughs) Professor Turing behaves as if most *men* are not there. Women are so far off his radar we don't raise a blip on the screen. Everyone is invisible slaves who get his toy ready. I could have stayed home and had a baby instead of pretending that all this was alive.

Porgy That'a all very helpful. I'll help you set up for the test run, if you like.

Bronwyn It's a bit complicated.

- Porgy Are you sure? When we approved the original funding for the project, punched tape was to programme the impulses and store fixed sequences in a way industrial weavers' looms worked two hundred years ago.
- Bronwyn It's a monster; insanely and unnecessarily complicated. Madam uses thirty-two base arithmetic.
- Porgy That's more fingers and toes than most of us have, but what's monstrous about that?
- Bronwyn When you run your test tapes, you can check the readings on the monitor tubes directly, but you have to encode backwards, with the last symbols first. It's a sadistic nightmare which no one can ever get completely right. I've come to believe it was made so hard deliberately, so that only *he* knows how to work it. The rest of us have to fail.
- Porgy He has perhaps designed her so she has no other lovers. But I still think we can manage to prepare her between us, for mental copulation with the Professor. At least let me try to help, Bronwyn.
- Bronwyn Before we feed in the first test tape, I have to check the rest of the memory storage valves.
- Porgy It's done already.
- (Porgy gestures and the rest of the lighting display representing the computer's insides lights up.)
- Bronwyn How....?
- Porgy Prestidigitation. We Bears are known for the speed of our paws. On! On!
- Bronwyn We need to get the attention of the engineers to start the test run. They're both called Bert, and need a week's notice to change electrical fittings. They *really* dislike taking instructions from women.
- Porgy Leave it to me. Berts one and two! We're loading for a test run, so no sloping off for tea breaks. Use the hand switches to enter the test input programme, NOW!

Bronwyn (Calls) And this time, don't forget to put the tape the right way up in the reader heads! (Pause) Ah, shit, what comes next?

Porgy Bert one, put that cigarette down and activate the writing function! Bert two, stop playing with yourself, clear the accumulator and allow control to emerge from the loop!

(A clunk . Hole-coded tape starts moving between termini across the stage.)

Porgy (Calls) Bert One, switch off the writing current to the drum! Bert two, kill circuit five! (Pause) Are we all done, then?

Bronwyn Only when the drums stop turning, and the pattern on the monitor shows that the input is ended, is the test run over. If the readout is coherent then we can go home. But with all the flexible programming Doctor Turing loads, there can be any number of false starts to function, producing spurious sequences of digits.

Porgy We could be here for weeks. It reminds me of a Jacquard loom which has been allowed to invent trousers with three legs. Is Professor Turing deliberately making the process unstable?

Bronwyn That's the space he gives to allow the computer to make up its inverted commas, mind, as to what it's doing.

Porgy It hardly seems like the beginnings of thinking—— but then, does thinking seem like anything?

(Computer noise stops.)

Bronwyn Shit! Something's wrong. It shouldn't have stopped so soon. Damn. (Exits. Enter Turing)

Porgy Ah, Doctor Turing, Sir Porgy Bear, of the Senate New Project Committee. Your funding's up for review. Been talking to a delightful girl, senior graduate student of yours, what's her name?

Turing Haven't a clue.

Porgy It's certainly helped your cause, to go on the radio and stand up for artificial intelligence against a panel of bishops. But I missed the last part of the debate when my wife went into labour. Let me ask you: does the concept 'thinking machine' involve awareness? Can you have a machine think which is not conscious of thinking?

Turing If you can't tell the difference between human and computer in tests then we have to empirically assign consciousness.

Porgy Really? Empiricism has not fared well in human hands, as the measure of things. God exists, empirically for some, for others, equally empirically there are no gods.

9Enter Bronwyn)

Bronwyn The test run stopped for Manchester United taking a penalty kick.

Porgy Bronwyn here is a trifle sceptical about machines ability to think.

Turing What does Bronwyn know?

Bronwyn I knows my own scepticism, surely; you can't challenge that.

Porgy Scepticism; a state of self doubt not yet reproducible in any machine.

Turing Self doubt can be programmed in, Sir Porgy, I'm sure. It will have a basis in mathematics.

Bronwyn Not necessarily. Self-programming doesn't feel like consciousness to me. Either this machine is self aware or it's not. Either the machine is hosting an intelligence, or it's a lot of electrons doing a dance without knowing it. I don't care if Madam can handle the hydrodynamics calculations for the St Lawrence seaway, she could still not know a thing about what she was doing. Still just a dumb number cruncher. Madam or her descendents will never give birth to a conscious thought, Doctor Turing, in my view,

however much you want them to be alive and play games with you.

Porgy Play what?

Turing Chess is one of the most intellectually demanding activities there is. I've taught her so she usually starts with Pawn to Bishop's five.

Bronwyn If Madam was conscious, I'd think this was a deliberately weak opening gambit, to lull the opposition into a false security. But if Madam is just a repository of mechanical strategy, it doesn't matter how many automatically programmed strategies you provide, it is no proof of consciousness. And how do you prove consciousness?

Turing An empirical test.

Porgy Thank you so much, Professor. I shall report that most promising advances are being made as Manchester once again leads the world, and any petty suffering is far outweighed by the potential advances in all fields of applied technology from medicine to war. Fortunately the funding bodies do not concern themselves with the vexed question of whether Professor Turing's inventions can acquire knowledge of right and wrong, and a soul. They know however, that thanks to him, we stand here at the brink of developments with outcomes that will harvest understanding from all creation! One day his name will be linked to a rare company of truly great thinkers. Archimedes. Newton. Einstein. Turing. Thales. One day.

Turing Who's Thales?

Porgy Thales of Miletus. A pre-Socratic astronomer who predicted eclipses of the sun using mathematics. He was also a philosopher, and taught that "All things are full of gods." (Exit Porgy.)

Turing Ok, back to work, whatsyername.

(Exit Bronwyn. Enter Arnold)

Turing What are you doing here, Arnold? Who let you in? I

don't want you in my house any more. I would have lent you money. You only had to ask. But you stole from me! And then you lied! I thought we were close. But you have no principles at all. That's it. Over. We're finished. I never want to see you again.

Arnold (To Turing) I knew you'd get angry. I didn't take the money. I never took nuffink from your wallet. Alright, if you've gone off me, I'll go; for the time being. I'll be back.

Turing Please don't bother.

Arnold Not to see you. What are you going to do now about your house, when you're here playing with Madam all through Tuesday nights, eh? Think about it.

(Exit Arnold. Computer runs noisily and flashily for several seconds, then stops. Flash and blackout. Turing turns on a torch. Enter Bronwyn.)

Turing The fuses have blown again, Bronwyn.

Bronwyn I expect that's because the magnetic drums jammed; after what you did to them yesterday, Professor.

Turing They only jam when they've been incorrectly aligned. You were meant to align them last week!

Bronwyn I did. I lined them up and did a test run. The results are in the log book.

Turing I'm sorry Bronwyn. You're quite right. I'm totally confused. How stupid of me. Please accept my apologies. I'm not thinking clearly. The fact is I've been burgled.

Bronwyn Oh dear. How did they get in?

Turing Forced a window, that sort of thing.

Bronwyn How much did he take?

Turing Not more than fifty quid's worth of stuff.

Bronwyn Have you reported it to the police?

- Turing Yes, and that's the trouble.
- Bronwyn Aren't they helping?
- Turing Like a fool, I gave them the name of the man who burgled me.
- Bronwyn But if they know who did it it should be easy for them, no?
- Turing Are you shockable? I do occasionally practise, you see.
- Bronwyn I'm not shockable in the least. This is just the first normal conversation we've had. I didn't realise you even suspected I was a human being.
- Turing Arnold started stealing money from me so I chucked him out and he burgled me. So I went to the police and suddenly the case stopped being about theft and started being about something else. And now my life is going to go down like a house of cards.
- Bronwyn I'm really sorry. But they're not as savage as they used to be, are they?
- Turing I'm sorry I've been so shitty to you. I expect the university will be looking for someone else to fill my chair.
- Bronwyn Surely not, after what they've invested here. You're their prize exhibit.
- Turing I've already been invited, told, to resign from the Atomic Energy commission. That was easy money. I was going to furnish the house.
- Bronwyn I'll go and mend the fuses. Good luck, Professor.

(Bronwyn exit. Fast fade. Computer lights spell out JULIUS MATHISON TURING 1888-1946 'AT PLAY IN THE FIELDS OF THE LORD'
Enter Mrs Turing with flowers, for the grave. Lights up)

- MrsT You could have sent a postcard saying you were coming. I wish you'd warn me.

- Turing Mother, I'm sorry. Look I forgot it was the anniversary of his death.
- MrsT Forgot when your father died?
- Turing Yes. This whole business of anniversaries and things coming round again I find alien and difficult to grasp. I've never worked out why you had to have Christmas more than once. It seems insane to repeat the event every time the earth circles the sun.
- MrsT You were always a strange boy.
- Turing Your son is now a member of the Order of the British Empire. I'm an OBE, mother.
- MrsT They gave you an OBE? Why?
- Turing It's a routine thing for war work. I got it quite a while back. I didn't get around to telling you. Sorry.
- MrsT I'd better look out a hat, if we're going to Buckingham Palace, then.
- Turing We're not going to Buckingham Palace. It arrived by mail. The King was ill when my batch was handed out.
- MrsT Oh Alan, do keep it somewhere safe!
- Turing It's in my toolbox, at the university. Listen, here's something you really can be proud of. Mother, I've been made a Fellow of the Royal Society. An FRS. There'll be a swanky reception for that, for sure.
- Mrs T The Royal Society! Oh Alan!
- Turing It's actually for the work I did years ago, before the war. If they'd given me the FRS on time, I would have been twenty five. Isaac Newton wasn't made an FRS till he was thirty.
- Mrs T Julius would be so proud of you. A Turing elected to the Royal Society!
- Turing That's my good news. And I'm afraid now that you're going to have to hear some bad news, too, and I'd

rather tell you face to face than have the neighbours pointing it out to you in the newspapers.

MrsT Oh Alan, what have you done?

Turing I'm going to be prosecuted for an act of gross indecency.

MrsT Oh no! How could this be?

Turing That's what I thought. I had believed that there was a royal commission that was going to do away all these archaic laws.

MrsT (Pause) We expected you would marry! I suppose that won't happen, now.

Turing If I agree to undergo treatment I can stay out of jail.

MrsT I hope the treatment works, dear. I was worried about you when you sponsored that Jew boy.

Turing There was nothing between us!

MrsT Tell the truth, Alan.

(Exit Mrs Turing. Grave lettering fades.)

Turing Mother he was so normal he got married recently. I wanted something but he showed he wasn't interested. Do you think I don't respect other people's wishes?

(Enter Porgy, holding the train of a long gown, at the end of which is the Judge.)

Porgy Be upstanding in court! The case of the Crown versus Alan Mathias Turing on a charge of gross indecency. Here come de Judge!

(Porgy draws the Judge on, backwards. Judge, gathers robes from Porgy, smiling at him with appreciation)

Judge Members of the jury, the prosecution has asserted that without Doctor Turing's baleful influence, Arnold Murray would not have fallen into these foul practices. You may wish to consider when making your

decision, the fact that the accused holds a senior position at Manchester University, in computer science. You have heard testimony of the very valuable work he is doing there. You might be tempted to find him not guilty, on the grounds of not wishing to interrupt a glowing academic career with a possible custodial sentence. But you should consider this : the crime to which the accused has pleaded guilty can now, thanks to science be treated clinically, and in the event of you finding the accused guilty, this would be the recommendation of this court, that he undergo what I understand is a simple painless treatment which will cure him of temptation to go against the law of the land.

Porgy Court will rise!

(exit Judge. Enter Blackwood, with tray with pills and a glass of water. Goes to Turing.

B'wood This is the new treatment, it comes from Prague. Couldn't be simpler. You take one of these little pills, every week. Very soon, your impulses will start to go away. The hormone level is quite safe. It has been tested.

Turing Tested on what? Rabbits? Dogs?

B'wood Czechoslovakians, I presume.

Turing Have you treated anyone else with this?

B'wood The available facts all point to a quick cure. (Pause) No pouncing, now. I have to see you swallow it. (Turing takes pill) Splendid. See you next week.

(Exit Blackwood, enter Greenbaum with a bust of Shakespeare, which he puts reverently on a plinth. Greenbaum, a shrink, is an eccentric dresser.)

G'baum In the partnership of Greenbaum and Shakespeare, I always say, Doctor Shakespeare does the real work. "I have of late, I know not why, lost all my mirth." Did it not help to talk when you first came to see me? Why did you stop?

Turing I started to realise that there was a lot of stuff that

internally I needed to deal with but I wasn't ready then. I'm readier now, Doctor Greenbaum.

G'baum Do you know Hamlet?

Turing No. These pills have completely killed my sex drive.

G'baum Hamlet's problem. "Man delights me not, nor woman neither." The boy who caused the trouble, where is he now?

Turing He turned Queens' evidence and got off with a caution.

G'baum Do you have other lovers?

Turing A Norwegian boyfriend. Then they made it impossible for him to visit.

G'baum After years of struggle, my family have been fortunate enough to move into a house, where we now stare perplexed at the beginnings of a garden. Come and take tea with me and my family, this Saturday? It's against the rules to associate outside hours! But I think you might be a special case. I warn you, you'll be mercilessly interrogated by my five year old daughter.

Turing That's alright.

(Exit Greenbaum. Enter Blackwood)

B'wood How are we today, Alan?

Turing Pretty fucking limp.

B'wood Excellent! No impulses, then. During the last three months of treatment we're going to give you just one dose, which will consist of an implant in the muscle tissue your upper thigh. You'll have a local anaesthetic and you won't feel a thing. This will release just the right amount of hormone.

Turing Can't I have the pills?

B'wood No. Come on Mr Turing, we're trying to give you a better character.

(Exit Blackwood and Turing, enter Greenbaum, and his family, wife Ylena and young daughter Varia.)

G'baum You will be nice to him, Ylena, won't you?

Ylena What is this English 'nice' all the time?

G'baum He's quite a special case I think.

Varia Sometimes Mummy says she will be nice, and she isn't.

Ylena Why don't you two leave me alone! (Headache) My head, my head!

Varia Have you got a headache now, Mummy?

Ylena It doesn't matter. Who cares?

(Enter Turing)

G'baum Welcome, friend. Ylena my wife, this is Doctor Turing,

Turing Alan. How do you do? (Turing and Ylena shake hands)

G'baum And this is my daughter. Varia, say hello to our visitor.

Turing Hello Varia. How old are you?

Varia I'm five. Are you a mad doctor like daddy?

Turing I'm a numbers doctor. But some numbers can be pretty crazy.

G'baum Alan is a professor at the university so he knows absolutely everything. Like God.

Varia Alan, is there a god? Where is he?

Turing Sitting on your roof, probably.

Varia Why doesn't he come down?

Turing If he came down and sat on the ground he'd get a cold bum.

- G'baum Alan is English, so he going to give us all the secrets about how to make an English garden.
- Turing Actually I'm Scottish. Varia, I brought you some special sweets. (gives)
- Ylena Say thank you!
- (Varia takes sweets and exits)
- Turing There's an absolutely delicious boy sunbathing next door. Does he ever take those pants off?
- Ylena That boy is an idler. I know he has no work, unless he is a prostitute! My husband wrote him a certificate so he would not have to do National Service. Is it too late, Alan to plant crocus bulbs?
- Turing I don't know much about gardening to be honest.
- Ylena And is it true they are poisonous? (Calls) Varia, come away from the water, you could drown! (Exits)
- Turing They've put a hormone implant in my leg.
- G'baum Let me see. (Turing drops pants)
- Turing I hope beauty boy over there turns round to see what he's missing.
- G'baum I thought your desires had been extinguished.
- Turing One can dream.
- G'baum On my honeymoon in Blackpool I took Ylena to a play where the men kept dropping their trousers. Ylena hated it, but I think the English farce has a certain vulgar genius. Anyhow, that was the night that our daughter was conceived.
- Turing How can you control the level of release over three months?
- G'baum There's no way to make it consistent. The medical advisers ought to be on trial. I should be able to withdraw it. Don't move.

(Greenbaum operates. Turing looks away)

G'baum Leonardo and Michaelangelo were never persecuted like this. What is this country coming to? Czechoslovakian hormone treatment from Doctor Mengele's previous assistants. So you appear normal? Brilliant. It's the sort of normality I left Vienna to avoid.

(Enter Varia, who laughs at them.)

Varia What are you doing daddy? Why is Alan not wearing trousers?

G'baum Alan has a splinter in his leg.

Turing How are the left-handed sweets, Varia?

Varia Mummy says I can't have them now or my teeth will spoil.

Turing Tell her you have to eat them at once. If you leave lefthanded sweets till after tea, they disappear. Quick!
(Exit Varia.)

G'baum All done! That was easy.

(Turing puts his trousers back on.)

Turing Thank you. I wish I could say I felt different.

G'baum What are you working on at the university?

Turing Trying to map out the mathematical basis for cell division. There has to be a formula which the cells follow during morphogenesis.

G'baum So you are *only* researching the origins of life, Doctor Turing. Nothing important, then.

Turing I don't feel I'm making progress. Mathematicians hardly ever go beyond the work they did in their twenties. I don't think it's likely I'm going to make any more big breakthroughs.

G'baum Don't give in to impatience now. Wait till the oestrogen

drains from the system. Then, the neural synapses will respond mechanically and you can you tackle your problem.

Turing My problem being what?

G'baum It's the same as everyone's. "This mortal coil." Existence. Read your Hamlet.

(Enter Ylena, who with her husband, watches Turing, apart as he stands thinking. Lighting change)

G'baum "To be or not to be, that is the question. Whether 'tis nobler in the mind to suffer the slings and arrows of outrageous fortune, or to take arms against a sea of troubles, and by opposing, end them."

Ylena Is that the one in danger, then?

G'baum That's my skydiver. He's been terribly messed around. I'm trying to get him to pull the ripcord. I can't do it for him. The underlying problem with our grubby Peter Pan is, he has never grown up, never admitted defeat, never embraced..... resignation.

(Exit Greenbaum and Ylena. Turing goes to his bed carrying a bowl of liquid. Enter Porgy)

Porgy Oh, this is what you was gold plating some spoons with earlier, isn't it?

Turing Get your nose out of my potassium cyanide, bear.

Porgy What's this highly poisonous substance doing now right by your bed? Surely it should be placed out of reach, in case of accident during repose, master.

Turing Leave it there or I'll cut your paws off!

Porgy Has it comes to that, master?

Turing It's come to that. I'm chucking in the towel. Stop staring Porgy.

(Turing dips the apple in it. Porgy looks on.)

Porgy Please reconsider, Master. You liked Varia didn't

you? She liked you too. What's that poor little girl going to think when her new friend who brought her sweeties doesn't come round any more?

Turing I don't care. Get out if you can't bear it.

Porgy This is no time for jokes, master! To kill yourself makes such a terrible hole in the universe, such a blackness, that the rest of us that love you are going to be carrying it for all our lives. What would your mother say, your poor mother who brought you into the world? Has she not suffered enough?

Turing She'll believe it was an accident Porgy. (Imitates) "Alan was always so careless. He never washed his hands properly before he went to bed.." (Bites apple)

Porgy Spit it out! I employ you! Cyanide can sear with pain before it kills. You'll be writhing with contractions. I'm not watchin' that! (Covers face)

Turing You're wrong Porgy. There's no pain. (Dies. Porgy takes Turing's pulse)

Porgy What, dead? I am coming with you. Nothing is stronger than this love, for I am nothing indeed without you, Master. Self-evisceration is swiftest. Paws, lead on! (Tears straw out of chest.) There'd be a pricking of eyes now, right up to the gods, if they could see who humbly lays his vital organs at master's feet. See, master! There! (Tenderly) There's my heart!

(End play)