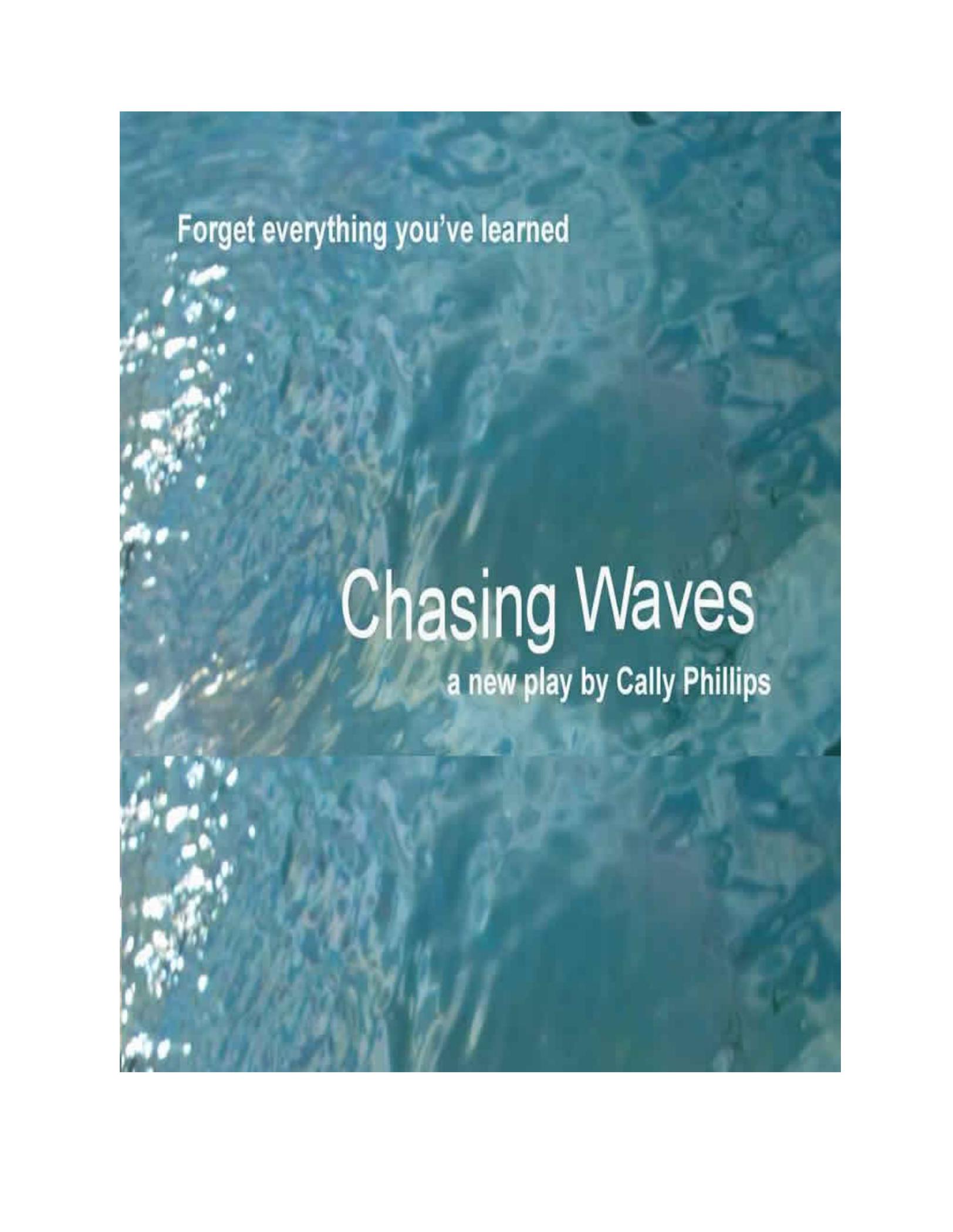


Forget everything you've learned

Chasing Waves

a new play by Cally Phillips



Forget everything you've learned

Chasing Waves

a new play by Cally Phillips

Chasing Waves

By Cally Phillips

Copyright © Cally Phillips 2004

All rights whatsoever in this play are strictly reserved and application for performance, etc, should be made before rehearsal via email to Cally Phillips at info@hoampresst.co.uk or hoampresst@btinternet.com

No performance may be given unless a licence has been obtained.

This play was written in 2004 and first performed on 14th/15th July of that year at Swallow Theatre, Whithorn with the following cast:

Schrodinger: Joe Johnson

Wittgenstein: Kristian Hart

Director: Amanda Walker

First published by HoAmPresst Publishing in 2012.

isbn 978-0-9566838-78

CHASING WAVES

Scene 1

Stage is bare apart from a black/white board and two large photographs - one of Wittgenstein and one of Schrodinger. A character whom we shall call WITTGENSTEIN is writing on a board. You'd have to be a philosopher of language to understand what he's writing - so let's just say it looks like a heap of jumbled equations.

Let's say that he then scribbles all that off and writes large - CHASING WAVES. Play requirements - Two actors. One box. Knowledge of physics and philosophy (the writer) Open, enquiring minds (the audience) He steps back from his writing. Considers it. Enter a character we shall call SCHRODINGER. He is carrying a large cardboard box, the kind you get a computer in. He places it down centrestage. Wittgenstein hastily scrubs the board. Replaces it with: What is meaning? Schrodinger turns to acknowledge Wittgenstein. The two men shake hands. Schrodinger contemplates the board.

SCHRODINGER

You can't start with that.

WITTGENSTEIN

Why not?

SCHRODINGER

It's too hard.(beat) You have to start with the easy stuff. Make people feel comfortable. At home.

WITTGENSTEIN

And if there is no beginning, then I can start anywhere I like.

SCHRODINGER

But there is a beginning. This is it.Now

WITTGENSTEIN

Now. This moment. Now? (beat)

Are you sure?

Schrodinger nods his head.

WITTGENSTEIN

I see no way in which this could be a beginning, and certainly not the beginning.

SCHRODINGER

They've barely got their coats off. Look, they're still thumbing through the programme, trying to/

WITTGENSTEIN

/To find some meaning? (to audience) You won't find it there. (to Schrodinger) A beginning could have been when the lights went down, or up. Or it could be when he (points at audience member) got out of bed this morning. Or bought the ticket. Or..yes, let's say that he bought this ticket, last week, to impress a girl/

SCHRODINGER

/That is a totally different story. It's not the beginning of this one.

Wittgenstein shrugs.

WITTGENSTEIN

Who can say. That's precisely my point. You can't tell where a beginning is.

SCHRODINGER

Or what a beginning is?

WITTGENSTEIN

Or what beginning means.

SCHRODINGER

Or why a beginning...(beat) But a play does have a beginning. It has to.

WITTGENSTEIN

But who can tell where that beginning will be?

steps out to directly address the audience.

WITTGENSTEIN

I'm sorry if this makes you feel uncomfortable, but we may as well make one thing clear from the very beginning. You are confused. Don't worry about that. You're expecting knowledge and we're striving for understanding. We will do our best, with the limited resources available to us.. but you have to stop worrying. Just give yourselves up to the moment. Forget everything you have learned. Start afresh.

SCHRODINGER

A new beginning. Now.

Wittgenstein turns from the audience.

WITTGENSTEIN

Okay. Now. A beginning. If you must have one.

He ushers Schrodinger and the box off-stage. Wittgenstein begins to write a jumble of equations on the board and then WHAT IS METAPHOR? Enter

Schrodinger, carrying the box. He places it down centre stage. Wittgenstein leaves the board, shakes hands with Schrodinger.

WITTGENSTEIN

What's in the box?

Schrodinger shakes his head.

WITTGENSTEIN

What?

SCHRODINGER

Too early. Have you no sense of the dramatic journey?

WITTGENSTEIN

Well, it's what they.. what we all want to/

SCHRODINGER

/ Know. Yes but..

Wittgenstein ushers Schrodinger off stage again. Returns to the board. Rubs off the writing. Stands poised to write, scratching his head as Schrodinger enters again, places the box centre stage and sits on it, head in hands.

Wittgenstein leaves the empty board, crosses to shake hands with Schrodinger and ignores the box.

WITTGENSTEIN

Something wrong?

SCHRODINGER

Uh..

WITTGENSTEIN

What's wrong?

Schrodinger shakes his head. Wittgenstein crosses behind him, takes another approach.

WITTGENSTEIN

What is your problem?

SCHRODINGER

Creativity.

WITTGENSTEIN

Ah.(beat)More?

The wellspring opens.

SCHRODINGER

Given two hours of freedom I can create masterpieces. Getting to that level of mental freedom, that's the problem. It's not often you're allowed to

escape from the world for long enough to elevate your mind to that state of freedom.

WITTGENSTEIN

List all the things that get in the way.

SCHRODINGER

Beverages. Mortgages. Cars. Women. Men. Children. Dogs. Shopping. Shoes. Why? Stress. MSG. GMF. WMD. Elections. Recycling. The fact that the list is endless/

WITTGENSTEIN

/And the greatest of these is beverages.

SCHRODINGER

Infinite inbuilt dilemmas.

WITTGENSTEIN

Such as?

SCHRODINGER

Pepsi or Coke. Coffee or Tea. Beer or spirits. All of which define who you are to yourself, your peers and society at large.

WITTGENSTEIN

So you're suffering from writers block?

SCHRODINGER

I've never suffered from writers block in my life. Just LIFE block. It's the same thing but more consequential.

Wittgenstein goes and writes on the board, screeds of numbers and figures. Incomprehensible. Schrodinger sits, head in hands. Wittgenstein finishes with a flourish.

WITTGENSTEIN

Got it. The time the average person spends on beverages is forty seven minutes a day. (beat) You have to take into account thinking, making, drinking, the whole process.

Schrodinger looks a bit interested.

SCHRODINGER

And how much do they spend?

WITTGENSTEIN

Money?

SCHRODINGER

Yes.

WITTGENSTEIN

You're missing the point.

SCHRODINGER

How?

WITTGENSTEIN

It's too hard a sum.

SCHRODINGER

I like sums.

WITTGENSTEIN

Yes Sums. In a challenge to depose beverages, Mathematics enters the fray. Mathematics. The intellectual's beverage.(pause) It's lucky ordinary people find sums so hard, or are so stupid. Or where would we be?

SCHRODINGER

Where are we?

WITTGENSTEIN

I thought you wanted to save the hard questions? (pause) Is your beginning officially over now? (beat) So what's in the box?

Schrodinger shakes his head. Lights down.

Scene 2

Wittgenstein. Alone on stage with the box. He wanders round it as he speaks.

WITTGENSTEIN

A box. Meaning. Semiotic significance.(beat) One. It is a computer box. Inside may, or may once have been, a computer. A computer is a brain in a box. A brain in a vat. Life.

(pause) What is it? (beat) Two. It is cardboard. Basic. Simple material. The ultimate kids toy. You buy them an expensive present which they break in five minutes, but they spend days playing in the box which becomes, in their minds..(breaks from line of thought) Three. It is large enough to sit on. It is functional. A part of ordinary life. (sits on the box) An act of faith of external reality. I sit on it because I believe it to be solid. To be there. To exist outside my mind.

(beat) Four. A box on a stage. Has to be representational. In some way. Has to mean something. But what?

Lights down.

Scene 3

Wittgenstein and Schrodinger on stage.

SCHRODINGER

So, where are we?

WITTGENSTEIN

The thing about the multiverse is that you can trip into all kinds of unusual worlds where the rules are quite different to the only ones you've learned.

SCHRODINGER

The rules you understand.

WITTGENSTEIN

No. The rules you've learned.

SCHRODINGER

Same thing.

WITTGENSTEIN

Not.

SCHRODINGER

It's like trying to make sense of the patterns of the sky. Of clouds. Of waves/

WITTGENSTEIN

/Making sense of? Making meaning?

SCHRODINGER

You have to establish patterns.

WITTGENSTEIN

An example please.

SCHRODINGER

Okay. Higgs Boson. The hunt for Higgs Boson.

Wittgenstein writes on the board The Hunt for Higgs Boson.

WITTGENSTEIN

Make the connections. Take the journey.

PAUSE.

SCHRODINGER

Okay.(beat) So. Hunt.(pause) Hunt makes you think of Snark.

WITTGENSTEIN

The hunting of the Snark.Lewis Carroll. Good. (beat) And Boson? (beat.)

The first thing that comes into your head.

SCHRODINGER

Pirate.

WITTGENSTEIN

You see. Already there are two quite different worlds to explore. You just have to make the choice.

SCHRODINGER

I just have to understand the choice.

WITTGENSTEIN

No. Understanding comes later. It isn't a necessary, or even a contingent condition. Choices exist to be made.

SCHRODINGER

But I..

WITTGENSTEIN

Choice One. The hunting of the snark. Lewis Carroll. Alice in Wonderland. A fine mathematician and a born storyteller. White Rabbit, Red Queen, off with her head...Choice Two. Pirate. The nautical connection of the word boson with bosun. Peter Pan. J.M.Barrie. A fine playwright and a born storyteller.

SCHRODINGER

It's a play on words.

WITTGENSTEIN

What is?

SCHRODINGER

This.

WITTGENSTEIN

This?

SCHRODINGER

All this. A play on words. This play. A play on words.

WITTGENSTEIN

A play is words. What else is a play?

SCHRODINGER

What else?

WITTGENSTEIN

What, for example is a character?

Schrodinger doesn't get it for a moment. Then..

SCHRODINGER

Who am I?

WITTGENSTEIN

Questions. Good. A good place to start.

SCHRODINGER

Yes. The set up of a play requires questions. We won't disappoint them here.. it's the answers.. at the end..

WITTGENSTEIN

The end?

SCHRODINGER

Yes. A play. Even a play on words, takes us on a journey.

WITTGENSTEIN

A voyage?

SCHRODINGER

To discovery.

WITTGENSTEIN

Discovery. I don't know about that. Let's go back a bit.. J.M.Barrie, Peter Pan, Captain Hook, ticking crocodile and do you believe in fairies?

SCHRODINGER

Do I believe... in fairies. (beat) I don't know, I've never really.. (appeals to the audience) Do I believe/

WITTGENSTEIN

/just make your choice.

SCHRODINGER

By the time I've worked it out to any significant figure, the choice will have passed me by. Even while making the list of possible alternatives, other choices will present themselves, other journeys, other worlds/

WITTGENSTEIN

Even deciding that there isn't a choice is a choice of a kind.

(he takes on the character of Captain Hook, lunges at imaginary enemies)

Have at you existentialists!

Schrodinger looks somewhat alarmed. And confused. Definitely confused.

He has to do something to stop Wittgenstein's Errol Flynn antics.

SCHRODINGER

I don't think we started at the right place. What about Higgs?

That pulls Wittgenstein up short.

WITTGENSTEIN

A proper name. You think that's a better place to start?

SCHRODINGER

I think a definition of Higgs Boson would be a better place to start.

WITTGENSTEIN

I disagree. (beat) They won't stomach it.

The two characters look at the audience.

SCHRODINGER

They look restless. They want to learn something.

WITTGENSTEIN SHRUGS.

WITTGENSTEIN

On your head be it.

SCHRODINGER

Higgs Boson. Hmm. Where to start? For the layman. A quantum particle. Real or imaginary. Unproven but possible, which if found/

WITTGENSTEIN

/Do you believe in Higgs Boson?

SCHRODINGER

No. I don't think so. Does it matter?

lights down.

Scene 4

Wittgenstein and Schrodinger on stage. Wittgenstein writes on the board.

QUESTIONS. WHAT IS MATTER? DOES IT MATTER?

WITTGENSTEIN

What is matter?

SCHRODINGER

Anything that has mass and occupies space.

WITTGENSTEIN

So you are matter?

SCHRODINGER

Yes.

Wittgenstein writes DO YOU MATTER? on the board.

WITTGENSTEIN

What is the problem?

SCHRODINGER

It's not.. it's not the same meaning.

WITTGENSTEIN

I said we should start with what is meaning. You said it was too hard. Now.

Okay. Let's try this one.

He writes on the board as he speaks.

WITTGENSTEIN

What is matter? Does it matter? You are matter. Do you matter? Do I matter?

He stands back from it.

WITTGENSTEIN

We might say that anything that exists, matters and so anything that has matter must matter.

SCHRODINGER

I don't get it.

WITTGENSTEIN

Well of course you don't get it yet. You haven't experienced the whole play. It's not a game of hangman here. It's not about guessing. It's like the play is a sentence. A complex sentence. Everything in the play is its constituent words from which we build up meaning. Context is everything. And so far in the sentence I've only said "I am" What could you possibly get from that? You know, or you think that you know that I am. But how can you understand that I am. Or what I am? After all we've only just met. I'm Wittgenstein by the way. What's in the box?

SCHRODINGER

Wittgenstein?

WITTGENSTEIN

The same.

They shake hands.

SCHRODINGER

Schrodinger. (beat) That explains all the meaning stuff then. Okay. It's time.

WITTGENSTEIN

Sorry?

SCHRODINGER

You can tell us something about meaning now.

WITTGENSTEIN

Now? Why now?

SCHRODINGER

Because I don't think we can go on without it.

WITTGENSTEIN

Go on? You want to go somewhere?

SCHRODINGER

Progress. By go on I mean, progress. Dramatically.

WITTGENSTEIN

(scathing) Dramatically?

SCHRODINGER

(beat) This is so confusing.

WITTGENSTEIN

Yes. That's the thing with meaning. It is.

SCHRODINGER

Is what?

WITTGENSTEIN

Is. Meaning Is.*(beat)* And is confusing.*(beat)* And there's the problem. The nature of meaning. We cannot even be sure of what we mean by mean.

Language lets us down at every stage of the process.

SCHRODINGER

Isn't there a simpler place to start?

WITTGENSTEIN

There are lots of places. Simple? I don't know.

SCHRODINGER

Then just try another. Any other.

WITTGENSTEIN

Green.

SCHRODINGER

What?

WITTGENSTEIN

If I say the grass is green. Do you a) agree b) know what I'm talking about and c) understand the meaning?

SCHRODINGER

Yes.

WITTGENSTEIN

Even though grass may not always be green, or the green that I see may not be the same green that you see?

SCHRODINGER

Yes. I still understand.

WITTGENSTEIN

Be careful. You still know what I mean, but I don't think we can move on to understanding yet.*(pause)* The box is brown.

SCHRODINGER

Yes. The box is brown.

WITTGENSTEIN

And when I make this statement what do I mean?

SCHRODINGER

That the box is brown.

WITTGENSTEIN

That the word box means this. (*he kicks the box*) and that the word brown is a descriptor of one feature of the box, namely colour. Yes. But beyond that?

SCHRODINGER

I'm lost.

WITTGENSTEIN

What can give a word its' meaning, is a rule for its use. The meaning belonging to it. The two fundamental facts about language are that we use it to mean things and we use it to communicate. Mind invests meaning in language.

SCHRODINGER

Meaning is a descriptor? Isn't there more to it than that?

WITTGENSTEIN

Of course. We don't need to understand "green" only to know that this means green - or in this case BROWN. People spend so much time on meaning and language these days, when the really interesting thing is the relationship between knowledge and understanding.

SCHRODINGER

We need to stick to meaning at the moment. So to speak.

Wittgenstein shakes his head.

WITTGENSTEIN

You really don't understand do you?

PAUSE

WITTGENSTEIN

So what do you bring to the table?

SCHRODINGER

What do you mean?

WITTGENSTEIN

What I say.

SCHRODINGER

That's not enough.

WITTGENSTEIN

What?

SCHRODINGER

Speech. Meaning. Enough.

WITTGENSTEIN

You say.

SCHRODINGER

I think. I think it then I say it. The connection is between thought and language.

WITTGENSTEIN

We haven't decided on precedence yet. We are still making choices not decisions.(beat) What's in the box?

lights down.

Scene 5

Wittgenstein and Schrodinger on stage. Schrodinger sits on box, disturbed.

WITTGENSTEIN

What are you worried about now?

SCHRODINGER

It's not really working is it?

WITTGENSTEIN

Working? How so?

SCHRODINGER

I mean. Isn't this just a smart play for smart people?

WITTGENSTEIN

Why thank you.

SCHRODINGER

No.. I..

His meaning is clear!

WITTGENSTEIN

Define.

SCHRODINGER

Define what?

WITTGENSTEIN

Everything. Break the sentence down into its constituent words.

SCHRODINGER

Into its meanings?

WITTGENSTEIN

If you like. If you can. If you think you can.

SCHRODINGER

I can't.

WITTGENSTEIN

I can.

SCHRODINGER

Show me. (beat) Isn't?

WITTGENSTEIN

Isn't. Is not. That's clear enough. The negative condition applies. Not P.

SCHRODINGER

This.

WITTGENSTEIN

Refers to something we might be looking at, or talking about. The issue or situation under discussion.

SCHRODINGER

Just

WITTGENSTEIN

Implies a level of insignificance. Gives an undertone, a subtext if you will, that something about this whole endeavour is trivial, and as such, worthless.

SCHRODINGER

"A"

WITTGENSTEIN

You can't get simpler than that. The definite article. Or is it the indefinite article? I can never remember. The more you learn, the further back in your mind all those simple rules and facts and things you learned at your mother's knee go. Or is it goes? Semantics? Grammar? The basic elements that make up the importance of your life are still there of course, always in the background, suspiciously lurking in some corner of your mind. But old.

Used up/

SCHRODINGER

/Smart.

WITTGENSTEIN

Subtextually shared with Just. A twisted word. Meaning twisted by context. In this instance it is derogatory. Has a kind of "na na na na na" feel to it.

(beat) We are not dealing with feelings. We are dealing with meanings. So/

SCHRODINGER

/But you can't separate them/

WITTGENSTEIN

/Back to the journey of our sentence

(beat)

Or the sentence of our journey.

SCHRODINGER

Syntax?

(pause)

Play.

WITTGENSTEIN

A drama. An event. A happening. Usually in a specially conceived building.

A theatre.

SCHRODINGER

For

WITTGENSTEIN

Because there's always a give and take. Givers and Takers. Someone to do and someone to receive. The implied audience (*he acknowledges them.*)

That's you.

SCHRODINGER

Smart.

WITTGENSTEIN

Repetition. For emphasis, in literary contexts. The same. Making the play and audience the same and consequently both subject to this twisted level of derogation.

SCHRODINGER

People.

WITTGENSTEIN

Those people. Gender non specific. But species specific. You have to draw the line somewhere in the theatre. We embrace humans only. Apart from the acceptance, often grudging in practice, of blind dogs and hearing dogs and/

SCHRODINGER

/What is the point of all this?

WITTGENSTEIN

You assume there is a point?

SCHRODINGER

I hope so.

WITTGENSTEIN

You assumed there was a point - a meaning - to your statement. Your sentence. Your utterance. Your... outburst. But in fact it turns out you were

just issuing random words.

SCHRODINGER

Are words ever truly random?

WITTGENSTEIN

Words? Or meanings?

(he looks closely at the audience.)

Is all meaning random?

SCHRODINGER

Isn't it?

Wittgenstein goes and writes on the board again - WHAT IS MEANING.

SCHRODINGER

If we have to keep doing this we're never going to get there.

WITTGENSTEIN

Get where?

SCHRODINGER

Where?

WITTGENSTEIN

You imply there is a destination.

SCHRODINGER

Without a destination there is no journey.

WITTGENSTEIN

You think?

SCHRODINGER

Don't you?

WITTGENSTEIN

I think the destination is in the journey.

SCHRODINGER

What?

WITTGENSTEIN

And that all moments are one moment.

SCHRODINGER

How?

WITTGENSTEIN

And that this moment is it.

SCHRODINGER

And is that the play?

WITTGENSTEIN

What?

SCHRODINGER

The world of the play is the world of the present.(pause) Is that really so clever?

WITTGENSTEIN

Clever?

SCHRODINGER

What?

WITTGENSTEIN

Word choice.

SCHRODINGER

What?

WITTGENSTEIN

An interesting choice. Of words. Of meanings. Define "clever"

Schrodinger puffs and blows. There's no getting away from this it seems.

SCHRODINGER

Um....

WITTGENSTEIN

You're using it like smart. I object.

SCHRODINGER

All right. I'll try again.(beat) As a play. Assuming this is still a play. Is this really so ground-breaking?

WITTGENSTEIN

Ground breaking?

SCHRODINGER

Yes.

WITTGENSTEIN

How on earth do you substitute ground-breaking for clever? They are miles apart. How can we possibly/

SCHRODINGER

/Well, we never get anywhere with your/

WITTGENSTEIN

/My point exactly.

SCHRODINGER

Listen damn you.

Schrodinger does a mental double-take.

SCHRODINGER

I will finish this.(beat) Is..it.. really.. so.. clever/

WITTGENSTEIN

/or ground-breaking?

SCHRODINGER

Or ground-breaking. Or insightful. or.. or..(*he is clearly getting frustrated*)

WITTGENSTEIN

Malicious?

SCHRODINGER

Malicious? In what way could it be malicious?

WITTGENSTEIN

Delicious?

SCHRODINGER

Now you're just saying words at random.

WITTGENSTEIN

Now you've just lost my pattern.

SCHRODINGER

You're just trying to distract me again. I won't let you. You will listen to me.

WITTGENSTEIN

Go on then.

SCHRODINGER

All that's been said so far is that the present is the only thing we know to be real. It's grade school philosophy.

WITTGENSTEIN

Isn't it grade school science?

SCHRODINGER

Grade school science?

WITTGENSTEIN

What goes up must come down. Gravity is constant. Light is relative.

SCHRODINGER

Not in grade school it isn't.(beat) In grade school light is waves or particles.

Not waves and particles. It's simple in grade school.

WITTGENSTEIN

It seems simple in grade school. The young are protected from scientific truths.

SCHRODINGER

What scientific truths?

WITTGENSTEIN

That we do not live in an ordered universe. That truth may not exist. That patterns may not exist.

SCHRODINGER

Patterns exist. It's just when we are too lazy or stupid to see them that we call them chaos.

WITTGENSTEIN

What happened to "is it really so clever?"

SCHRODINGER

It wasn't the point of the debate.

WITTGENSTEIN

Debate? I thought we were discussing the point of the play?

SCHRODINGER

Conversation. It wasn't the point of this conversation. So I dropped it.

WITTGENSTEIN

Just like that?

SCHRODINGER

Yes. If I hadn't dropped it we'd never have got anywhere.

WITTGENSTEIN

Where? Where have we got to?

SCHRODINGER

Here.

WITTGENSTEIN LOOKS ROUND.

WITTGENSTEIN

And weren't we here already? ha ha. You see. All moments are one moment and this is it.

SCHRODINGER

I didn't mean physically, I meant metaphorically. Where we are in the play.

WITTGENSTEIN

You don't know where you are in the play. You don't even know if this is a play any more. Admit it. You know nothing and you understand even less. About life. About plays. About what's in the box.

Schrodinger walks off and sits in the audience. Wittgenstein writes on the board WHAT IS METAPHOR? Schrodinger talks to the audience from their midst.

SCHRODINGER

Who are we?

Wittgenstein turns from the board. Addresses audience.

WITTGENSTEIN

We are clearly not Wittgenstein and Schrodinger. In case you are wondering. In case you are still confused. In case you want your money back.

He looks at the audience.

WITTGENSTEIN

You want your money back? (beat) Well you won't get your money back, so there's no point wanting it.

Schrodinger speaks from the audience.

SCHRODINGER

Of course we are not actually Wittgenstein and Schrodinger. We are after all, young men, and they/*(he points at the hanging photographs)*

WITTGENSTEIN

/These were young men once too. Young and old. It's just a question of perspective. of context.(to Schrodinger) What are you doing?

SCHRODINGER

I am being an audience.

WITTGENSTEIN

You can't be an audience. You can only be an audience member.

SCHRODINGER

I can be an audience. If there's only one of me. (beat) And there clearly is only one of me. (beat) And, as the audience, I want my money back.

WITTGENSTEIN

Among several others.*(shakes his head, goes off the point)* Why would anyone want their money back?

SCHRODINGER

Confusion.

WITTGENSTEIN

Confusion? That's precisely what I'm trying to counter. Before you so rudely interrupted me/

SCHRODINGER

/Before I (hotly) Interrupted YOU!

He comes back from the audience and sits on the box.

WITTGENSTEIN

Happy now?

SCHRODINGER

What?

WITTGENSTEIN

Now you've "been" somewhere. Now you've crossed the divide. Changed perspective. Broken the rules. Happy?

SCHRODINGER

Not particularly.

lights down.

Scene 6

Wittgenstein and Schrodinger on stage as before.

WITTGENSTEIN

Let's get one thing clear. We are two characters who may randomly have been assigned the names Wittgenstein and Schrodinger by a writer as an act of semiotic meaning.

SCHRODINGER

We aren't really Wittgenstein and Schrodinger?

WITTGENSTEIN

No.

SCHRODINGER

On what grounds?

Looks at the blown up pictures.

WITTGENSTEIN

They are old whereas we are young.

SCHRODINGER

But as you said, they were young once too. Like us..

WITTGENSTEIN

Like us? Or not. Plus.(beat) They never really met.

SCHRODINGER

We can't know that.

WITTGENSTEIN

It isn't recorded anywhere.

SCHRODINGER

We can't know if they met, or didn't meet. They might have met, by chance for example. Waiting for a pizza.

WITTGENSTEIN

Do you like Pizza?

SCHRODINGER

Do you?

WITTGENSTEIN

I asked you first.

SCHRODINGER

No.

WITTGENSTEIN

Me either.

SCHRODINGER

That doesn't mean Wittgenstein and Schrodinger never met.

WITTGENSTEIN

But it could mean that you and I are not Wittgenstein and Schrodinger. We can't know. You see how useless knowledge becomes as a path to follow?

SCHRODINGER

Okay, okay, but the probability..

WITTGENSTEIN

Probability. That's more like it. I can handle probability.

SCHRODINGER

Reality.

WITTGENSTEIN

Whoa. Back up the truck. That's a giant leap. We may or may not have all the values pertaining to the two men known as Wittgenstein and Schrodinger. However all we can really say is that *we* are real characters.

SCHRODINGER

Even if we don't know who we are?

WITTGENSTEIN

Who we are is not our concern. That's the concern of the writer and the audience/

SCHRODINGER

/And the actors?

WITTGENSTEIN

Do you really think you can handle that level of complexity right now?

Schrodinger shakes his head.

WITTGENSTEIN

So. Despite your earlier display of petulance, you will understand that you cannot, in reality, cross the line. (*to the audience*)In any case.It's not likely to be random. The writer had a purpose. A meaning. Something for us to engage with, work out, puzzle over. A conundrum if you will, in three

dimensions. Four dimensions actually as it is happening over time.

Something to say/

SCHRODINGER

/To test us.

WITTGENSTEIN

To test the audience? Not a good idea. An audience wants to be entertained, not tested. If you want to be tested you go to..to..

SCHRODINGER

A test centre?

WITTGENSTEIN

Yes. Or.. It doesn't matter.

SCHRODINGER

Doesn't it?

WITTGENSTEIN

I happen to know that in the writers notebook, the phrase "charm the audience" was used. That's the purpose. That's a purpose at any rate.

Schrodinger looks at the audience.

SCHRODINGER

Not really working is it? And the test centre. Why doesn't it matter?

WITTGENSTEIN

I thought we'd done matter to death earlier.

SCHRODINGER

Yes but, it matters if you are late for your exam, or if it's a life or death/

WITTGENSTEIN

/digressio ad absurdum.

SCHRODINGER

What?

WITTGENSTEIN

Occams Razor.

SCHRODINGER

Are you just flinging so much philosophical filth at me. It means nothing to me. I don't recognise it. It's a kangaroo court of meaning.

WITTGENSTEIN

E equals m c squared.

SCHRODINGER

What?

WITTGENSTEIN

Do equations make it any more intelligible.

SCHRODINGER

You might at least have used one of my own equations!

WITTGENSTEIN

No one understands your equations (*whispers*) and word on the street is..
they're wrong anyway.

SCHRODINGER

Nothing would make any of this more intelligible, for us, or the audience,
unless the writer came down off his high horse and and told us/

WITTGENSTEIN

/Or her.

SCHRODINGER

Sorry?

WITTGENSTEIN

Or her high horse. His or her. Politically correct use of language.

SCHRODINGER

We can't be doing with that. Language is difficult enough to make sense
of..

WITTGENSTEIN

We'll stick with the generic him then.

SCHRODINGER

Yes.

WITTGENSTEIN

So. What is your point?

SCHRODINGER

My point? My point is that you digress.

WITTGENSTEIN

Digress?

SCHRODINGER

You never stay on the point.

WITTGENSTEIN

What is the point?

SCHRODINGER

That's what we're trying to find out and if you won't stick with it..

WITTGENSTEIN

But is it sensible?

SCHRODINGER

What?

WITTGENSTEIN

Is it sensible for characters to try and work out the point.

SCHRODINGER

The point of what?

WITTGENSTEIN

Of anything. The play. Life. The multiverse..

SCHRODINGER

What is our point in the play?

WITTGENSTEIN

Can we use a different word than point please. You've used it in so many different contexts it's ceased to mean anything.

SCHRODINGER

Okay. What is our job in the play.

WITTGENSTEIN

Our job?

SCHRODINGER

Yes.

WITTGENSTEIN

Our job is not about the play. We are characters. Real characters IN the play. The machine cannot question its own construction.

SCHRODINGER

But in the play we may well precisely be here to do just that. It may be our purpose.

WITTGENSTEIN

Ooops. Is that the actor or the character speaking there?

SCHRODINGER LOOKS CONFUSED.

WITTGENSTEIN

The play's the thing.

SCHRODINGER

What?

WITTGENSTEIN

You can't argue with Shakespeare.

SCHRODINGER

I can argue with anyone.

WITTGENSTEIN

Not sensibly. The machine cannot question its own construction. What is the sense of characters trying to question the nature of character.

He turns from the audience and writes on the board, speaking as he does so.

WITTGENSTEIN

All the world is in the box.

lights down.

Scene 7

Wittgenstein and Schrodinger on stage as before.

SCHRODINGER

In terms of classical structure you've still given it away too soon. And as for the inciting incident... where is it? Where is the dramatic arc? What do we have to hang onto?

WITTGENSTEIN

We are striving for understanding. Not knowledge. Understanding is like a cliff that you've just fallen over. You can sort of hang onto it by your finger tips, and you are still happy that you're alive. It's not like lying on a beach sipping a cool drink.

Schrodinger shakes his head.

SCHRODINGER

We just can't be sure this is what the writer intended. At all.

WITTGENSTEIN

And does this worry you? What the writer intended?

SCHRODINGER

Of course it does. The thing about the quantum world is that however little impact one's actions seem to make, once you've created something, said something, communicated something, it exists and the world is changed because of it. It's like fractal geometry.

WITTGENSTEIN

And economic and social policy.

SCHRODINGER

If you like. It's down to factors greater than the thing itself how great the effect is.

WITTGENSTEIN

And you think that is the concern of the thing?

SCHRODINGER

I think therefore I am.

WITTGENSTEIN

How charmingly old world Cartesian of you. (beat) But in this case the writer, or creator, only has to make the quantum ripples, not measure them, or chase the wave.

SCHRODINGER

That sounds like the writer writing himself off the hook/

WITTGENSTEIN

/Or herself./

SCHRODINGER

/I thought we'd resolved that one?

WITTGENSTEIN

We challenged it. We never resolved it. We never really explored it. We said the words, we didn't go into the meanings.

SCHRODINGER

Still. I do think the writer has to take some responsibility for all this.

WITTGENSTEIN

All what?

SCHRODINGER

All this (*expansive gesture round the auditorium*)

WITTGENSTEIN

Can you really describe any of this as "responsible"?

SCHRODINGER

No. No you're right. It's not responsible at all. It's the height of irresponsibility. Two characters, unaware of what's going on.. it's absurd. (beat) And it's not even original.

WITTGENSTEIN

Original?

SCHRODINGER

What is the first thing you remember? Don't answer, it's a quote.

WITTGENSTEIN

Pardon?

SCHRODINGER

I'm quoting. From "Rosencrantz and Guildenstern are dead."

WITTGENSTEIN

I think you mean you are quoting from Tom Stoppard. Him writer. They characters. Remember who's in charge.

SCHRODINGER

In charge?

WITTGENSTEIN

Responsible?

SCHRODINGER

In charge? Are you trying to tell me our writer could possibly be in charge of this? I have never experienced anything so out of control.

WITTGENSTEIN

Ah. The director. It's a director's medium.

SCHRODINGER

I thought that was film.

WITTGENSTEIN

Not if you talk to a director!

PAUSE.

WITTGENSTEIN

And what do we mean by in charge anyway. You're putting a twist on it.

Meaning - power crazed.

SCHRODINGER

Help. HELP! We are being held here against our will by the power crazed machinations of an irresponsible writer in collaboration with a director who should know better..

(turns to Wittgenstein) What can we do?

WITTGENSTEIN

What can't we do?

SCHRODINGER

Sorry?

WITTGENSTEIN

We are on stage. Do you see the writer?

SCHRODINGER

I don't know..

WITTGENSTEIN

Do you think the writer, even if here, is going to dare put his/

SCHRODINGER

/Or her/

WITTGENSTEIN

Head above the parapet at this stage in the game. No one wants to be the wrong end of a lynching.

SCHRODINGER

What are you suggesting?

WITTGENSTEIN

You came here with a problem. Do you remember? At the beginning. Your beginning. A problem of creative block. Now is your chance to do something about it.

SCHRODINGER

Me? Do something?

WITTGENSTEIN

Yes. We need to consider what we have to offer. What do we want to create. To communicate.

SCHRODINGER

You're losing me.

WITTGENSTEIN

It doesn't matter. What matters is if we lose them. The audience. Without them we are nothing. (pause) Proposition.

SCHRODINGER

Premise.

WITTGENSTEIN

Whatever. Proposition. Premise. First rule of playwriting. We must hold onto our audience at all costs.

SCHRODINGER

Are you suggesting that WE take control?

WITTGENSTEIN

Do you see anyone else?

SCHRODINGER

That we commit an act of rebellion? Storm the drama. Make it up as we go along?

WITTGENSTEIN

Improvisation.

SCHRODINGER

Don't you need to take classes in that?

WITTGENSTEIN

Improvisation is all about spontaneity.

SCHRODINGER

Which as we all know requires a lot of practice to perfect.(beat) How about stream of consciousness?

WITTGENSTEIN

You can't do stream of consciousness on stage. It won't work.

SCHRODINGER

Let's try.

Wittgenstein shakes his head and addresses the audience.

WITTGENSTEIN

Where's your Willie Shakespeare now?

SCHRODINGER

Who's afraid of Virginia Woolf.

WITTGENSTEIN

I am.

SCHRODINGER

No. It's a play. And she did stream of consciousness.

WITTGENSTEIN

Yes. And I am afraid, very afraid of Virginia Woolf. Her writing.. her/

SCHRODINGER

/You don't think she wrote this play do you?

WITTGENSTEIN

No. I doubt it.

SCHRODINGER

Why?

WITTGENSTEIN

Too much structure. Albeit underlying and non traditional. Too much subtext. No lighthouses, or purple triangles..

SCHRODINGER

I don't like this. I want to get back to the play.

WITTGENSTEIN

The play.

SCHRODINGER

Yes. This play. To what it's about.

WITTGENSTEIN

So what is it about? In your opinion?

SCHRODINGER

It's about what you and me have in common. It's why the writer placed us on the stage together.

WITTGENSTEIN

And what do we have in common?

There is a pause. Schrodinger shakes his head.

WITTGENSTEIN

Boxes.

SCHRODINGER

What?

WITTGENSTEIN

Boxes. It's what we've got in common. Represented by
(he kicks it)

This box.

SCHRODINGER

(winces) I wish you wouldn't keep doing that.

WITTGENSTEIN

Why? What's in the box?

lights down.

Scene 8

Wittgenstein and Schrodinger walking round the box.

WITTGENSTEIN

It's what we have in common. A box.

SCHRODINGER

The box?

WITTGENSTEIN

A box.

SCHRODINGER

This is a box.

WITTGENSTEIN

If you say so.

SCHRODINGER

Clearly this is a box.

WITTGENSTEIN

It is not a clear box.

SCHRODINGER

No.

WITTGENSTEIN

Would that solve your problem?

SCHRODINGER

What problem.

WITTGENSTEIN

The problem of your cat?

SCHRODINGER

What cat?

WITTGENSTEIN

The cat in the box.

SCHRODINGER

If the box was clear you'd be able to look at it. It's not the box. It's the looking. That's the problem.

WITTGENSTEIN

Is it right to assume that everyone is familiar with both our particular box problems?

SCHRODINGER

No. I don't think it is.

WITTGENSTEIN

Rectify this then please. In the interests of clarity.

Schrodinger sits on the box.

SCHRODINGER

I want to tell you a story.(beat) It's the story of quantum physics.

Wittgenstein shakes his head.

SCHRODINGER

The short version. The simple story. For those who came to be entertained not tested.

WITTGENSTEIN

That's good. Flatter the audience. They are getting restless.

SCHRODINGER

That's philosophy. It always has that effect on people.

WITTGENSTEIN

The story?

SCHRODINGER

Yes. My story. Is the cat in the box.

WITTGENSTEIN

Isn't that the cat in the hat?

SCHRODINGER

No. That's Doctor Seuss.

WITTGENSTEIN

Born storyteller. (beat) But it could be the cat in the hat in the box?

SCHRODINGER

No.

WITTGENSTEIN

Why not?

SCHRODINGER

Because that cat isn't a live cat.

WITTGENSTEIN

We don't know if your cat is a live cat. That's the whole problem isn't it?

SCHRODINGER

But it is a necessary/

WITTGENSTEIN

/and sufficient/

SCHRODINGER

/it is a necessary condition that the cat has to be alive at some point.

WITTGENSTEIN

What point?

SCHRODINGER

The point of entry into the box.

WITTGENSTEIN

But this is a thought experiment, no?

SCHRODINGER

Yes. (beat) But with a real cat.

WITTGENSTEIN

I don't understand that. And if I don't understand, **they** never will.

SCHRODINGER

Don't be silly, you're a philosopher. They are an audience.

WITTGENSTEIN

Meaning?

SCHRODINGER

Do I need to spell it out?

PAUSE.

WITTGENSTEIN

Please go on with your story.

SCHRODINGER

Thank you. My story. Or experiment is called Schrodinger's cat.

Wittgenstein addresses the audience.

WITTGENSTEIN

Not because he owned the cat in any way you understand. Just the thought. The thought that went into the experiment.

SCHRODINGER

Yes. As I was saying. We put a cat in a box. A live cat. With a vial of radioactive matter. We shut the lid. We leave the cat there. We cannot observe the cat. So we cannot tell if the radioactive vial has killed the cat or not. We cannot tell if the cat is alive or dead.

WITTGENSTEIN

I think the radioactive vial is one step too far.. for them.

SCHRODINGER

What?

WITTGENSTEIN

Well. Is it really necessary. To make your point. You put a cat in a box. You leave it there. At any time it will be alive or dead, but you cannot tell while it is in the box, unobserved.

SCHRODINGER

I suppose..!

WITTGENSTEIN

(to the audience)

/This sounds cruel, but remember the cat is not a real cat in the sense that it was ever a sentient being. It is a real cat in a thought experiment, which is, apparantly for the case of our argument, worlds away from it's being an animated cartoon cat. Do not worry. Do not get annoyed. Do not lose your grip on the argument by being concerned about the needs, the physical state or emotional wellbeing of the cat. This is a problem all non-philosophers face. They cannot see that emotion doesn't come into arguments.

Schrodinger is standing impatiently.

SCHRODINGER

May I?

WITTGENSTEIN

Sorry. I'm just trying to straighten things out.

SCHRODINGER

We cannot tell if the cat is alive or dead.

WITTGENSTEIN

Though at any point it is clearly in one of these two states?

SCHRODINGER

Only when we open the box can we tell whether the cat is alive or dead.

WITTGENSTEIN

And if it's dead, it's too late to worry about it. I don't see your problem.

SCHRODINGER

The problem is, what state is the cat in when we are not observing it.

WITTGENSTEIN

Alive or dead.

SCHRODINGER

But we cannot be sure which.

WITTGENSTEIN

Well, it can't be alive and dead at the same time. Unless you apply some very fuzzy logic.

SCHRODINGER

That's exactly what quantum physics shows.

WITTGENSTEIN

Fuzzy logic?

SCHRODINGER

That by observing the state of something we alter that state. (beat) That we cannot know what state something we are not observing is in. (beat) That the cat could be in either or both states and our observation fixes it. (pause) It's an analogy for quantum particles.

WITTGENSTEIN

Or waves.

SCHRODINGER

Yes. Exactly.

WITTGENSTEIN

It's all about chasing waves then? Or the same wave.

SCHRODINGER

Is this still too confusing?

WITTGENSTEIN

For me (*shakes head*) For **them?** (*shrugs*) I'll help you. Watch.

Wittgenstein goes across to the box, mimes stroking a cat. Puts the cat in the box, talking to it all the time.

WITTGENSTEIN

Here kitty kitty. Don't worry, it's just a thought experiment.

He closes the box. Sits on it. Gets up, walks round it.

WITTGENSTEIN

So. Box. Cat. Alive? Dead? Who can say?

He makes to lift the lid. Doesn't. Some really bad fake miming. Finally lifts up the lid, mimes stroking the cat.

WITTGENSTEIN

Ah. Happy cat. Lucky cat. Go. Be Free. Live your life.

Then as the "cat" runs off, he mimes catching it by the scruff of its neck and puts it back in the box.

WITTGENSTEIN

(to audience) Or alternatively.

He repeats the whole previous pantomime. This time when he lifts the cat out of the box he mimes sorrow.

WITTGENSTEIN

Oh, poor cat. what a cruel..

He breaks from the mime, holding the cat out in front of Schrodinger.

WITTGENSTEIN

What am I meant to do with this?

SCHRODINGER

With what?

WITTGENSTEIN

It's a dead cat. What can I do with it?

SCHRODINGER

Put it back in the box.

WITTGENSTEIN

Good idea.

He mimes putting it back in the box. Pauses. Thinks better of it, then takes it out again.

SCHRODINGER

What are you doing?

WITTGENSTEIN

I can't leave it in the box.

SCHRODINGER

Why?

WITTGENSTEIN

Why not?

SCHRODINGER

Yes. Why not?

WITTGENSTEIN

Because they

(points to audience)

Will think it's part of it. The play. They'll be sitting for the rest of the show, thinking at some point that it's about to come out again. That we'll take off the lid. It will become a gag. A gag in waiting. The play will descend from drama to comedy to farce and..

He mimes throwing the cat into the wings.

SCHRODINGER

What are you doing?

WITTGENSTEIN

Just putting the cat out.

He comes back and sits firmly on the box.

WITTGENSTEIN

So. That's Schrodinger's cat then. Now. I say - All the world is in the box.

SCHRODINGER

Which is clearly false. I mean, there isn't enough room for all the world for a start. And in fact, there's nothing in the box now.

WITTGENSTEIN

How can we tell. We aren't looking in it. According to your story, the only time we can know what is in the box is when we are observing it, and since our observation changes reality..

SCHRODINGER

This isn't about me any more. It's about you. Your statement that all the world is in the box. What do you mean?

WITTGENSTEIN

It's clear.

SCHRODINGER

No it isn't. Explain it. In a way that real people can understand.

WITTGENSTEIN

Real people? Does the set that is real people include real characters or just real people. Is this about us, or them and us. Because I don't want a confrontation.

SCHRODINGER

I don't care.

WITTGENSTEIN

Don't get upset. I'm just trying to explain All. What we mean by all. We need to go back to meanings and definitions and I know how you hate all that stuff.

SCHRODINGER

All the world is in the box. What can this possibly mean?

WITTGENSTEIN

Exactly.

SCHRODINGER

What?

WITTGENSTEIN

I couldn't have explained it more succinctly myself.

SCHRODINGER

Really?

WITTGENSTEIN

Yes.

SCHRODINGER

Then there's not much point going on is there?

WITTGENSTEIN

You have to stop this fascination with movement. Leave it to Einstein.

SCHRODINGER

Einstein?

WITTGENSTEIN

He had a box thought experiment too. The clock in the box.

SCHRODINGER

Let's just leave Einstein out of this. My enemy.

PAUSE

WITTGENSTEIN

Well, he always was a bandwagon jumper. Ha ha. I see what you're doing.

Pretending to get upset. About a clock in a box.

(beat)

You're just trying to get me off the point.

SCHRODINGER

The point?

WITTGENSTEIN

That you must stop the fascination with movement. With going. We are here. We can go nowhere.

lights down.

Scene 9

Schrodinger and Wittgenstein sitting on either side of the box.

SCHRODINGER

Are we waiting then?

WITTGENSTEIN

Then?

SCHRODINGER

Are we waiting - now. (beat) Are - we - waiting. (beat) It's a simple enough question. (*exasperated*) Surely.

WITTGENSTEIN

No.

SCHRODINGER

No what?

WITTGENSTEIN

No is the answer.

SCHRODINGER

To what?

WITTGENSTEIN

To your question.

SCHRODINGER

Which question.

WITTGENSTEIN

Whichever you like.

SCHRODINGER

No need to be like that. I just thought. What with this being absurdist drama. I thought... maybe we are in *Waiting for Godot*. Maybe this is/

WITTGENSTEIN

/We?

SCHRODINGER

The play. Maybe we are in the play *Waiting for Godot*. And so we are waiting.

WITTGENSTEIN

I'm not waiting. Are you?

SCHRODINGER

I don't know.

WITTGENSTEIN

Exactly.

SCHRODINGER

I might be.

WITTGENSTEIN

Or not. So what is the point of the question?

Schrodinger ignores him. He's still thinking about Waiting for Godot. He's trying to make some sense.

SCHRODINGER

It's the ultimate absurdist play.

WITTGENSTEIN

What? This? (*shrugs*) I don't think so/

SCHRODINGER

/Not this. Waiting for Godot.

WITTGENSTEIN

Is it the play that's absurd, or life?

SCHRODINGER

Are we characters in a play?

WITTGENSTEIN

Exactly.

SCHRODINGER

Characters in search of an author?

WITTGENSTEIN

Possibly.

SCHRODINGER

No.. no.. I could be onto something here. We could be characters in search of an author. Pirandello, not Beckett at all.

WITTGENSTEIN

But there aren't six of us.

SCHRODINGER

There could be.

(He looks out into the audience.)

SCHRODINGER

Some of them. They could be.

WITTGENSTEIN

Could be characters? I suppose/

Schrodinger has gone out into the audience again. He approaches certain members of the audience.

SCHRODINGER

/Are you real?

Wait for response - doesn't matter which.

SCHRODINGER

And you? Are you a character? (beat) Anyone here in search of an author?
WITTGENSTEIN BREAKS IN.

WITTGENSTEIN

They don't know. How could they know? We are not trading in knowledge here. Our business is understanding. So they are confused..

Schrodinger comes back to the box.

SCHRODINGER

Well that's your fault. Confusion was your choice.

WITTGENSTEIN

Confusion is the quickest route to understanding.

SCHRODINGER

You sure about that?

WITTGENSTEIN

It may be.

Schrodinger is sceptical. And fed up with Wittgenstein's superior attitude.

Decides to take some control himself. Makes a choice.

SCHRODINGER

How about the author?

WITTGENSTEIN

What?

SCHRODINGER

The author. Will the real author please make himself/

WITTGENSTEIN

/or herself/

SCHRODINGER

/or herself, known to the management in the interval.

PAUSE

WITTGENSTEIN

(shakes head, unimpressed by Schrodinger's attempts) It's not a murder mystery. Whatever else.

Pause. Nothing happens. Schrodinger is finally forced to acknowledge Wittgenstein again.

WITTGENSTEIN

Oh. Thought you'd had enough of me.

SCHRODINGER

You're.. you're the only one..

WITTGENSTEIN

In the same boat?

SCHRODINGER

The only one I can talk to.

WITTGENSTEIN

(somewhat mockingly) The only one who understands? (beat) How touching.

Schrodinger feels like he's been reeled in.

SCHRODINGER

When is the interval?

Wittgenstein shrugs. Schrodinger makes his way back into the audience and grabs a playbill. Reads it. Throws it down.

SCHRODINGER

There isn't one.

WITTGENSTEIN

No. (beat) Ah well. It's too late anyway.

SCHRODINGER

Too late for what?

WITTGENSTEIN

For an interval.

SCHRODINGER

How do you know?

Wittgenstein taps his nose.

SCHRODINGER

What do you know?

WITTGENSTEIN

I don't know. I understand.

PAUSE

SCHRODINGER

I know something you don't know.

WITTGENSTEIN

(skeptical) Really?

Pause.

SCHRODINGER

It's called Chasing Waves.

WITTGENSTEIN

What?

SCHRODINGER

The play

WITTGENSTEIN

Ah. (beat) What's in a name?

Schrodinger puzzles on this one.

SCHRODINGER

Chasing Waves. What can it mean?

WITTGENSTEIN

What is a wave?

SCHRODINGER

What?

WITTGENSTEIN

What do we mean by wave?

He does a wave.

WITTGENSTEIN

Is this, for example, a wave?

SCHRODINGER

Yes. But I don't think it means that kind of/

He is cut off by Wittgenstein, holding up his hand, palm out, stationary.

WITTGENSTEIN

And this?

SCHRODINGER

What?

WITTGENSTEIN

Is this a wave?

SCHRODINGER

No.

WITTGENSTEIN

Are you sure. (beat) Think very carefully.

SCHRODINGER

No. No it's not.

WITTGENSTEIN

Is it a particle?

SCHRODINGER

No.

WITTGENSTEIN

Sure?

SCHRODINGER

No. Yes. I..

Wittgenstein begins to move his hand slowly, until it becomes a recognisable "wave" motion.

WITTGENSTEIN

So at what point does it become a wave?

He halts again.

WITTGENSTEIN

So now. When you look at this hand, it could be a moment of a wave? It is wave and not wave?

We sense that Wittgenstein is taking the piss out of Schrodinger and that Schrodinger is mightily confused.

SCHRODINGER

Let's get back to the box.

WITTGENSTEIN

Good choice.

Pause. Schrodinger sits on the box. Defeated.

SCHRODINGER

If we had taken a poll. At the beginning. Of the play. And asked people which they thought would be easier to understand. A philosopher or a physicist, I bet they would have said philosopher. But now..

WITTGENSTEIN

Now?

SCHRODINGER

Well. I think I've explained my box problem very clearly.

WITTGENSTEIN

With the help of my superb mime skills.

SCHRODINGER

Despite your very inadequate mime skills. And yet, we are none the wiser as to what your box problem is.

WITTGENSTEIN

It's not my box problem. It's a problem for us all.

They begin to shove the box back and forth.

SCHRODINGER

It's not my problem. Have your box. With its problem.

WITTGENSTEIN

Well done. That's another excellent explanation.

SCHRODINGER

What?

WITTGENSTEIN

Of all the world is in the box. You don't want the box. You give me the box. You are tired of life, of confusion, of misunderstanding. So.. you commit suicide.

SCHRODINGER

Hang on. I just gave you the box.

WITTGENSTEIN

You just gave me my box.

SCHRODINGER

Or a box.

WITTGENSTEIN

This is a box.

SCHRODINGER

That's all we can be sure of.

WITTGENSTEIN

It's what we have in common.

SCHRODINGER

What else do we have in common?

WITTGENSTEIN

Must there be something?

SCHRODINGER

I don't know. Lets try.

WITTGENSTEIN

P and not P

SCHRODINGER

Sorry?

WITTGENSTEIN

Reality.

SCHRODINGER

Expound.

WITTGENSTEIN

We are real and not real.

SCHRODINGER

We are in a play together.

WITTGENSTEIN

We do have that much in common.If this is a play.

SCHRODINGER

Okay. Okay. I accept that's still unresolved, but there must be a certainty. By this point.

WITTGENSTEIN

You think?

SCHRODINGER

There should be. This far into the play.

WITTGENSTEIN

If it is a play.

SCHRODINGER

Whatever. I am certain that we have this.. this.. experience in common.

WITTGENSTEIN

Only if external reality exists.

SCHRODINGER

We KNOW it does. (beat) Here we are.

Wittgenstein shrugs.

WITTGENSTEIN

That's your proof?

SCHRODINGER

We ARE here.

Wittgenstein raises an eyebrow.

WITTGENSTEIN

Sure?

SCHRODINGER

Are we here? (beat) I'm confused. You make me confused/

WITTGENSTEIN

/We are not dealing in certainty. In knowledge. We seek understanding and it's not the same thing. Experience. Reality. Not the same thing.

SCHRODINGER

Please. Please humour me. For a moment.

WITTGENSTEIN

A moment? Just a moment? Just one? Which one?

SCHRODINGER

Any one. This one.. please. Please let's just try to find understanding through knowledge. Please.

WITTGENSTEIN

Is that your choice?

SCHRODINGER

Yes.

WITTGENSTEIN

You can try (beat) You won't succeed.

Schrodinger goes down on his knees.

SCHRODINGER

Please. I beg you. They beg you. We are tired of hanging on the cliff by our fingernails. We want to sip cool drinks by the pool. Just for a time/

WITTGENSTEIN

/in lieu of an interval?

SCHRODINGER

Yes. No. Whatever (beat) Please.

PAUSE

WITTGENSTEIN

Okay. Against my better judgement. Let's go.

SCHRODINGER

Go?

He looks relieved. Is about to leave. Wittgestein pulls him back.

WITTGENSTEIN

Let's begin! There is a world that exists such that that world might be called a play and in that play/

SCHRODINGER

/So the play does have some meaning.

WITTGENSTEIN

It might do. (beat) If you want.

SCHRODINGER

(resolved) The play has some meaning. A meaning. Which we might be able to find. We might not find it, but we could. We can't escape that.

WITTGENSTEIN

We can't "escape" anything.

SCHRODINGER

But we are getting closer?

WITTGENSTEIN

Closer? To what?

Schrodinger takes a moment to reflect.

SCHRODINGER

Maybe all that's gone before isn't such rubbish. Maybe it's like a warmup. The equivalent to a dancer, warming up before the performance. It's a mental warm up for philosophers and physicists/

WITTGENSTEIN

/I wouldn't go too far down that road. Audiences pay for performances, not for warm ups.

SCHRODINGER

Anyway. Now. We've got somewhere. We're ready to go.

WITTGENSTEIN

Be careful with your use of the word equivalent. And your use of the word GO. Since we can't.

SCHRODINGER

Can't what?

WITTGENSTEIN

Can't go. Not till/

SCHRODINGER

/Godot comes?

WITTGENSTEIN

No you fool. Stop letting the writer in.

SCHRODINGER

What writer?

WITTGENSTEIN

Any writer. But more specifically, the writer of this play. The Godot joke. It's been done before.

SCHRODINGER

By this writer? Really? You know his work?

WITTGENSTEIN

Would I have come to the audition unprepared? (*steps back*) Sorry. That was the actor. Stepping over the boundaries again. Now you're getting me confused. Character. Actor. Audience. Writer. Real and fictional worlds.

It's too bad/

SCHRODINGER

/You know him?

WITTGENSTEIN

Or her.

SCHRODINGER

You said we were to use the generic him. (beat) Ah. You do know the writer. You've met the writer. You've met HER.

WITTGENSTEIN

Maybe.

(beat)

Or him.

SCHRODINGER

Well, you're starting with an unfair advantage. If you've met.. talked to..

WITTGENSTEIN

You fool. Of course I "know" the writer. So do you. Our relationship is.. is.. well, can only be described as - intimate.

SCHRODINGER

I.. I would have.. I don't like what you are inferring.

WITTGENSTEIN

We are the cats in the thought experiment. We are the writers thoughts.

Made physical. No more no less.

SCHRODINGER

No more?

WITTGENSTEIN

No less. But possibly more. Yes. Definitely more. Once exposed to an audience we become so much more.

SCHRODINGER

What do you mean?

WITTGENSTEIN

We leave one box. The world that is the mind of the writer.

SCHRODINGER

And we stand outside the box. Disproving your theory that all the world is in the box.

WITTGENSTEIN

No. We get put into another box. This box. And anyway, I said all the world is in the box, not all the worlds. So the theory stands. This is a vindication of my private language argument.

SCHRODINGER

Which is?

WITTGENSTEIN

That there is no such thing. Once we leave the mind of the writer, we become a shared commodity. From thought we become language. Before

we even become real. While we are still on the page, we ,characters become a possible world. A reality of sorts.

SCHRODINGER

Real and not real.

WITTGENSTEIN

P and not P

SCHRODINGER

And where does that leave us?

WITTGENSTEIN

Leave us?

SCHRODINGER

Yes. Where are we?

WITTGENSTEIN

Where we have always been. In the moment. You see where knowledge gets us.

SCHRODINGER

Where?

WITTGENSTEIN

Here. Nowhere.

(beat)

That's why our search is for understanding.

(he flexes his fingers)

Put down your cool drink and hang onto that ledge.

Lights down.

Scene 10

Nothing has changed.

SCHRODINGER

This is turning out really badly.

WITTGENSTEIN

Why?

SCHRODINGER

I don't know.

WITTGENSTEIN

I mean. How?

SCHRODINGER

They need resolution.

WITTGENSTEIN

What?

SCHRODINGER

Them. The audience. They need an ending. Resolution. (beat) And me. I wouldn't mind having it too.

Wittgenstein shakes his head. Begins walking very particularly round the box, in a large circle. Schrodinger tries to ignore him.

SCHRODINGER

A play must end with resolution.

Wittgenstein pauses.

WITTGENSTEIN

Now THAT'S absurd.

He continues walking in his circle, every so often turning in and peering, as if into a void.

WITTGENSTEIN

They don't need resolution. They need to go home and think about it.

SCHRODINGER

A post show discussion. (beat) At least.

WITTGENSTEIN

No.

SCHRODINGER

It's hard work isn't it?

WITTGENSTEIN

What is?

SCHRODINGER

This. Hard work.

WITTGENSTEIN

Compared to what?

Silence. Wittgenstein stops walking.

WITTGENSTEIN

It's all relative.

SCHRODINGER

I asked you not to bring up Einstein.

WITTGENSTEIN

Hard work compared to what?

SCHRODINGER

Well. Compared to sipping a cool drink on a beach.

WITTGENSTEIN

You were the one who wanted to Chase Waves.

SCHRODINGER

Was I?

WITTGENSTEIN

Yes. Don't you even remember?

SCHRODINGER

Remember? I don't even know who I am.

Silence.

Wittgenstein begins to walk again, round in the circle, the other way.

Schrodinger begins to tail him.

SCHRODINGER

So why is the author making us work so hard? What can he/

WITTGENSTEIN

/or she/

SCHRODINGER

/or she, hope to achieve? Certainly not popularity.

WITTGENSTEIN

Ah. Expectations.

SCHRODINGER

Yes. If your expectation was popular drama you'd be disappointed by now.

WITTGENSTEIN

But why, if you read the flyer "Chasing Waves" would you imagine it would be popular drama?

SCHRODINGER

Could be about surfing. Or..Or.. Could be about anything. How could you be expected to know, from a flyer.

Schrodinger gives up walking and sits on the box in the centre. Wittgenstein notes this with a certain surprise. Turns and begins walking in the other direction.

WITTGENSTEIN

Ergo you cannot have expectations. Or knowledge. You get out what you put in.

SCHRODINGER

What?

WITTGENSTEIN

You for example. You want it to be easy. The easy guide to understanding. Understanding in ten minutes a day. Without effort. Without thought. Well, it doesn't work like that. Sorry. With such paltry expectations you are destined for disappointment. Your expectations cannot but be crushed. And it is all that you - and your kind - deserve.

SCHRODINGER

Deserve?

WITTGENSTEIN

No. Of course. You deserve nothing. You will get nothing. You will disappear..

He stops walking. He peers into the imaginary circle.

WITTGENSTEIN

Listen. Let me say this very slowly and very clearly.

He begins his slow and determined circular walk once more.

WITTGENSTEIN

They each need to go from here and think for themselves about what this means to each of them -each individually-that is the meaning. That is the play - that is the understanding.

Schrodinger can't hold off for a moment longer.

SCHRODINGER

What are you doing?

WITTGENSTEIN

Walking round the black hole.

SCHRODINGER

What black hole?

He jumps up from the box, stands behind Wittgenstein, peering into the hole.

WITTGENSTEIN

Ah. You don't see it? The black hole this play has become? The vortex. Here I stand on the edge of the void.

SCHRODINGER

I don't know what you're talking about.

WITTGENSTEIN

Do we have to talk about EVERYTHING? Can't you just accept. Can't you just THINK? Why do you have to externalise it all?

SCHRODINGER

Because I don't know what you're talking about. And if I don't know, they can't possibly know.. and time's pressing on.. and..

WITTGENSTEIN

You have lost confidence in the audience?

SCHRODINGER

Um.. I...

WITTGENSTEIN

You have lost confidence in yourself?

SCHRODINGER

I..

WITTGENSTEIN

You have lost confidence in me?

SCHRODINGER

I'm confused. I'm still confused.

WITTGENSTEIN

Ah. And still as far as ever from the end.

SCHRODINGER

It feels that way.

WITTGENSTEIN

But still here, firmly in the moment?

SCHRODINGER

Yes. I suppose so.

WITTGENSTEIN

A moment.

SCHRODINGER

Yes.

WITTGENSTEIN

And.. and do you think the cat is still in the box?

Schrodinger pauses for a moment. Thinks.

SCHRODINGER

No. You threw it out.

WITTGENSTEIN

That was one possibility but.. how can you be sure.. the whole point was, surely that without observation we can tell nothing?

SCHRODINGER

I suppose so.

WITTGENSTEIN

Then I repeat.. is the cat still in the box?

SCHRODINGER

I don't know.

WITTGENSTEIN

And if the cat is in the box, is it alive or is it dead?

SCHRODINGER

I don't know.

WITTGENSTEIN

And if the cat is NOT in the box, is it alive or is it dead.

SCHRODINGER

How could I possibly know?

WITTGENSTEIN

You couldn't. But you could understand.

Schrodinger lunges towards the box. Wittgenstein blocks him.

WITTGENSTEIN

Are you sure you want to do this?

SCHRODINGER

Yes.

WITTGENSTEIN

Is it your choice?

SCHRODINGER

Yes.

WITTGENSTEIN

Can you understand the consequences of your proposed action?

SCHRODINGER

Yes.

WITTGENSTEIN

Are you sure?

SCHRODINGER

No.

WITTGENSTEIN

Are you confused?

SCHRODINGER

Yes. No. Yes.

He pushes Wittgenstein out of the way and opens the box. Tips it upside down. No cat comes out.

SCHRODINGER

I just had to be sure.

WITTGENSTEIN

Oh no. No no no no no.

SCHRODINGER

What?

WITTGENSTEIN

In your quest for knowledge you have destroyed the quantum world you believed in. There is your answer.

SCHRODINGER

What?

WITTGENSTEIN

Your answer. Your resolution. You tried to prove a possibility.

He picks up the box. Closes it. Sits on it.

WITTGENSTEIN

Disaster. A tragedy.

Schrodinger doesn't know what to do. An awkward pause. Wittgenstein stands up.

WITTGENSTEIN

Alternatively.

He opens the box. Reaches into it, throws the "nothing" it contains out into the audience. (Could make this some kind of glitter/tinsely stuff that floats out into the audience - like fairy dust.)

WITTGENSTEIN

All the world is in the box. (beat) In which case. Comedy. (pause) Comedy and tragedy. The wave and particle of drama. Quantum possibilities.

Turns to Schrodinger.

WITTGENSTEIN

Satisfied? (beat) Think very carefully before you give your answer? (beat)

You are being offered a resolution here. Do you want to take it?

SCHRODINGER

I.. I.. don't.. know... what happens after the end?

WITTGENSTEIN

Nothing.

SCHRODINGER

No. I mean. To you and me. What will happen to us after the end.

WITTGENSTEIN

Nothing.

SCHRODINGER

And to them?

WITTGENSTEIN

They? They'll go out.. have a drink.. go home.. fall in love.. fall out of love.. grow old happily together.. grow old and sad and lonely..

SCHRODINGER

But we?

WITTGENSTEIN

Nothing. That's it. The end.

SCHRODINGER

Then we can't have an end. We didn't have a beginning. So we won't have an end. I don't want an end. It's not a quantum concept. I want to go on living.

(he walks offstage and sits in the audience)

WITTGENSTEIN

Um.. I.. sorry.. he's.. I suppose he's still chasing waves

he walks to the whiteboard and writes on it THE END

BLACKOUT

CURTAIN.

Extras

Until e-publishing came along, publishing plays has been an expensive thing (both for producer and for purchaser). That can now change. One of the many benefits of e-publishing is that, unhindered by print per page costs, it is possible to offer 'extras' in ebooks and this edition of *Chasing Waves* comes with extras. With ebooks one can begin to explore in the way that DVD's did, 'behind the scenes' type content and critical introductions/analysis of plays. That can only be a good thing.

HoAmPresst Publishing is committed to e-publishing the plays of Cally Phillips (produced and unproduced) making them available to a wider reading audience.

Chasing Waves is the first of the catalogue to be e-published. Whether this leads to future productions of the plays is an unknown. But e-publishing means that at least work can be 'out there' available for anyone who is interested to read it.

Cally Phillips says:

I have always been interested in making the creative process as transparent as possible and *Chasing Waves* provided an opportunity to do this in 2004. It was the final production of my three year residency with Dumfries and Galloway Arts Association and we threw open the rehearsals to the public so that they could see all stages from the first rehearsed reading through to the final performance. In order for people to get the most of the process documentation was provided to support the rehearsal process and this is included below. Arguably these are 'extras' that you can take or leave, but there's another opinion which suggests that this should be the basic information a playwright can produce along with their work if they want people to understand it and perform it. You decide.

How to Chase Waves

(or a brief guide to a few key elements in *Chasing Waves* by Cally Phillips)
These were primarily notes given to the actors but are interesting for the reader/audience member too.

The Quantum World

Wittgenstein: All the word is in the box. (beat) In which case.

Comedy. (pause) Comedy and tragedy. The wave and particle of drama.
Quantum Possibilities.

Once upon a time, Newton prevailed, and the world was a safe place for all of us. When you hit a plain, old-fashioned billiard ball, you could predict how fast it would move and in what direction. And when the billiard ball came to rest, you knew exactly where it was. These simple notions seemed obvious, necessary even. Most people believed that for physics to work, it had to be based on such solid and unshakable foundations.

Then on 19 October 1900, physicist Max Planck made a ground-breaking presentation to the German Physical Society. Planck was a sober man and, at 42, a little long in the tooth for a revolutionary. But his discovery was to turn the classical physics of the billiard ball on its head. What he described was an answer to an old question: Why does the colour of radiation from any glowing body change from red to orange and ultimately to blue as its temperature increases? Planck found he could get the right answer by assuming that radiation, like matter, comes in discrete quantities. And he called his little packets of energy "quanta" from the Latin for amount. At the time, Planck seems to have imagined that some deeper explanation of these quanta would emerge.

But it rapidly became clear that the "quantisation" of energy -- dividing it up into individual pieces -- was actually a new and fundamental rule of nature. The classically trained Planck didn't like this conclusion one bit. He resisted it to his dying day, prompting his famous lament that new scientific theories supplant previous ones not because people change their minds, but simply because old people die.

It's not surprising that Planck was unsettled by the implications of quantum theory. If you accept its conclusions nothing is what it seems, or what common sense and Newtonian physics lead you to believe. Things change when you look at them. Objects behave in unpredictable ways.

Take the uncertainty principle, which emerges inevitably from quantum theory. According to this, you can never measure anything as accurately as you'd like. Or to put it another way, measurements affect the thing you're trying to measure. Then there is the notion of wave-particle duality, which says that an electron, for example, may sometimes act like a wave and sometimes like a particle. What all these ideas seem to suggest is that

physical objects -- even reality itself -- are not at all what everyone had supposed.

How do such grandiose and alarming conclusions follow from the seemingly innocuous statement that energy is divided up into quanta? The American physicist Richard Feynman liked to use a simple and compelling example. Think of light reflected from a mirror. No mirror is perfect, so perhaps 95 per cent of the light bounces off the mirror's surface, while the other 5 per cent passes through, or is absorbed or otherwise lost.

In pre-quantum days, no problem. When light hit a mirror it was seen as a continuous stream of energy: most bounced off the mirror's surface but a fraction streamed through. But Planck recast light as a torrent of quanta -- called photons. Because each photon is indivisible, it must either be reflected or absorbed in its entirety. You can't have 95 per cent of a photon going one way and the rest going somewhere else. But then, to understand what a mirror does to light, you must conclude that 19 out of every 20 photons bounce off the surface while the rogue photon goes its own way. Who decides what each individual photon should do?

Here lies the revolution. Quantum theory says that what happens to any individual photon is genuinely and inescapably unpredictable. It has a 95 per cent chance of being reflected, and a 5 per cent chance of being transmitted or absorbed, and that's all there is to it. There's nothing about any photon, no secret property or hidden clue, that can tell you any more precisely than that what it will do. The unpredictability is innate.

Here's another example. If you rotate your Polaroid sunglasses in front of your eyes, you'll see changes in the amount of light getting through them. Light (as James Clerk Maxwell had shown in 1864) is a type of electromagnetic wave, and the waves can be polarised, like a skipping rope that's made to go up and down or side-to-side, or anything in between. Sunglasses tend to let through vertically polarised light but block the horizontally sort, the source of most glare and reflections.

But a single photon of light coming at your sunglasses has only two options: to pass through or not. What will it do? Again, the best you can do is to know those probabilities. You can't ever predict exactly what any individual photon is going to do.

In the old days of classical physics, you might have wanted to predict what a billiard ball would do when it ran into another billiard ball or the side of the table. To do that, you would need to know its mass, speed and direction,

perhaps also at what rate it is spinning, its hardness or springiness when hit, and so on. You might call this list of properties the classical "state" of the billiard ball, and the better you knew its state the better you could predict its behaviour. But quantum theory throws all that out of the window. You can only describe the "quantum state" of a photon in terms of its probabilities. And the probabilities change, depending on what you plan to do with the photon. A photon headed for a mirror will be reflected or transmitted when it gets there. But if the same photon were heading towards a polarising screen, you would need to describe it in a different way. For the classical billiard ball, one set of properties -- mass, speed and the like -- will tell you everything you need to know about it, under every circumstance. But the quantum state of a photon -- now that's a different matter.

You can see why physicists of the old school found quantum theory confusing, alarming and quite possibly dangerous. It seems as if the photon has no reliable properties of its own, and only reluctantly acquires them as a sort of conspiracy between it and the measuring device.

Thought experiment: Review the script and decide what your character thinks of the quantum universe.

Observation & The Cat

Schrodinger: ... We put a cat in a box. A live cat. With a vial of radioactive matter. We shut the lid. We leave the cat there. We cannot observe the cat. So we cannot tell if the radioactive vial has killed the cat or not. We cannot tell if the cat is alive or dead...

Wittgenstein: (to the audience) This sounds cruel, but remember the cat is not a real cat in the sense that it was ever a sentient being. It is a real cat in a thought experiment...

In the real world cats can't be both living and dead. So what is it that forces them to choose?

In the quantum world, measurements are what make things happen. When a measurement is made, one definite answer emerges from of a range of possibilities. Without measurements, evidently, the whole Universe would languish in a permanent fog of indeterminacy. But what on earth is a measurement? Does it require human agency or observation or (like a tree falling in a forest when no one is watching) can measurements happen in the dark? And supposing we know what a measurement is, how exactly

does it make a quantum system choose between its various options and decide what definite state it should take up?

When Niels Bohr, was drawing up what has become known as the Copenhagen interpretation of quantum theory, he was well aware of the significance of these questions. But he couldn't find good answers, and didn't pretend to. Measurements are possible, he said; we know they are. After all, photon detectors detect photons. Pragmatically, he asserted that a measurement is what forces a quantum system to adopt a definite state. A rather circular definition it's true, but accept that, and all else follows. This principle is the keystone of the Copenhagen interpretation, the main point of which is not to worry further about what a measurement is.

But it's uncomfortable to have a fundamental physical theory, no matter how well it works, that depends on a principle no one even claims to understand. Particularly unhappy with this state of affairs was Erwin Schroedinger's cat. The cat finds itself inside a box along with a technical gizmo that sends a photon towards a filter and records whether the photon passes through or not. If it doesn't, nothing happens. If it does, the photon trips a device that breaks open a vial of poisonous gas, and the unfortunate cat dies. The experiment is set up so that there's a fifty-fifty chance of the photon passing through the filter. Accordingly, once you open the box and look inside, there's a fifty-fifty chance the cat will jump out.

That's all very well. The difficulty arises, as Schroedinger pointed out in 1935, when you start wondering what was happening inside the box after the photon measurement was made but before anyone lifted the lid. It's simple enough to say that the gizmo delivered a photon, the photon either passed through the filter or it didn't, the vial of poison was broken or not, and the cat died or stayed alive.

Once the photon hit the filter, a quantum measurement was made, and subsequent events ensured that after that time the box contained either a dead cat or a live cat. But that assumes that the photon striking the filter was enough to constitute a measurement. What if, on the other hand, it takes human observation to trigger the measurement? In that case, it would appear, the cat must have been in some indefinite quantum cat-state, neither dead nor alive but potentially either, until someone opened the box to see. But what can it possibly mean, if anything, for a cat to be in some undefined half-dead, half-alive state?

Bohr's response was straightforward: it doesn't matter. The only demonstrable point is that when the box is opened, the cat inside will be either dead or alive. There's no point worrying about what a half-dead, half-alive cat might mean, since no one can ever see such a thing. Any cat you'll ever see will invariably be either dead or alive.

There is a genuine physics problem here, though. Bohr's attitude amounts to saying that there are quantum objects, such as photons, that can be in uncertain quantum states. And then there are classical objects, such as cats, that can only exist in definite classical states. The snag is that a cat is made of quantum components - protons, neutrons and electrons. Quantum theory is supposed to be the fundamental basis of all physics. So how does a cat get to be a classical unequivocally dead-or-alive cat, rather than a quantum half-dead, half-alive cat?

This is another way of looking at the measurement question. Where, along the chain of events from photon to filter to detection to vial of poison to cat, does the measurement actually happen? At what point does quantum indeterminacy give way to classical definition, and how?

The central issue revolves around what it means to talk about the quantum state of a complex object such as a cat. Being dead or alive is not an intrinsic property of the elementary quantum constituents of the cat, but rather a collective attribute of the way all those constituents are put together. A quantum cat-state, properly described, would mean an exact and complete specification of the quantum state of every single particle within the cat. If a single electron flips into a different energy state, then the entire cat, collectively, flips into a different overall quantum state.

Clearly, there are (almost) countless quantum states all corresponding to the same cat. Even when the cat appears to be doing nothing at all, as cats are wont to, its internal quantum disposition is in a constant turmoil, flipping from one state to another. But all those quantum cat-states must belong to one of two categories: those corresponding to live cats, and those that represent dead cats.

Is it possible then to make a true "half-dead, half-alive" quantum cat-state? Hypothetically, yes. Take one state from the array of "dead cat" quantum states and another from the array of "live cat" states and, by standard technical means, combine these two mathematically into a single state that partakes equally of each possibility. It's the same thing, although on a much larger scale, as combining quantum states for photons with horizontal or

vertical polarisations so as to represent a photon in an indeterminate state, whose polarisation has yet to be measured.

A "half-horizontal, half-vertical" photon polarisation state will stay that way. And in principle, so should a "half-dead, half-alive" quantum cat-state. But here things get complicated, because the cat's dead half and live half are free to evolve quickly into any of the myriad other dead and alive states open to them. What's more, as the dead part rattles around among all the possible dead states, and the live part does likewise, they do so independently.

To demonstrate a genuine "half-dead, half-alive" state there has to be a very particular coherence in the way the two component parts are joined together. As each side evolves, that coherence drains away, so that in practice the cat behaves not as if it were in a half-dead, half-alive state, but as if it were either dead or alive - just the way we expect a cat to be. Strictly speaking, there hasn't been any change from "dead and alive" to "dead or alive", but as a practical matter it becomes impossible to perform an experiment that will find anything except a cat that's either dead or alive. For all practical purposes, the cat is classical.

This process of "decoherence" between components of a compound quantum state illustrates how hard it is to keep complex objects in pure quantum states. This is because they are subject to innumerable random interactions and influences, both internal and external. In short, a "half-dead, half-alive" cat isn't impossible, just extraordinarily unlikely - and almost impossible to detect. Another way of thinking about the situation is to say that the constant interaction of atoms and electrons within the cat amounts to a continual "self-measurement" of the quantum state. It's not observation or detection that matters, it's the incessant interaction of all the quantum states in a cat that prevents any individual state from remaining stable. So humans or cats will inevitably fall into a meaningful and observable classical state - even though the cat's interior quantum state is incessantly changing and altogether unpredictable. Anything big, in other words, is just about guaranteed to look like a classical and not a quantum object. Just what Dr Bohr ordered!

Thought experiment: What does your character think is in the box?

What does your character think of the thought experiment?

As an actor, consider how the box relates to the 'black box' of the theatre

and therefore how the play is a thought experiment in and of itself (with audience as observer, within or without the box?).

Quantum Characters

Quantum theory upset Einstein because it gave him nothing better to grapple with than frustrating probabilities. In 1936, he got together with Boris Podolsky and Nathan Rosen to create the "EPR paradox". It's ironic that the spooky EPR connection has now been used in the lab to teleport photons, because the original reason for inventing the EPR paradox was to show that one of the implications of quantum theory was so unacceptable that it must be wrong or incomplete in some respect. What the EPR trio couldn't accept was the idea that measuring a photon in one place could have an instantaneous physical consequence somewhere else -- all because quantum measurements are about probabilities.

The original EPR argument has been recast in many different forms, but let's stick with photons for now. Suppose you entangled a pair of photons polarised at 90 degrees to each other. You can't know what the polarisations are until you measure them; they could be vertical, horizontal or any angle in between. All you do know for sure is that they are perpendicular to each other. You send these photons off in different directions. At some point as they shoot off into the distance the photons will run into polarising filters you've cunningly put in their path.

Suppose one photon passes straight through a vertically aligned filter. It must be vertically polarised, so its partner must be horizontally polarised. The second photon would therefore pass through any horizontal filter in its way, but not through a vertical filter. So far so good. One photon is vertically polarised, the other is horizontally polarised, so they are at right angles as they should be, and all's well with the world.

Not quite. Until the first photon hits the filter, you have no idea whether it will go through or not. And for that matter, the photon doesn't know, what sort of filter it is going to hit until it gets there. Since you know nothing about either photon's individual polarisation until you make a measurement, you only know that the odds of it going through are fifty-fifty, no matter what angle the filter is set at. So the second photon can't know what the first photon will do until it actually does it. Yet the actions of the first photon determine the actions of the second. The second photon has to get some sort

of tip-off from the first, even though they are physically a long way from each other.

What's more, this tip-off has to be instantaneous, because it has to work even if the two photons hit their filters at exactly the same time. It's impossible to predict what either photon will do, and yet the two of them must act in concert so that their polarisations have the correct relationship to each other. This is the crux of the spookiness that Einstein, Podolsky, and Rosen took such exception to. It arises precisely because the results of quantum measurements are uncertain or indeterminate until they are actually made.

The story would be different if the polarisations of the two photons were somehow fixed at the outset, even though we don't know what they are. The results of any polarisation measurements would still be fifty-fifty either way, because you have no prior knowledge of what the photons will do when they get to the filters. But from the photons' perspective, everything is predetermined: each photon is in a definite state, so the fact that the two measurements come out as they do is the result of prearrangement, not of a spooky communication.

This is what the classically minded Einstein seized on. It's like saying that a billiard ball headed your way is either red or blue, but you don't know which until you actually look at it. That's an entirely different proposition from saying that the billiard ball is neither red nor blue until you look at it, and it only becomes one colour or the other at the moment you see it.

The argument, in other words, was that if photons' polarisations are truly not determined until they are measured, then the paired EPR photons have to conspire with each other in some instantaneous way in order to guarantee that simultaneous measurements on them come out right. That seemed absurd! Much more sensible, Einstein and his friends believed, was the notion that quantum theory is incomplete, and that each photon has some secret property that, if only you knew it, could tell you what the result of a polarisation measurement would be.

All well and good, except . . . how would you find out the photon's secret except by making the very measurement whose result it is supposed to help you predict? Which rather spoils the point. Most physicists agree that the EPR conundrum is indeed something of a puzzle. But does it mean that quantum theory is wrong, or just hard to understand? What would be the point of giving photons extra properties if there is no independent way of

finding out what they are, especially when they don't seem to make jot of difference to the outcomes of experiments?

In the words of the physicist John Bell, who generally sympathised with Einstein's disquiet over quantum theory, the EPR paradox is one of those questions that most physicists feel they will fully understand if they can ever spare twenty minutes to think about it. But in the meantime, why worry?

Thought experiment: Consider how Wittgenstein and Schrodinger are two parts of one quantum character. If this is so, then the relationship with the audience becomes the focus, rather than what each character might want from the other character. In light of this, what does your character want from the audience and how does he try to get it?

Semiotics

Wittgenstein writes on the board The Hunt for Higgs Boson.

Wittgenstein: make the connections. Take the journey.

Schrodinger: Okay. (beat) So. Hunt. (pause) Hunt makes you think of Snark.

Language is volatile. If it wasn't, we wouldn't have so many misunderstandings. 'But I'm sure you said this', 'yes, but I meant that!'. A branch of linguistic theory originated by Saussure and perpetuated by Roland Barthes addresses this volatility by separating the written word or utterance from its meaning. Barthes recounts Saussure's system: "the language or langue—the signified is the concept, the signifier is the acoustic image (which is mental) and the relation between concept and image is the sign". Take for instance the word 'cat'. I utter the word 'cat' and you hear 'cat' (the acoustic image, the sound of my utterance 'cat'). When you hear 'cat' you associate a concept with the verbal utterance. You might imagine a fluffy white cat, while the next person might imagine a mangy alley cat and so on. The sign is the relationship between the concept and the verbal utterance, but one can easily see how for any singular utterance, an untold number of associated concepts exist. Now imagine moving from a single utterance to a sentence, and from there to a paragraph. We can see why Wittgenstein says: 'Language lets us down at every stage of the process'.

Thought experiment: What is your character's relationship to language? How does it change through the course of the play?

Wittgenstein's Language

See Wittgenstein's Poker, pp. 222-233.

Implied and Real Audiences

Wittgenstein: Because there's always a give and take. Givers and Takers. Someone to do and someone to receive. The implied audience (he acknowledges them) That's you.

Implied reader/actual reader or audience: Terms invented by Wolfgang Iser and discussed by him in his books *The Implied Reader* (1974) and *The Act of Reading: A Theory of Aesthetic Response* (1976). The 'implied reader' is a 'model' or 'role'. Such a reader is active as well as passive; the text structures his or her response, but he or she also produces meaning and has the task of 'consistency building'. The 'actual reader', by contrast receives mental images while reading; but these images are, inevitably perhaps, modified by the experience and knowledge (and thus other images) which the reader brings to the text. The hypothetical implied and actual reader co-exist, are one and the same person responding to a text in different ways and at different levels of consciousness.

Wittgenstein and Schrodinger talk about the audience quite a bit.

Characters barge into the auditorium, steal programmes from spectators, try to predict what they are thinking, discuss how to tailor the dramatic structure to suit the preconceived ideas of the audience, etc. *Chasing Waves* creates a three-dimensional (if not 4D or more) implied audience, situated within a script which will ultimately engage with a diverse, live audience. Therefore, the implied audience created by the text, and therefore re-created by the actors on stage, will confront the actual audiences sitting in the Swallow Theatre in July.

Thought experiment: Consider the audience within the script as one might prepare a character for performance:

What explicit information about the audience can be found in the script?

What do you know about the audience which is implied by the script?

What is your character's specific relationship with the implied audience?

What do you want from the audience?

How will you achieve this objective?

What does the audience want from your character? From the play?

How might the implied audience differ from the real audience?

What might the live result of this difference be?

Authors & Characters

Wittgenstein: But in this case the writer, or creator, only has to make the quantum ripples, not measure them, or chase the wave.

Schrodinger: That sounds like the writer writing himself off the hook/

Literary theorists have had a lot to say about the relationship between an author and his/her text. For instance, Wayne Booth states: ‘we must never forget that though the author can to some extent choose his disguises, he can never choose to disappear’. Which seems to mean that when a writer writes a text, he or she can never wholly remove some part of him or herself from the text (although this part may be ‘a disguise’).

Foucault discusses the name of the author:

We can conclude that, unlike a proper name, which moves from the interior of a discourse [narrative] to the real person outside who produced it, the name of the author remains at the contours of texts—separating one from the other, defining their form and characterizing their mode of existence. Foucault, therefore distinguishes the name of the author from a proper name, indicating that the name of the author somehow exists in the margins of the text, and therefore delineating text from author, while forging a link between the two. Booth and Foucault seem to point to what might be an ‘author-in-the-text’.

Real authors and their actual books aside, attention has been paid to a figure within a work of literature, which might look, sound and appear like the real author. This figure is a character, just like any other character, and has sometimes been called, ‘the implied author’. Booth states that the implied author seeks to “mold the reader into the kind of person suited to appreciate . . . the book he is writing”. The implied author offers the reader certain clues about how one might read a book, where the story originated, other related texts, etc., all within the framework of the fiction.

Thus a number of relationships emerge: real author to real text, implied author to real audience, implied author to implied audience. One can also consider the relationship between real author/implied author and characters. Pirandello played with the relationship between author and his or her characters in *Six Characters in Search of an Author*:

Father: You never saw it before, sir, because authors usually hide the workings of their creation. When characters are alive, truly alive before their author, he has only to follow them in their words and actions which

they precisely suggest to him, and he has no other choice except to want them to be the way they want themselves to be. And he's in for trouble if he doesn't! When a character is born, he immediately assumes so much independence, even from his own author, that he can be imagined by everybody in a number of other situations in which the author never thought of putting him, and sometimes he even acquires a meaning the author never dreamed of giving him!

In this passage, Father indicates that authors actually 'hide' within a work of art. He also indicates that characters act autonomously, with the help of the readers imagination, and therefore a character has a life wholly independent of the author.

Thought experiment: How does the author appear in Chasing Waves?

Why might a real author choose to place an 'implied author' in a text, and why might it have been done so in this instance?

How does the 'implied author' in CW "mold the audience into the kind of person suited to appreciate . . ." the play she wrote?

What is your character's relationship with author?

How does your character become entangled in the author's relationship with the audience?

Isn't the simultaneous existence of implied author in the script and real author without the script similar to the quantum existence of two entangled particles?

If the author becomes part of the script, isn't she also inserting herself into the thought experiment, and therefore excluding herself from the possibility of being the observer, who finally lifts the lid of the box?

Time

Schrodinger: The world of the play is the world of the present.

A play, as printed script on sheets of paper, exists in time:

The work itself, "exists simultaneously in all of its parts and . . . none of these parts is 'earlier' or 'later' in a temporal sense"

It may have a temporal, dramatic structure within its scenes, words, etc., but in once sense it exists, as a whole, on the shelf as a physical object, until a reader picks it up or a director begins to stage it.

With this, we can see how multiple 'times' might be associated with one particular work of art (so far we've considered the physical nature of the printed text, as well as indicated temporal structures within the work of

art). It can be said that a narrator or ‘speaking storyteller’ creates a narrative now which depends upon events that happened sometime in a narrative past [once upon a time...]. See Ricoeur, *Time and Narrative*, II, 196 for absolute present of the narrator. Also, Genette notes that narrating itself passes as one of the most unnoticed fictions of literary narrative, in that narrating involves an instantaneous action, free of temporal dimensions (*Narrative Discourse*, 222)

A play takes this one step further. When enacted on stage, the time of a play is always the narrator’s ‘now’. An audience experiences a stage play as the time inherent in the play’s structure is enacted before one’s eyes. This might involve flashback, flashforward, repetition, etc., but any particular moment still recounts a live ‘now’. Therefore, as Schrodinger states, ‘the world of the play is the world of the present’.

However, Wittgenstein and Schrodinger have further problems in time which go beyond the narrative times outlined above. Consider, for example, the myth of causality:

Let us consider an example... Our example will be serving at tennis, a relatively small-scale, unified, and simple action... Let us note first that the action unfolds in temporal phases, like the melody. The purpose of the action is to hit the ball in a certain way, which is thus the temporal as well as the teleological end of the action—though it could be argued, interestingly, that the ‘follow-through,’ which occurs after the ball is hit, is part of the means to the end which precedes it. In general one is inclined to think it standard that means temporally precedes the end of the action, just as it is thought standard that cause precedes effect. In both cases, of course, there are important exceptions involving contemporaneity... (Carr, *Time and Narrative*).

Therefore, even simple actions, such as hitting a tennis ball, upset our classical ideas regarding cause and effect.

Physicists push the boundaries of our understanding of time even farther: There are two main philosophies of time. One theory suggests that the flow of time from the past to the future is genuine, and only the moment ‘now’ is real at any one time. This seems to mean that we need another ‘layer’ of time in which to measure the ‘flow’ of our time. If our movement through time implies the existence of a ‘supertime’ to measure the rate time passes, there must also be a ‘super-supertime’ to measure supertime, and so on. This idea was proposed by 20th-century British philosopher John William

Dunne. The other possibility is that everything that has happened and everything that will happen exists somewhere in four-dimensional spacetime. This means that, in theory, every moment coexists, in a spread-out spacetime reality. All that 'moves' is our perception of 'now.' One version of this has been proposed by British astronomer Sir Fred Hoyle. The problem is that this seems to leave us with no options for making choices, that is, it means we have no free will (Gribbin, *Time & Space*).

Thought experiment: Why do Schrodinger and Wittgenstein have so much trouble with beginnings and endings?

Why might Wittgenstein say: 'You can't tell where a beginning is?'

What is the problem with Schrodinger's comment: 'If we have to keep doing this we're never going to get there?'

What happens at the 'end'? Why?

Post-modernism

Post-modern literature sometimes involves the writing of reflexive or meta-fiction: fiction which is in the first instance aware of itself as fiction and which may dramatize the false or constructed nature of fiction, on the one hand, or the inevitable fictionality of all experience, on the other.

Consider how *Chasing Waves* capitalises on both halves of the post-modernist coin outlined above. On the one hand, the play is acutely aware of itself as fiction (characters indicate they are characters, refer to the author, talk about the audience, refers to the dramatic structure in which they exist, barge into the audience, etc.). However, its post-modernity doesn't stop there. By addressing the nature of the quantum world, both through science and language, the play attacks the very nature of experience. If one can't know what one means by 'green', how can language be anything more than a fictional construct? If reality in the quantum world is unpredictable as well as inherently dual until observed, then all everyday observation only identifies a tiny sliver of the universe.

Thought experiment: Is your character aware that he is a fiction?

How does your character address his fictionality? What is his relationship with his fictional state?

What is your character's understanding of the universe? Or rather, what is his cosmology?

The Absurd

Schrodinger: Two characters, unaware of what's going on..it's absurd. (beat) and it's not even original.

Clearly, the idea that man is absurd is by no means new. An awareness of the essential absurdity of much human behaviour has been inherent in the work of many writers... However, the concept of homo absurdus has acquired a rather more specific meaning in the last hundred years or so. This is partly, no doubt, owing to the need to provide an explanation of man's apparently purposeless role and position in a universe which is popularly imagined to have no discernible reason for existence.

Mathematically, absurd is that which cannot be expressed in finite terms of ordinary numbers or quantities. Hence irrational rather than ridiculous. It is in the mathematical sense that the 'philosophy' of the absurd has been mostly expressed (from the Penguin Dictionary of Literary Terms).

The author's choice to employ absurdist elements in Chasing Waves reinforces the quantum ideas addressed in the script. As indicated above, the absurd in mathematics cannot be expressed in finite terms, 'hence irrational'. To the classical Newtonian world, the quantum world seems irrational. As Schrodinger attempted to demonstrate in his thought experiment, a cat from our world of common-sense, should not be able to exist in both a live-cat state and a dead-cat state. This duality can be understood from the classical point of view as absurd.

Also, the absurd tradition addresses man's 'purposeless role and position in a universe'. In quantum physics, man's place is up for grabs. On the one hand, the quantum world cannot be predicted by man, and until an observer enters the equation, quantum objects can exist in two states at once, two places at once, etc. However, the role of the observer is unclear, and can be interpreted as the force which encourages a quantum object to behave in a certain way (as a wave or a particle). Therefore, man may or may not have importance in the quantum world. Chasing Waves addresses the observer from the quantum world, as well as plays with the audience as observer, asking them to consider their place in relation to the play and the universe.

Thought experiment: What other characteristics are usually associated with absurdist drama?

What is important for a character to understand about the universe in an absurdist drama?

Further Reading

Pirandello, Luigi. *Six Characters in Search of an Author*.

Stoppard, Tom. *Rosencrantz and Guildenstern are Dead*.

Beckett, Samuel. *Waiting for Godot*?

About observation

We begin from the quantum assertion that the observation of an object in some way changes the object itself.

Part of the rationale of the play is to analogise this assertion in dramatic terms.

Our contention is that observation or interaction with a play affects the fundamental “being” of that play. That in a sense each audience member “creates” his own play simply by engaging with the action on stage.

The world of the play is not just one world, but a whole multiverse which you can tap into and from which you may draw your own understanding.

You as observer will bring something to this play which will change it in a fundamental way. That is what you will take away from this experience.

Your play. There is no right or wrong. There is only relative observation.

What you take away from the play and the process of rehearsal will be affected by what you put in –by how you interact with what is happening in front of you, and inside you.

This is why we have distributed materials around the rehearsal room, things for you to interact with, waves or particles if you will, for you to observe.

Director/Writer commentary:

What is the play about? (The Director)

In Cally Phillips' radical new play *Chasing Waves*, two characters who may [or may not] be a philosopher and a physicist probe the nature of life, language and the universe. Who are we? Where do we start? What is language? and What's in the box? As they play with words and challenge the boundaries between spectator and story in a style reminiscent of Stoppard, Crip and Beckett, the two men ask us to forget everything we've learned and embark on a journey of understanding.

"Because our representation of reality is so much easier to grasp than reality itself, we tend to confuse the two."

This assertion lies at the heart of *Chasing Waves*, as much as it is also applicable to quantum physics and linguistic theory. For me, and the writer, the very split between genuine reality and what we interact with on a day to day basis is both fascinating and disturbing. If the quantum world works, as

physicists have been proving for most of the past century, then our classical everyday world has nothing to do with the mechanisms that drive the universe. If we consider the statement above in light of language, we might begin to consider the link between the word and its physical counterpart. Words and speech are inadequate as representatives of the physical world, and are even more lacking when it comes to representing our psychological worlds. Cally and I had been discussing linguistic inadequacy long before this play was written. We seek to question working representations of reality in all manifestations, including societal myths, scientific myths and linguistic systems. By creating this play, we are asking our audiences to consider: what is real and how do I participate in creating the fictions I call 'reality'?

What is the play about? (The Writer)

Well, you know, it seemed like a good idea at the time! A play that incorporates all kinds of things I am interested in – quantum physics, philosophy of language, absurdist drama, and a way of thinking about a deeply felt belief I have that theatre is a good example of the quantum “way” of being. I wanted to play with character/audience relationships in a new way. There is lots of other stuff written by me about the play throughout this space – and at the end of course, there is the play, which ultimately is THE VOICE which speaks to you and which you may understand.

The Stages of Production

Pre-production

Initially of course the play is written. This is where the choices begin.

Choices must be made about

Casting

Costume/Props

Set

Script

Venue

In this production these choices were made by the director and writer in collaboration.

Rehearsal

A huge amount of time is spent in preparing the play for performance.

A rehearsal schedule is drawn up as follows. In this case there were 9 days rehearsal. This is a very short time to get a play up and running but it was achievable with good actors, clear direction and a firm commitment on the part of all the company towards the shared goal.

Usually the director delegates responsibility for smooth running of rehearsals to the stage manager, but in a small production like this it is not unusual for the director to take on practical stage management tasks as well as the artistic direction of the play.

If the director doesn't have access to the original writer of a script, he or she will interpret the play as he or she sees fit. Often directors will also disregard stage directions written by the playwright in order to actuate his or her interpretation of the play. Copyright prevents the director from changing the lines, but if copyright isn't in effect, as in Shakespeare's works, a director can cut, add and rearrange lines or even scenes. The rehearsal process for *Chasing Waves* differs from the norm in that the writer and director will work very closely in order to bring the play to the stage.

Rather than disregarding what the writer might have had in mind, the writer will be there to answer questions from actors and director both. Also, prior to the rehearsal process, the director worked with the writer in order to solidify her interpretation of the script and ensure that it is what the writer intended. Although the director will have the final say over interpretation, the process will be more collaborative than it might be in other rehearsal processes.

What happens in the rehearsal process?

The rehearsal process includes a number of steps, including, but not limited to:

A read-through

Blocking rehearsals

Scene-work

Run-throughs

Technical rehearsals

Dress Rehearsals

Read-through: Actors, director, writer and sometimes members of the production team assemble for a reading of the play. Each actor reads aloud the part he or she has been assigned. A stage manager reads stage directions, or director in lieu of a stage manager. They read the play in its

entirety. At the conclusion of the read-through, directors, actor and writer might discuss character or other aspects of their approach.

Blocking Rehearsals: With script in hand, the actors determine exactly where and when they will move throughout the play. Stage movement is called 'blocking'. The director leads this process. A stage manager records the blocking. Actors also make notes of blocking in their scripts.

Scene-work: Once blocking has been solidified, director and actors will work specifically on each scene. They will determine what happens in each scene, both explicitly and implicitly, and strive to ensure that their collective interpretation is true to each scene's meaning and action. They may discuss individual line reading, and continue to develop relationships between characters. At this point actors have memorised their lines (known as 'off-book'; e.g. An actor who no longer carries their script is 'off-book'), and the director may look carefully at whether or not a performance is believable. During scene-work a director will start and stop the actors as they play a scene.

Run-through: The actors perform the play from start to finish without breaking to work on specific sections of the script. The director takes notes during a run through. After the run-through will discuss adjustments he or she would like to see in the actors' performance.

Technical rehearsals: The play is blocked and has had several run-throughs. Lights and sound, as well as any other technical element such as props or pyrotechnics, are added to the play. This is initially done in a cue-to-cue rehearsal where the lighting designer, sound designer, stage manager, director and actors run the technical cues in the order they occur in the play. This is not a rehearsal for actors to work on performance. Technical rehearsal is for the technical team to ensure the accuracy of the lights and sound, not only in terms of timing, but also in terms of quality. After the cue-to-cue, there are generally additional technical rehearsals in which the entire play will be performed with the technical elements in place. Chasing Waves will not have a complicated technical design, and therefore only one technical rehearsal will occur.

Dress Rehearsal: The actors run the entire play with costumes, lights, sound and props. The director will take notes during the dress rehearsal regarding adjustments he or she would like, which may be for the actors or the technical team. Chasing Waves will have one dress rehearsal.

Production

This is the bit you see.

What are the elements of production?

A play is about making creative choices and solving creative (and practical problems).

For Chasing Waves pre-rehearsal decisions included

Set: Decisions about The Box, photographs, the Whiteboard, defining the stage area.

All physical aspects of the play that exist on the stage to create a world inhabited by the characters. This might be as elaborate as a full two-story, realistic house with complete furnishings, or a black cloth hanging at the back of the stage and a few boxes to represent chairs. A set designer creates the set, with input from the director. Often the writer gives at least some indication about set in the opening stage directions. Some writers are very specific about set in stage directions.

Costumes: How to dress each character. Character is delineated in some way through costume and since this is an “absurdist” play we had a free rein to make costume choices. It was important that costume said something about character, but also that it might challenge and provoke pre-conceptions reactions and thought from the audience. Usually a costume designer selects and/or creates the costumes with input from the director. In this case, because of the unusual and collaborative nature of the play, the choices were made by writer and director.

Lighting: Stage lighting is carefully designed in order to create mood and location. The lighting design not only includes placement of lights on the grid or bars (the apparatus from which the lights hang above the stage and sometimes in the auditorium), but also when and where lights fade up, out, etc. within the script. Stage lights are often covered with gels, which give the lights a color, and sometimes filters can be used on a light in order to diffuse the light or give it texture. Sometimes a gobo will be used over a stage light; a gobo is a metal stencil which when placed over a light will create a shadow pattern on stage. Due to the limited nature of the space/technical possibilities, we decided to keep things as simple as possible. Lighting is one of the technical aspects we will undertake “on the hoof” during the rehearsal process – yet another creative “choice” to be made during the process.

Sound: Many plays call for sounds that cannot be made by the actors, such as off-stage noises or music. A sound designer selects all of these sounds, often with input from the director. The designer chooses a volume level for each sound, as well as works with the director and actors to ensure that the sound cues occur in the correct place within the play. We don't have any sound effects in *Chasing Waves* – again, the spirit of keep it simple! The overall design brief for a play is that everything should be appropriate to both the play and the space.

Who brings a play to the stage?

The Writer

The writer creates the playscript. As a playwright, one must keep staging in mind when you are writing and also ask oneself whether it will work as a piece of drama when it is realised in front of an audience. This may mean that the play will challenge the audience, or complicate the relationship between the play and the viewer, but it always somehow keeps the audience in mind. For instance, if a novel is adapted for the stage, it isn't transferred word for word, but a process of selection occurs, which tailors the story for the medium. A writer does not stage the play, except in the instances when the writer also takes on the role of director. The writer works collaboratively with a director in order to realise the final production.

The Director

The director brings the play to the stage by selecting the actors, researching the play's background and content, identifying overarching themes or issues in the play which he or she will emphasize in the production, working directly with the actors throughout rehearsal by blocking the play, conducting scene-work and leading character development, as well as leading run-throughs and overseeing technical aspects of the production. The overall interpretation and realisation of the play rests with the director.

The Actor

An actor receives a script prior to the beginning of the rehearsal process. He or she studies the script carefully, conducting research in order to illuminate the play's content and his or her character's traits. The actor will start to learn his or her lines prior to the first rehearsal. An actor's responsibilities during rehearsals include punctuality, focus, learning one's lines in a timely manner, learning blocking and creating a believable

character who engages in realistic relationships within the context of the world of the play.

The audience

In *Chasing Waves*, Wittgenstein and Schrödinger form a strong and complex relationship with the audience. The audience becomes another complete character and this play takes the relationship between character and audience to the extreme. The challenge for actors and director will be to create a spontaneous, interactive connection between characters and audience. The challenge for the audience member will be to enjoy his or her complicity in the performance.

The observer as audience

We hope that the audience will consider how their role as observer is central to the very life of the play, and also how the audience's role as observer relates to the observer's role in the quantum universe.

The observer as playwright

The rehearsal process of *Chasing Waves* should be a valuable experience for new playwrights. For instance, consider how closely the director and writer have been working on this play in order to bring it to the stage.

Thought experiment: Consider how actors and director 'use' the play. How is a play a 'starting point' for a production?

What do the actors and director bring to the script?

How might the interpretation of any scene, line or exchange arise from the script itself? Can you separate the contributions made by actor/director and by playwright?

Think about how the play works within the theatre. Why might one choose to do this play in this particular theatre?

How might observing this process influence your own writing?

What might the benefit be to writing for a specific space or remembering how many actors the spaces to which you have access can accommodate?

Analyse the director's approach to the script. If a director worked with your script in a similar way, what would the obstacles be? Ask the same question about the actors.

About Benito Boccanegra's Big Break

The play came out of a night at the opera. I don't like opera, in fact I actively dislike opera but for reasons we do not need to explore here, I *had* to go and see this production in 1995. Finding myself in an absurd position (the best seats in the Royal Opera House, when I hate opera) I was struck by other absurdities and kept my brain entertained throughout the performance by considering the parallels which I found between Simone Boccanegra in the 14th century and Mussolini in the 20th century. That's how the play started. I started writing it in my head during the performance. I then went and did some research on Verdi and found more and more parallels – and started making creative connections.

A play in the absurdist tradition. The story of Simon Boccanegra, the first Doge of Genoa (14th c) is updated to Italy of the 1920's. Benito Boccanegra is a loosely disguised Mussolini figure (but as in the *Life of Brian* he is surpassed eventually by the real Mussolini) - his life runs in fictional parallel. His '*big break*' is his attempt to create a Fascist dictatorship, and his failure leaves the way clear for Mussolini.

The play is a pastiche of operatic style. Boccanegra is a plebian and is quickly thrust into the upper echelons of society. He does not know how to act, and therefore is louder, more obstreperous than is socially acceptable. His larger than life persona is both humorous and embarrassing.

The play distorts time and deals with specific anachronisms. Giuseppe Verdi enters the play from time to time. He has his own problems. He's trying to make an opera out of a rather unpromising story. Confronted by Boccanegra, "*The plots too thin*" Giuseppe's advice is "*Make it bigger.*" There is an element of cross purpose to this conversation as Boccanegra is worried about an assassination plot and Verdi is worried about the libretto. Eventually Boccanegra "makes it so big" that it destroys himself.

A telling phrase which comes up time and again is: "*My dying wish is to unite Italy.*" Boccanegra on one level believes that his way is best - it would

certainly be best for him.

In the Stoppardian, Pirandello style of character, Boccanegra and his fellows are always in one sense regarded as creations of Guiseppe Verdi, and his twentieth century alter ego Joe Green. These two men struggle over time to reach an agreement about what makes a good story. In the process of their struggle, the characters run riot. *Benito Boccanegra* is unashamedly a play in the absurdist vein, where the fictional characters have as much "life" and "power" as the real ones. There are a multiplicity of parallels across the time-frames showing the relation between history and fiction, opera and fascism, success and failure, real and "created" reality.

The essential conceit is that Joe Green (a nobody) is thinking how names affect lives and in particular how successful people often have alliterative names. By accident, the names of Benito Mussolini and Simone Boccanegra get joined together to "create" the character of Benito Boccanegra who is the real focus of the play. All the other characters are foils to him - and of course he is the only one with no "reality" at all. Through the course of the play Joe notices that his own name parallels Verdi's, which has a profound effect on him.

There are four distinct time-settings in this play - though all interlink. The absurdly short length of the plays reflects this co-existence.

- 1) A student named Joe Green, doing an analysis of Verdi's operas.
- 2) A fictional character named Benito Boccanegra who supposedly makes an attempt to champion Fascism in 1920's Italy but who is beaten to it by his better known namesake Mussolini.
- 3) Guiseppe Verdi, in the midst of writing an opera and
- 4) Simone Boccanegra, the 14th century subject of Verdi's opera.

CHARACTERS:

- 1) Joe Green - a student
 Sophie- his girlfriend
 Pete - his room mate
- 2) Benito Boccanegra - a liontamer rising to ringmaster and Fascist dictator.

Giacomo - his sidekick (and narrator)
Marco Matteotti - a rival of Benito's

3) Guiseppi Verdi - the operatic maestro
Guiseppina- his mistress, later his wife
Piave - librettist for Verdi's opera
Arrivabene- friend of Verdi.

4) Simone Boccanegra- First Doge of Genoa
Paolo - one of Simone's men.

JOE GREEN is a graduate student, struggling to find something new to say in his thesis on Verdi's operas. As a result of an administrative error, he is sharing an office with PETE GROSS a philosophy graduate. Pete's line of interest is in proving the mathematical significance of alliterative sounds in language. To this end he is embarked upon a study to discover whether people with strongly alliterated names (such as Boris Becker, Brigitte Bardot) are fated to be famous. It is as a result of a mix up over the joint scribblings of Joe and Pete, that the character BENITO BOCCANEGRA is born

Joe is out to impress his girlfriend SOPHIE. What better way than a night at the opera? And "Simon Boccanegra" is the only Verdi opera he hasn't "bagged" so far. His intention is to combine work with pleasure, maybe even propose to Sophie in the interval... but as the opera gets underway, Joe finds his mind wandering. What must it have been like to be Verdi, struggling against the odds for recognition with this opera?

GIUSEPPE VERDI has already won the love of a good woman (GIUSEPPINA STREPPONINI) in the 1850's, but not much else is going right. His latest opera has been laughed off the stage and a series of librettists are threatening to wreck the project still further. His intention to use opera to explain links between the Italian political systems of the 15th and 19th century, seems to be too complex for people to understand. But he will never give up.

In Southern Italy in the 1920's BENITO BOCCANEGRA, a fictional circus ringmaster, is facing similar problems. He knows he has what it takes to become a great fascist leader. It is getting the right supporters which is his current problem. His sidekick GIACOMO'S only comment on the uniform Benito has spent his hard earned cash on for his paltry squadristo is: *"black shirts, how practical."* Benito knows he has a lot of work to do before *"All Italy will quake at the sight of the son of a blacksmith - the boy who ran away to join the circus and who became the liontamer and ringmaster for the entire nation."* It is a question of *"Knowing when the opportunity is there. Any fool can take an opportunity. Knowing when to take it, that's the real trick."*

The action of the play weaves together the rise and fall of Benito Boccanegra's fascism with Giuseppe Verdi's twenty year struggle to receive the acclaim he feels his opera Simon Boccanegra deserves, and with Joe Green's dawning realisation that his study of Verdi is an attempt to make sense of his own identity. The universal consideration of the relation between history and fiction, theatricality and reality are played out through the interaction of three very different sets of relationships and the conclusion is perhaps a vindication for Verdi's belief that there can be a vital link between opera and politics.

While much of the play is created fiction, research invariably provides a rich seam and some letters provided useful material. For example,

"All this is political not dramatic, but an ingenious writer could turn it into drama very well"

letter from Petrarch to the Doge Boccanegra on the subject of Italian patriotism in 15th century.

"I don't find in this drama a single character of which one can say: it's sharply delineated! No event that is really fatal, that is indispensable and potent, generated by tragic inevitability... There is much intrigue but not much structure. Everything in this drama is superficial - all these events seem thought up on the spur of the moment, as material to fill up the stage."

letter from Boito to Verdi 1880 on the subject of his opera Simon Boccanegra.

These writings spurred me on to explore the absurdist potential of the place and look at the relationships between character, drama and audience. And it is from this kernel that *Chasing Waves*, nearly 10 years later, draws much of its initial impetus. The absurdist itch was one I was destined to scratch for quite some time. The interest in fixed and flexible roles and relationships between theatre, drama, the audience and characters is one that has consumed much of my thought throughout my writing career. I like looking at connections, playing with them, subverting them – to me this is an essential part of the creative process.

In the nineteenth century, Verdi struggled to convey a sense of tragedy and high drama through his political opera "Simon Boccanegra" which was based on events in Italy in the 15th century. While the opera was largely considered a failure in its own day, we can now see its importance as an early example of his liberal belief in the inevitable progression of history. "*Benito Boccanegra's Big Break*" takes this notion one step further, using a fictional character to provide the link between Italy in Verdi's time and the rise of Mussolini in the 1920's.

"Benito Boccanegra's Big Break" explores the vital connection between grand opera and politics, considering the role of tragedy and drama in both history and fiction, and encompassing the role of "great men" in the "play of politics". It draws on the absurdist tradition of Dario Fo, Stoppard and Beckett to reveal in Benito Boccanegra a character who is larger than life - and much more dangerous as the following exchange reveals:

BENITO: Don't you understand Giacomo. We are not bound by the rules of ordinary people. We are larger than life. We have a life beyond the petty wranglings of right and wrong. We are dealing with destiny here. With themes which will guide humanity for generations. Of heroism..

GIACOMO: And tragedy.

BENITO: Yes. Tragedy too. Where is a hero without tragedy?

Benito Boccanegra, the fictional character who aspires to be Il Duce, if only Mussolini hadn't stolen a march on him, is a chillingly brutal man. Being aware of his fictionality however, gives him one great advantage. He can stage-manage his own death to his best advantage.

BENITO: I want it to be the ultimate grand gesture. It has to be theatrical excess. Verdi, not PUNCHINELLO. I have to live on in the minds of the people as larger than life, greater than reality. (pause) Then think of the come back.

GIACOMO: So you won't really die then?

BENITO: You have to really live to really die Giacomo. That's where we fictional characters have the advantage.

Benito has it all sewn up. As Giacomo comments at the end of the drama:

GIACOMO: Old Fascists don't die. They simply change countries.... Like a great operatic tenor Benito Boccanegra travels the world playing his part; the part he rehearsed for, trained for all those long years in the circus that was Italy; singing for his supper in a most spectacular way. Look out for him. He may be coming to your town any day now.

So, in Benito Boccanegra's *Big Break*, what I intended to explore was relationships between the fictional and the real, between tragedy, history and heroism and mostly between the audience and the character. The play has never been performed to date - too many characters and too short a drama for the modern taste – but it's value retrospectively is shown as the ideas explored in it became developed and expanded for *Chasing Waves*. On the face of it the two plays might seem quite different. But if you look more closely, I hope you will see the parallels.

BENITO BOCCANEGRA'S BIG BREAK

By Cally Phillips

© 1995 Cally Phillips

All rights reserved.

| | |
|-------------------------|--------------------------------------|
| SCENE ONE: | Empty stage - present. |
| SCENE TWO: | Giuseppe Verdi's study. Paris 1857. |
| SCENE THREE: | Circus tent - Southern Italy 1920's. |
| SCENE FOUR: | A street in 14th century Genoa. |
| SCENE FIVE: | Joe Green's study - present. |
| SCENE SIX: | A street in Italy- 1920's. |
| SCENE SEVEN: | Joe Green's study - present. |
| SCENE EIGHT: | Circus tent - Italy 1920's. |
| SCENE NINE: | Simone Boccanegra's study - 14th |
| century Genoa. | |
| SCENE TEN: | Giuseppe Verdi's study - Paris 1857. |
| SCENE ELEVEN: | Circus tent - Italy 1920's. |
| SCENE TWELVE: | Giuseppe Verdi's room - Venice 1857. |
| SCENE THIRTEEN: | A street - Italy 1920's |
| SCENE FOURTEEN: | Same street - Italy 1920's. |
| SCENE FIFTEEN: | Joe Green's study - present. |
| SCENE SIXTEEN: | Giuseppe Verdi's study- Italy 1881. |
| SCENE SEVENTEEN: | Empty stage- Italy 1940's. |
| SCENE EIGHTEEN: | Empty stage - 14th century Genoa. |
| SCENE NINETEEN: | Giuseppe Verdi's study - Italy 1881. |
| SCENE TWENTY/ EPILOGUE: | Empty stage. |

CAST:

| | |
|-----------------------------|-------------------------------|
| JOE GREEN (20s) | A research student. |
| GIUSEPPE VERDI (40's) | The operatic maestro |
| GIUSEPPINA STREPPONI (30's) | His mistress, later his wife. |

| | |
|-------------------------|--|
| BENITO BOCCANEGRA (30s) | A liontamer, ringmaster, fascist leader. |
| GIACOMO (20s) | His friend |
| SIMONE BOCCANEGRA (40s) | First Doge of Genoa. |
| PETE (20s) | A student. Friend of Joe Green. |
| SOPHIE (20s) | Joe's girlfriend. |
| PAOLO (30s) | One of Simone's men. |
| PIAVE (30s) | Librettist for Verdi's opera. |
| MARCO MATTEOTTI (30s) | Socialist leader - Italy 1920's. |
| Rival to Benito B. | |
| ARRIVABENE (30s) | A friend of Giuseppe Verdi. |

4 BLACKSHIRTS and 1 MAN. (played by members of the cast)

The action of the play takes place in four main time periods: The present, Italy of the 1920's, Italy / Paris of the mid-late nineteenth century and fourteenth century Genoa.

SCENE ONE

The curtain rises to an empty stage.

Downstage centre, lit only by a lamp, stands JOE GREEN a research student in his mid twenties. He seems jumpy..distracted. He addresses the audience directly.

JOE

Joe. Joe Green. I.. I don't feel I have to justify myself to you; but I will. I mean.. I'm a research student sure, but I pay my own fees. You're not paying taxes to support me; I starve at my own expense. (pause)

So if my predeliction tends to the obscure; to thematic rivalry in Verdi's operas, I don't need you to all start jumping up and down shouting the odds about what a waste of time and money. (pause)

It's my time and my money I'm wasting. (pause) Besides, I've always felt this strange kind of connection to Verdi and Sophie, that's my girlfriend, she's into all this spiritual stuff she thinks I may have a purpose; you know, a link somewhere, on a different time dimension.. or something..

Blackout.

SCENE TWO

Lights go up on Giuseppe Verdi's study (Paris 1857). A man in his mid forties, he sits at his desk, scratching his head with his pen.

He looks out to the audience.

GIUSEPPE

You might wonder what the relevance of fourteenth century Genoa is to us here in Italy in the mid nineteenth century. It's a point too many critics are all too willing to make. (pause)

But I find that in writing this new opera there is a strange affinity with the past and the central character Simone Boccanegra himself..well..

As he goes off into reverie, a woman brings him a cup of tea. As she places it on his desk, he takes her hand; kisses it tenderly.

GIUSEPPINA

Don't forget to drink it, Giuseppe.

GIUSEPPI

I won't forget to drink it, Giuseppina.

He kisses her hand again. She smiles at him.

GIUSEPPI

You sound like a wife, Giuseppina.

The smile falls from her face. She removes her hand from his.

GIUSEPPINA

Think about it Giuseppe. When you can tear your thoughts away from Simone Boccanegra and the intrigues of Genoa.

SCENE THREE.

A circus tent in Southern Italy early 1920's.

Giacomo, an awkward looking young man dressed in a well worn demob suit, takes centre stage; his back to the audience.

GIACOMO

Ladies and Gentlemen..

Offstage a crowd chants

CROWD

Benito! Benito!

Giacomo spins round. He is out of his depth, trying to gain the attention of all the crowd (including the audience) and doesn't have the charisma to hold their interest.

GIACOMO

I am sorry to tell you that Signor Giolitti is no longer able to perform.
Boo's and whistles from offstage.

GIACOMO

But in his place, please welcome. newly promoted from liontamer to the
revered status of ringmaster (pause) Benito Boccanegra.

*He encourages the crowd into a round of spontaneous applause..
From offstage a few individual voices of dissent are heard.*

VOICE 1

A liontamer?

VOICE 2

A Ringmaster?

VOICE 3

A Ringleader!

*Benito B. enters. He wears the costume of a ringmaster, complete with a
whip which he cracks loudly. He looks every inch the fascist dictator he
hopes to become. He is a man whose charisma commands if not respect,
then at least attention.*

The crowd fall silent.

*Benito B. stretches his arms out for silence. He knows how to milk an
audience.*

BENITO B.

Giolitti is not well. (pause) The war has taken too great a toll on his nerves
for him to continue. (pause)

Shouts from offstage.

VOICES

Shame! Shame!

Benito B. waits for silence.

BENITO B.

Ladies and Gentlemen. As you welcome me to your hearts (pause) Please
remember. (pause) In a crisis it makes a great deal of difference who is
ringmaster.

The crowd offstage cheer.

Benito B. continues with his highflown rhetoric.

BENITO B.

To satisfy you gentlemen, and ladies, of course ladies, I am ready, since this
is what you want, to be liontamer and ringmaster, and to do everything at
your pleasure.

Cheers from offstage.

BENITO B.

The show will go on!The show must go on!

He takes a bow, cracks his whip and is ushered offstage by Giacomo, looking slightly less nervous now he is at his leader's side.

SCENE FOUR

A street in 14th C Genoa.

SIMONE BOCCANEGRA stands centre stage, addressing a crowd offstage and the audience.

Voices call out from offstage.

VOICES

Let him be a lord!Let him be a lord!

SIMONE

To satisfy you gentlemen, I am ready; since this is what you want, to be abbot and lord and to do everything at your pleasure.

VOICES

Il Doge, Il Doge.

SIMONE

Remember only this.I am a man of the people, like you.I come from plebian stock and I am committed to wiping out piracy and to fighting against the wiles of the patricians to my dying breath.

VOICES

Il Doge!Il Doge!

As the lights go to blackout a lone voice calls out.

VOICE

Il Duce!

SCENE FIVE

Joe Green's Study.Present day.A desk, two chairs and a whiteboard.And messlots of mess.

Joe rocks back and forth on a chair.

Pete, his college mate, sits on the edge of the desk.

JOE

I'm exploring the possibility of linguistic combinations..connections.

PETE

It's a bit out of your field isn't it.

JOE

It was Sophie's idea really. About names. Their value. Is there something for example, about strongly alliterated names, which makes people feel they are destined for greatness

PETE

And feeling that way they actually do become great?

JOE

Exactly. Like Bertold Brecht. (laughs) Boris Becker..

PETE

Brigitte Bardot. (laughs) Bugs Bunny!

JOE

Yes I think we may be straying from the point. The point is..

Pete moves to the blackboard; wipes off Joe's work, begins to fill it with mathematical symbols.

PETE

Let's try this out. If we can find a connection between the values of consonants and vowels in a name and the putative greatness of the person.. (pause) Hey, it'd be a hell of an equation. (pause) Names.. names.. give me names.

JOE

Jesus Christ.

PETE

John Lennon.

JOE

Adolf Hitler.

PETE

Benito Mussolini..

Blackout.

SCENE SIX

Italy 1920's a backstreet. In front of the curtains, as in interchanges in a pantomime.

In the semi darkness a beating is going on.

Giacomo and Benito B. are brutally knocking about a young man.

GIACOMO

What do you mean you don't want to join the squadristo?

The man yelps.

Benito B. pulls the man up by the hair until their faces are close.

BENITO B.

Don't you realise you don't have a choice.*(a pause, punctuated by a slap)* If you don't stand outside the cage with the liontamer, you'll be in the cage with the lions.

The man drops to his knees. Benito B. lets him fall.

GIACOMO

We don't need his sort anyway.

As the man curls up on the floor in the foetal position, Benito B. grabs Giacomo by the collar.

BENITO B.

We need every sort, Giacomo. We need landowners, we need peasants, we need socialists and anarchists and conservatives and liberals. We need them all.*(pause)* We need them all to come to the circus and cheer.*(long pause)* We need churchmen and politicians, we need them all to understand that economics is subordinate to politics *(pause)* and that politics is subordinate to bread and circuses *(pause)* and that it is all subordinate to bloodshed.

GIACOMO

And the army?

BENITO B.

The army we don't need.*(pause. He smiles malevolently)* We will have our own army!

Four young men dressed in black shirts march onto the stage. They halt and salute Benito B.

BENITO B.

The Fascisti.

GIACOMO

Black shirts. How practical.

BENITO B.

Today it may only be four men. But before long we will have a nationwide squadristo. Fascism will be an Italian phenomenon.

GIACOMO

A touring circus is as good a propaganda machine as any, I suppose.

BENITO B.

Scoff if you dare Giacomo. But I, Benito Boccanegra, one time liontamer, ringmaster, ringleader..

GIACOMO

Ras.

BENITO B.

Yes, ras. But more than that. Much more. With the fascisti behind me I could even become..

GIACOMO.

Il Doge?

BENITO B.

Yes. I will be Il Duce. All Italy will quake at the sight of the son of a blacksmith the boy who ran away to join the circus and who became the liontamer and the ringmaster for the entire nation.

The four blackshirts cheer.

BLACKSHIRTS

Il Duce! Il Duce!

Benito B. hushes them.

BENITO B.

Not so loud. Not yet. We must gain support before we lay claim to our just deserts. (pause) Disperse.

The blackshirts march off, dragging the young man with them.

BENITO B.

It's the problem with opportunism.

GIACOMO

What is?

BENITO B.

Knowing when the opportunity is there. Taking it is one thing. Any fool can take an opportunity. Knowing when to take it; that's the real trick.

GIACOMO

Fate.

BENITO B.

If only it were that simple.

GIACOMO

What then? If not fate?

BENITO B.

Chance, Giacomo. Chance.

SCENE SEVEN

Joe's study present day.

Joe and Pete sit, head in hands, exhausted. The whiteboard is covered in names and numbers.

Enter Sophie, carrying a tray with three mugs and a pot of tea.

PETE

We'll need something stronger than that I think.

SOPHIE

Are you getting anywhere?

JOE

Not so as you'd notice, no.

Sophie crosses to Joe, runs her fingers through his hair.

SOPHIE

Perhaps you should call it a day.

Joe laughs.

SOPHIE

What?

JOE

I can just see it. Giuseppina Strepponi bringing cups of tea to Verdi and Montenelli, saying "C'mon boys, surely that's enough for tonight."

PETE

Which opera..?

JOE

Simon Boccanegra. Not one of his most famous. Not one of his most successful. But he sweated blood over it all the same.

Pete leaps up out of his seat, crosses to the blackboard. He rubs out some names to make space, then writes SIMON BOCCANEGRA on the board. Joe and Sophie watch him.

JOE

With an "e"

PETE

What?

JOE

Simone with an "e".

*The centre of the board now reads in large handwriting.. BENITO MUSS..
SIMON BOCCANEGRA.*

Pete rubs more of the "MUSS" off to make way for Simone. He stops.

PETE

Hey!

JOE

What?

Pete steps back from the board. It reads BENITO BOCCANEGRA.

PETE

How about that for alliterative power?

Blackout.

SCENE EIGHT

Circus tent. Italy 1920's.

Giacomo walks briskly to centre stage and addresses the audience.

GIACOMO

And after the performance, in the circus tent, Benito Boccanegra will be signing up volunteers. You are all welcome. If you care for the future of Italy, if you believe you deserve more for your efforts in the trenches than a demob suit and empty promises. If you want to own land in common, to use your vote to its' fullest potential join us. Join the fascisti. Be part of the fastest growing and most successful political party since.. (he falters) A black shirt. Wear the black shirt with pride. No more wishywashy liberal coalitions. Follow the party of strength. Follow Benito Boccanegra.

Voices offstage chant.

VOICES

Benito.. Benito.

SCENE NINE

Simone Boccanegra's study. 14th c Genoa.

Simone Boccanegra sweeps onto the stage. In his hand is a letter. He is followed by PAOLO.

Simone waves the letter at Paolo.

SIMONE

The cheek of the man. A poet. Telling me my place.

PAOLO

What does he say?

Simone reads the letter.

SIMONE

"Love each other, love justice, love peace, and if you must go to war, go happily. There is never a shortage of enemies just do not fight each other."

PAOLO

It is true there is never a shortage of enemies.

SIMONE

Do I tell him how to rhyme a sonnet? Bah. Petrarch. These poets think just because they can encapsulate the mysteries of love in fourteen trite lines of iambic pentameter, they can solve the problems of the nation as easily.

He rips up Petrarch's letter.

SIMONE

Leave affairs of state to me, Petrarch. If you know what's good for you. (pause) Now Paolo. What about the pirates?

PAOLO

The pirates?

Blackout.

SCENE TEN

Verdi's study Paris 1857.

Giuseppe sits behind his desk. PIAVE stands across the room. The atmosphere is tense.

Giuseppe holds out a manuscript to Piave. Piave crosses, snatches it from his hand.

GIUSEPPE

Here is the libretto, shortened and altered to just about what it should be. *Piave thumbs through it, disdainfully.*

GIUSEPPE

You may put your name to it or not, as you please. (pause) If you are upset about what has happened, Piave, I am upset too; and perhaps more than you, but all I can say to you is "it was a necessity!"

PIAVE

And Montenelli.. ?

Enter Giuseppina, carrying a tray with two teacups and a teapot.

GIUSEPPINA

Tea?

GIUSEPPE

Just leave it there thank you.

He waves to the corner of the desk. She places the tray carefully down on the desk, looks at Piave, at Giuseppe. Sensing the tension, she thinks better of further speech and exits.

PIAVE

Montenelli did this?

GIUSEPPE

Montenelli was here in Paris. You were not.

Piave snorts.

GIUSEPPE

What did you expect? Did you expect me to rewrite the libretto myself?

Piave throws the libretto to the floor.

PIAVE

You might as well have done.

He storms out of the room.

Giuseppina enters. She crosses to Giuseppe, picking up the libretto on her way. She places it on the desk.

GIUSEPPINA.

He didn't drink his tea

Giuseppe laughs.

GIUSEPPE

What am I to do, Giuseppina?

He takes her hand, kisses it.

GIUSEPPINA

I like it. I like the love story. The part where Simone's daughter finds out that..

GIUSEPPE

Of course, Giuseppina. Larger than life. It is opera. We have to make them larger than life. This isn't history after all. It's drama.

Blackout.

SCENE ELEVEN

The circus tent. Italy 1920's.

BENITO B.

This isn't drama Giacomo. It's history.

GIACOMO

It's dangerous.

BENITO B.

At the first test. You would fail me at the first test.

GIACOMO

It's not that..

BENITO B.

Then what?

GIACOMO

Marco Matteotti. He is a powerful man. He has powerful friends.

BENITO B.

He is only powerful while he is alive, Giacomo. (pause) Without him, who will the socialists have to turn to except me. This is important Giacomo. It is my chance to become Il Duce. (pause)

It is opportunity staring me in the face. (pause) And you have decided to become squeamish at the sight of blood.

GIACOMO

Blood no. But murder..

BENITO B.

Don't you understand. We are not bound by the rules of ordinary people. (pause) We are larger than life. (pause) We have a life beyond the petty wranglings of right and wrong. (pause) We are dealing with destiny here. With themes which will guide humanity for generations. Of heroism..

GIACOMO

And tragedy.

BENITO B.

Yes tragedy too. Where is a hero without tragedy?

Blackout.

SCENE TWELVE

Giuseppe's study. Venice 1857. Giuseppe and Giuseppina enter. They are dressed as for a first night.

GIUSEPPE

A fiasco. A complete fiasco.

GIUSEPPINA

I am sure the audience would have liked it, if..

GIUSEPPE

Don't bother making excuses Giuseppina. The whole thing was doomed from the start. And I'm sure Piave is laughing up his sleeve now. Verdi. The Great Verdi. A flop. Ha, ha, ha.

He sinks down into his chair, head in hands on the desk

GIUSEPPINA

Many opera's are badly received at the premier and then..

GIUSEPPE

Badly received is one thing. Laughed off the stage is another.
Giuseppina crosses behind him, runs her hands soothingly through his hair. She gets no response.

GIUSEPPINA

I know what will cheer you up.
She crosses the stage towards the exit.
Giuseppe speaks without looking up.

GIUSEPPE

What could possibly make me feel any better now?
Giuseppina smiles.

GIUSEPPINA

A nice cup of tea.
She exits.

Giuseppe lifts his head sharply. A look of horror. But she is gone. He sinks back down into his chair.

GIUSEPPE

Of course. A nice cup of tea. The perfect end to a perfect day.
Blackout.

SCENE THIRTEEN

ITALY 1920'S a street.

Marco Matteotti addresses the audience as crowd.

MATTEOTTI

Recent events have been a sham. A fraud. A fiasco. Candidates have been beaten up, coerced, tortured. We have seen the worst excesses of a Roman orgy of violence. Theatricality has taken over from reason. Politics has become no more than a circus. (pause) All this is intolerable. (pause) I am not afraid to speak out, to challenge the cowards who threaten the democracy of our country, and I ask you..

A shot rings out.

Matteotti clutches his chest, falls to the ground dead

The lights dim.

The figure of Giacomo and four blackshirts can be seen. They cross to Matteotti. Giacomo makes sure he is dead, then they drag him off.

Blackout.

SCENE FOURTEEN

Italy 1924 the street.

Led by Giacomo, the blackshirts carry a coffin across the stage.

Benito B. follows them onto the stage. He stops centre stage to address the audience.

BENITO B.

The death of Marco Matteotti has struck us all. It has particularly affected me.

VOICE OFFSTAGE

Murderer! Fascist murderers!

BENITO B.

I now accept, alone, full political and moral and historical responsibility for what has happened. (pause) I did not kill Matteotti, but I feel his blood on my hands, on the hands of Fascism. (pause) I hide from nothing, from no man. (pause) If Fascism has been a criminal association then I am the chief of this criminal association. (pause) But do not forget, I am your leader. I take my responsibility seriously and..

VOICES OFFSTAGE

Ringmaster! (*raucous laughter*) The ringmaster thinks he is a leader of men. Stick to lions, ringmaster.

Giacomo enters. Benito B. stands looking shocked at the heckling.

BENITO B.

Giacomo. What is going on?

GIACOMO

You've lost them Benito. They don't trust you any more.

BENITO B.

Don't trust me? But who will they find to lead them now? Who..?

VOICES OFFSTAGE

Benito! Benito!

Benito B. perks up. Raises his arms to the crowd.

VOICE OFFSTAGE

Mussolini, you clown.

The chanting of the crowd becomes more distant as they move off.

VOICES OFFSTAGE

Mussolini!.. Benito!.. Il Duce!

Benito B. grabs Giacomo by the collar.

BENITO B.

Who is this Mussolini?

Giacomo shrugs Benito off.

GIACOMO

He is a great man, Benito. You should hear him speak. (pause) And an opportunist. What an opportunist. They say he threatened to march on Rome. That he will have support of the Pope and the King within the week. (pause) He is truly a hero of the people.

BENITO B.

March to Rome? What about me. I've toured the length and breadth of this starvation ridden, economically ruined fleapit of a country for four years. I've bludgeoned and cajoled and threatened. (pause) I've filled circus tents night after night. People on the verge of extinction have given me their last coins to share in the hope, the worthless hope of the circus.

GIACOMO

They just come to the circus to forget their troubles for a while.

BENITO B.

When you are starving, what use is happiness?

GIACOMO

Perhaps you have been trying to reach the wrong people?

BENITO B.

What!? You think maybe I should have been running an opera, not a circus?

GIACOMO

It's a thought, maestro!

Benito B. sinks to his knees.

BENITO B.

It's over. It's all over. Tragedy. Politics. Reality disguised by rhetoric. The wrong opportunity. (pause) I gave them the rhetoric of the circus and they wanted the rhetoric of grand opera.

GIACOMO

You gave them Punchinello and they wanted Verdi.

BENITO B.

I told you Giacomo. Any fool can take an opportunity. It's knowing which one to take. (pause) Chance. Pure chance.

GIACOMO

Or fate.

BENITO

Fate! Fate is for people who don't dare take chances.

GIACOMO

Well.I think I'll tag along with this Mussolini crowd for a while.See what chance or fate he has to offer.

Giacomo exits.

BENITO B.

I won't believe it.I can't accept it.Some little upstart.Some politician.Some man who steals my name, intends to steal the country I have been softening up for all this time.(pause) And what a name.Benito Mussolini.What sort of a name is that?For God's sake.It doesn't even alliterate properly!

Blackout

SCENE FIFTEEN

Joe's study present day.

Joe lies sprawled on the desk.Pete lies on the floor.Both are sleeping.

Sophie enters.She crosses to Joe, stepping over Pete.

She clambers onto the desk, curls up beside Joe.

SOPHIE

Have you been here all night?

Joe groans.

He puts his arm round Sophie, in a sleepy sort of gesture.

Suddenly he sits bolt upright.

JOE

Marry me!

SOPHIE

What?

JOE

Marry me.

SOPHIE

What's brought this on?(pause) Something's happened (pause) What's happened?Have you made some amazing

Joe shakes his head.

JOE

No.Just taking my chance.Trying my luck.Spinning the wheel.

Sophie climbs off the desk, stands looking perplexed.

SOPHIE

I..

JOE

Well?

SOPHIE

Well what?

JOE

Will you marry me?

Pete has woken up. He is clambering up the side of the desk, and has just reached the one knee position as Sophie backs into him.

She turns, looks at him, even more perplexed.

Joe jumps off the table, goes down on one knee beside Pete.

JOE

I love you Sophie. Will you marry me?

Pete rolls onto the desk.

PETE

I think you two need some privacy.

He goes back to sleep.

SOPHIE

Yes Joe. I will marry you. But I want to know what's brought this on.

JOE

Oh. Nothing really. It's just. Well. All that stuff about numbers and names got me thinking. And I thought.. Joe Green.. and then (pause) It all became amazingly clear.

SOPHIE

It isn't amazingly clear to me.

Joe takes her by the hand, leads her to the blackboard. He writes his name on the board.

JOE

What's Italian for Joseph?

SOPHIE

I don't know. Josepho?

JOE

(writing on the board) Giuseppe.

Sophie nods, still puzzled.

JOE

And Green? What about Green?

Sophie takes the pen from him.

SOPHIE

Ah. Now that one I do know. It's Verde.

She writes it on the board.

JOE

You see. Joe Green. Giuseppe Verde. You see?

SOPHIE

Isn't Verdi spelt with an "i"?

JOE

That's a minor detail. Look. I'm Giuseppe Verdi. Me. Joe Green. That's why I've always wanted to study his music, to understand his innermost thoughts..

SOPHIE

Hey. What about Sophie Green? Who does that make me?

Blackout

SCENE SIXTEEN

Verdi's study. Italy 1881.

Giuseppe, obviously twenty discovery. About numbers and names? years older, sits at his desk, reading.

Beside him stands BIOTO.

BIOTO

We already have a plot black enough in itself, and the act that we would add would not modify the overall hue.

Giuseppe looks up, nods.

GIUSEPPE

Well. Bioto, I think perhaps..

BIOTO

Our task is impossible maestro. The drama that we are working with is lopsided; like a table that wobbles, but noone knows which leg is the cause; and whatever is done to steady it, it still wobbles.

He leans on Giuseppe's desk.

It wobbles.

BIOTO

Amazing.

GIUSEPPE

You mean you didn't know?

BIOTO

Know what?

GIUSEPPE

Oh.I thought that was why you used the analogy.(pause) Puzzled me in fact, because I can tell you exactly which leg wobbles.

He points to a leg.

GIUSEPPE

I think I've lost the point.Please go on.

Bioto picks up the libretto, waves it around.

BIOTO

I don't find in this drama a single character of which one can say: it's sharply delineated! There is much intrigue but not much structure.(pause) Everything in this drama is superficial all these events seem thought up on the spur of the moment, as material to fill up the stage.(pause) There is only the semblance of real events, without relation to the characters.(he throws the libretto back onto the desk) This drama lacks tragic power as much as it lacks theatricality.

GIUSEPPE

You don't think much of it then?

BIOTO

Maestro.It is not a criticism of your music.It is..

Giuseppe picks up the libretto, kneels on the floor.

GIUSEPPE

I know it's worth.(pause) You see that's why it's been propping up this desk for so long.

He clambers back to his feet.Returns to his seat behind the desk.

GIUSEPPE

So what do you suggest?What do you have in 1881 that will revitalise my appalling attempts of 1857?

BIOTO

Ah.Maestro.I have a great idea.For the second act.A scene in the Council Chamber.A huge scene.Drama!Theatricality!(he sighs) Grand Opera!!

Blackout

SCENE SEVENTEEN

Italy 1940's The circus tent.

Benito B. and Giacomo are in conversation.Benito B. has now cast off all guise as ringmaster and is dressed in fascist garb.Giacomo is in a blackshirt.

GIACOMO

All this is political, not dramatic.(pause)

BENITO B.

But an ingenious writer could turn it into drama very well.

GIACOMO

Where will you find such a writer?

BENITO B.

History will be my scribe.(pause) A grand gesture.That's what is called for now.(pause) I'll have Mussolini by the balls.My death will be my finest hour.

GIACOMO

It seems a bit drastic.

BENITO B.

It's opportunity Giacomo.It's the only opportunity left over which I have any control.

GIACOMO

When you're backed into a corner, isn't that fate?

Benito B. ignores him.

BENITO B

A poisoning?A hanging?Which will be most effective?Historically, I mean.

GIACOMO

How about being hung from a lamppost by an uncontrollable mob?

BENITO B

Not much dignity there?I want it to be the ultimate grand gesture.It has to be theatrical excess.Verdi, not PUNCHINELLO.I have to live on in the mind of the people as larger than life, greater than reality.(pause) Then think of the come back!

GIACOMO

The come back?

BENITO B.

Of course.This is drama not history, Giacomo.There has to be a sequel.It's the only sensible marketing strategy.

GIACOMO

So you won't really die then?

BENITO B.

You have to really live to really die, Giacomo.That's where we fictional characters have the advantage.

GIACOMO

Oh.I see.Well.(pause)

He paces the stage, excitedly.

GIACOMO

In that case, let's make it an exit they'll talk about for years.(pause) I've got it!Torn limb from limb by a ravaging lion.The lion you tended lovingly all those long, hard years in the circus.

BENITO B.

The betrayal of an old friend.(pause) It has a certain appeal.

GIACOMO

Betrayal.You want betrayal.I'll give you better than a lion.(pause)Betrayed by the woman who loves you?(pause) It has more pathos than a lion surely? Gives people more to associate with.

BENITO B.

Except there is no woman who loves me.

GIACOMO

An oversight surely.

Benito B. is agitated.He struts round the stage.

BENITO B.

Find me a woman.I must have a woman.(pause)

He comes downstage and addresses the audience.

BENITO B.

I want a woman to betray me.Anyone willing to take the chance?Grab the opportunity?Cheat fate?

He turns from the audience, returns to Giacomo.

BENITO B.

I knew a woman would be a necessary accessory one day.I mean there doesn't seem any need for one when you're fighting; dealing in beatings and blood but yes; I find you do need them after all.(pause) Dramatically I mean.(pause) To throw all that action into relief.

Lights dim.

As the lights come up, upstage Verdi sits at his desk, writing.

Giacomo and Benito B. stand downstage.

The effect is of two times brought into one place.

GIUSEPPE

If they repress them, make arrests and exile the leaders, it will serve no purpose.In the crowd, certainly, there are always agitators bad ones, thieves but also there is almost always Hunger.

The light goes down on Verdi.

BENITO B.

You see.It's all in the writing.You have to know what to say.You have to leave them all begging for more.

Four blackshirts march onto the stage, carrying a rope.They place the noose round Benito B's neck.

He turns to appeal to Giacomo.Throws his arms wide in a desperate, grand gesture.

BENITO B.

Help me.Giacomo.My only friend.Help me!

Giacomo nods to the blackshirts.

GIACOMO

Take him away.

As he is led from the stage, Benito makes a final, dramatic appeal to the audience.

BENITO B.

My dying wish is to unite Italy.

SCENE EIGHTEEN

14th C Genoa.

Simone Boccanegra lies centre stage, supported by Paolo and the blackshirts.

SIMONE

Poisoned.(pause) Poisoned.And for what?(pause)

He struggles to his feet, aided by the blackshirts.

He addresses the audience.

SIMONE

My dying wish is to unity Italy.

Blackout.

SCENE NINETEEN

Verdi's study.1881.

Giuseppe and ARRIVABENE sit at his desk.

GIUSEPPE

And then he falls to the ground poisoned.The perfect tragedy.All brought about by mischance.His final words "My dying wish is to unite Italy."

Arrivabene claps.

ARRIVABENE

Excellent Maestro.

Giuseppina enters, places a cup of tea beside Giuseppe and Arrivabene, then leaves, silently.

Arrivabene raises his cup to his lips.

GIUSEPPE

I wouldn't if I were you.

Arrivabene looks puzzled.

GIUSEPPE

We've been married for over twenty years. Bared our souls to each other. Been through everything together. But I have never had the heart, or the nerve; to tell her that her tea is quite undrinkable.

Arrivabene laughs, puts down his cup.

Lights go down on Giuseppe and Arrivabene.

They go up down stage left

Enter Giacomo. He addresses the audience. He is puffed up with pride a complete transformation from the nervous bungler of the beginning of the play.

GIACOMO is to unite Italy.

Now I can tell you (pause) that I think Boccangera will be able to go the rounds of the theatres (pause) even though the subject is a very sad one.

Lights up on Giuseppe and Arrivabene.

Giacomo turns, faces them, stares at them; amazed at these beings from another age.

GIUSEPPE

In the second act it seems that the effect fell off (pause) but it wouldn't be surprising if in another theatre, where the finale primo didn't make such a great effect, the second act had the same success as the others.

Benito B. enters downstage left and taps Giacomo on the shoulder.

Giacomo spins round, amazed.

BENITO B.

If you discover the way to adjust and smooth out all the difficulties I have outlined to you, I am ready to do this act again, after all. (pause) Think about it and answer me.

He exits.

Giacomo turns back to observe Giuseppe and Arrivabene.

GIUSEPPE

What I do require is that those who are in charge of public affairs should be citizens of great ability and spotless integrity.

Arrivabene nods.

Lights go down on Giuseppe and Arrivabene.

EPILOGUE

Giacomo is left standing alone in the middle of the stage.

He faces the audience

GIACOMO.

What can I say? I've only got the lines I was given. I mean I can't explain it all to you. Not all those subtle nuances you might have missed first time.

(pause) Can I tell you what fate had in store for Joe and Sophie? What chance happenings..(pause) Is that what you want to know? Or have you just come to the circus to forget your troubles for a little while?

He shrugs.

GIACOMO

I don't know what to tell you.

VOICES OFFSTAGE

Benito! Benito!

GIACOMO

Oh, yes. What of Benito Boccanegra. The hero of the piece.(pause) You might think he had his chance and blew it. Wasted his "big break", succumbed to his fifteen minutes of fame.(pause) But don't write him off so thoughtlessly, I beg you.(pause) Remember, I knew him. I was his closest friend.(pause)

Oh no. A man as resourceful as Benito doesn't give up so easily. He looks for his chances. Takes his opportunities.(pause) Our friend Joe Green could learn a thing or two from him, you know.(pause. He laughs) Old Fascists don't die, they simply change countries.(pause)

He lay low. He lived through the rise and fall of Benito Mussolini the man with incontrovertibly preferred sum of consonant and vowel values the man undaunted by the lack of alliterative power (pause) And all the time, Benito Boccanegra was planning his comeback, waiting, as all good characters do, for his next time out.(pause)

So, in 1946, when the ravages of peace once more rang out round the world, he made his move.(pause) Where did he go? To Africa? To South America? to Great Britain? Who's to say. Like a great operatic tenor, he travels the

world playing his part; the part he rehearsed for, trained for all those long years in the circus that was Italy; singing for his supper in a most spectacular way. Look out for him. He may be coming to your town any day now.

Giacomo takes a bow

CURTAIN.

Future Publications

by HoAmPresst Publishing

Chasing Waves is HoAmPresst Publishing's first foray into e-book drama publication. Other dramatic works planned are:

2012 (November) 10th Anniversary publications of *Down the Line* and *Men in White Suits*

2013 (March) 10th Anniversary publications of *Love is an Urban Myth*, *The Other Side of the Mountain*, and *When Time Stands Still* and 20th Anniversary publication (August) of *We Wove A Web in Childhood*.

For more about the plays of Cally Phillips visit www.callyphillips.co.uk
From 2002-2006 Cally was Artistic Director of Bamboo Grove Theatre Company a unique and experimental company whose mission was to 'take drama out of the theatre' You can find out more about this by going to <http://bamboogrovetheatre.wordpress.com>

Cally Phillips also writes novels.

E-book versions of

The Threads of Time (2003)

Brand Loyalty (2010)

Are available in all e-book formats as well as in 'Keep it Real' limited edition paperbacks.

Forthcoming ebooks in 2012 includes the trilogy *In Three Minds*
Another World is Possible, *The One that Got Away* and *Butterfly Dreaming*

For more about all of these works got to the HoAmPresst Website.

<http://www.hoampresst.co.uk>

And if you want to talk about the work, there are plenty of options for interactivity via Cally Phillips (author) Facebook Page and HoAmPresst blogsites. Always happy to receive feedback and if you like what you've

read please leave a comment on blogs or 'like' the Facebook pages. It's good to know who is out there and what they think.