

WHY? BECAUSE . .

Slide 1

Good afternoon

Can you hear me at the back?

My talk will be in two parts

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I Causation

II Explanation

and – spoiler coming up, I shall be *against* Causation

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and *for* Explanation

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So *Causation* – who made that word up? And why? What's it for?

In form it is just one of those bogus Latin words that means 'causing' but with a gown and mortar board on

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Like respiration for breathing or copulation for f . . . oh well you get my point

But under this cap and gown of respectability, some very bogus ideas are often being smuggled in.

First up is the notion that there is some common process underlying different sorts of causation – or of causing.

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(1) Water *causes* iron to rust. I.e iron oxide tends to form on an iron surface in the wet

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(2) Gravity *causes* bodies to fall from the sky i.e the attraction of the earth to a cricket ball is greater than that of the cricket ball to the earth, in proportion to their respective masses.

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(3) A prism *causes* a spectrum to appear i.e light travelling through a prism becomes ordered by frequency.

Now I challenge anyone to show that these processes are *physically* alike in any way at all.

Now I challenge anyone to show that these processes are *physically* alike in any way at all. We can look at each one, and see it happening, and what happens in any one case is quite different from any other. Indeed, as Hume famously pointed out

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we are never *sensible* of any connexion betwixt causes and effects,

ie we never *observe* such a connection, never *perceive* a causation taking place

One way they can be found alike is through a rather misleading metaphorical model of causing, or causation.

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The metaphor in this model is of A '*making*' B happen – a metaphor of force.

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And indeed often containing a metaphor of agency: What God has blown down the trees?

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But, gods apart, what is the *force* involved in rusting or refraction?

The model of causation also seems to involve separating two objects or events, one as cause, the other as effect. But this is often an arbitrary construct imposed on what may as well or better be thought of as a continuous process.

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The ball's hitting the window *caused* it to break. Was there really a sense in which the hitting of the window and its breaking were two separate events.

Aha! But we can restore the respectability of the metaphor by appeal to the *laws of Nature*. Surely Laws *make* things happen in a regular and consistent fashion. And the concept of causation as some kind of process is typically applied to those events which seem to happen regularly and consistently. Iron always rusts in certain situations, smaller bodies always fall down to earth, spectrums always appear in the right circumstances.

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Law is not as it happens a very good metaphor for natural regularity. In the political domain, where the metaphor began, law describes what *ought* to happen. But often doesn't.

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Even God's laws are often broken. His laws like ours are *enforced* by way of punishment on the

Even God's laws are often broken. His laws like ours are *enforced* by way of punishment on the many many occasions when people don't do what the law says they should.

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But Nature does not go around punishing naughty iron that resists rusting or deviant balls that stay up in the air.

So the idea of a natural law is different from human law. It's what *always* happens. But we must not be circular. We infer a 'law' when we find a regularity. We cannot then invoke the law to explain the regularity.

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In fact, all we mean by a law of Nature is a perceived regularity.

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And when we find an exception to what we thought the law was, we don't say the law was broken. We say that we had not fully understood the law and we rewrite it.

This concept of Causation as some kind of active process leads to one or two problems.

For example, sequence. The metaphor calls for cause to precede the event.

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But does the refraction of light *precede* the spectrum? Does it matter that gravity was operating *before* Alice let the ball go?

And, to take up a frequently discussed issue, can there be negative causation?

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Not watering it caused the aspidistra to die. Is this the activity of an absent cause?

It gets worse when it comes in the form, *My* not watering it caused the aspidistra to die. But what if someone else had watered it. So we have to run through about 7 billion people whose negligence, ie *not* doing something, killed the aspidistra. Yes, you lot included.

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Well may you be ashamed!

But hold on! What about the years and years when none of you watered my aspidistra and it *didn't* die? Surely that lets you out?

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Of course we can reframe the point. So, my aspidistra died because *nobody* watered it.

Now we have a culprit, or a cause at last. It was Mr Nobody!

Now we have a culprit, or a cause at last. It was Mr Nobody!

IE back to the absent causative agent!

But the diversion is worthwhile: What we have done is to expose the notion of *the* single cause of this or that.

The cause of the aspidistra's death was lack of water. But the cause of lack of water was that I didn't water it *and* nobody else did, *and* there was no other source of water (lots of causes or absences here.)

Or to put it another way, we have to forget about X as *the* cause of Y. Let us say that X is *a* cause of Y. This point becomes even stronger when we look at the *causation* of *non-effects*. Just what was the cause that made my house *not* fall down yesterday? *Made* it not fall down?

Causation turns out to be not a chain but a concatenation of causes.

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Bit like this only complicated. And large. Pan to include the nature of this sort of plant, of plants generally and the ecology of our planet.

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The cause of anything is – everything. Any regularities here will have to be found in parallel universes.

Already we are bursting out of the metaphor of causation as *making things happen*. Into the rather milder tones of X making Y *more likely*

Probabilities do indeed seem to bust the link with laws of nature.

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Instead of saying, whenever X always Y, we have, whenever X often Y. Not much chain of causation here.

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At this point, we may expect an interruption from a gang of those philosophers who still want to reduce the events of the real world to logical propositions. Surely, they clamour, we can gain by renaming causes as conditions, and then separating necessary from sufficient conditions. So OK throwing the die at all is a *necessary* condition of throwing a 6 – boy, that clarifies things!

But what is a *sufficient* condition of throwing a 6? Throwing the die often enough? And just how often must that be? I suppose having a die with a 6 on every face would be a sufficient condition – a sufficient condition for getting thrown from the craps table too with extreme prejudice.

Let's take a road accident

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Let's say that it is so far as we can gather true, that Car A caused the accident by failing to stop; that the failure was itself conditioned by the state of the brakes and of the street lighting and of the driver's inattention. It is quite possible that any two of these, or even any one, would have been *sufficient*, so none is *necessary*.

Whatever else is involved in physical causation, it is not the same as logical entailment. Let's stick to causation, and leave clausation out of it.

The idea of causation as making things happen gets even dodgier when we look at human actions.

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What *were* the causes of the English Civil War?

Well we can obviously frame different answers here, and people have. But most of them will involve motives hopes and fears and purposes, and in particular Future effects that people want to bring about, or to forestall.

But will anybody claim that there was a chain of causation, or a complex of causation, that *made* the civil war happen. No, *people* made it happen. And, unless you are a very old-style Marxist, people are not figures swept along by great historical *forces*. If you are an old-fashioned Marxist, please come over in the next break and show me the instrument that measures the strength and direction of an historical force.

Well, I hope I have dealt with Causation as a physical process. Drop the idea. Its – wait for it – it's a lost cause.

II Explanation

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The sort of explanation I am recommending is well defined in the Oxford Companion to Philosophy

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“That which produces understanding how or why something is as it is”

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Also “Explanation: an act of making something understandable.”
(Cambridge Dictionary of Philosophy 3rd Edn)

Explanation so taken is a process of communication., of dialogue.

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First there's a question – typically beginning Why or How.

Slide 33 The question provokes an answer.

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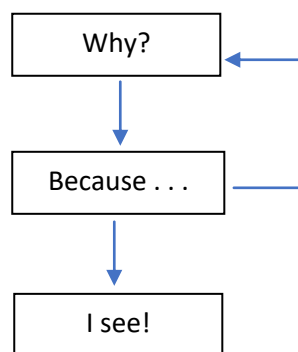
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The outcome is understanding.

Of course one answer may or may not seem satisfactory. If not, there is a further question and a further answer. And so on, until the curiosity is satisfied.

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The fuller model is



Of course the middle section here can go through as many iterative loops as you like – as parents here will be aware. Is there time to go through all the verses of “There was an old woman who swallowed a fly”? Just one then.

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There was an old woman who swallowed a cow,
I don't know how she swallowed a cow!
She swallowed the cow to catch the goat,
She swallowed the goat to catch the dog,
She swallowed the dog to catch the cat,

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She swallowed the cat to catch the bird,
She swallowed the bird to catch the spider,
That wriggled and jiggled and tickled inside her,
She swallowed the spider to catch the fly,
I don't know why she swallowed the fly,
Perhaps she'll die.

And the process may not always end in understanding
“I don't why she swallowed a fly”

And the process may not always end in understanding
“I don’t why she swallowed a fly”

But this only emphasises the nature of explanation. The I See ending is an expression of satisfaction, curiosity has been satisfied. “I don’t know why she swallowed a fly” does not mean that there was no reason, or even that there is no explanation, just that I haven’t come across one that satisfies me.

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And I’m quite clear on what killed her.

Let us go from the old woman to an old philosopher, Aristotle.

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He is on my side: causes are a kind of explanation, not a kind of process.

Since Aristotle obviously conceives of a causal investigation as the search for an answer to the question “why?”, and a why-question is a request for an explanation, it can be useful to think of a cause as a certain type of explanation. (Stanford Encyclopaedia)

Yes indeed. And one of the great advantages of taking *Explanation* as the frame is that Why - Because is far more versatile in getting at the sort of answer wanted, the nature of the curiosity to be satisfied. If the first answer does not do it, one puts another Why question until one reaches, not *the* final cause, but the point that puzzled you.

I agree that the same thing can be done using the vocabulary of cause. What caused this to happen rather than that. But this only says the same thing as Why did this happen rather than that. It still takes us well away from the chain of causation model. ‘This’ may be the effect of X. But ‘this not that’ is not an effect, it is a direction, and the direction of an enquiry not of a physical process.

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For example, *Why* are those dominoes lying like that.

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Because it is a stable position, all forces equal and opposite – an answer in terms of mechanics.

But not satisfying my curiosity.

Slide 43 So, *How* did they get to be that way –

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So, *How* did they get to be that way –

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Because they knocked each other over – an answer in terms of dynamics.

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But I'm still curious. *Why* did they knock each other over?

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Because Alenka flipped them. An answer in terms of agency.

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I'm still curious. *Why* did she do that then.

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Because she wanted to try a forked domino effect. An answer in terms of motive.

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And there, as it happens, I'm satisfied. *I see.*

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Now we have to be vigilant and keep off the formal philosophy freaks again. What they want to do is to lay down the rules according to which we are entitled to be satisfied, and those take us back into laws of nature and logical entailments. Thus

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“A singular event *e* (the explicandum) is explained if and only if a description of *e* is the conclusion of a valid deductive argument, whose premises, the explanans, involve essentially a lawlike statement *L* and a set *C* of initial or antecedent conditions.”

(Psillos summarising Hempel)

In other words, you and I are not entitled to say when we understand something. We are only allowed to understand it as a logical entailment of premises. In fact we start with a transformation of observations into verbal constructs.

What is this single event *e*?

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What is this single event e ? Any single so-called event e can always be alternatively described as 2, 3 or n events; or as part of a bigger event. And where is the world do we observe a self-contained event e with a clear start and stop? And what set of words can ever fully describe any event with complete accuracy?

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Never mind that the lawlike statement L may be wrong. Never mind that none of our lawlike statements about the real world can be other than provisional.

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Never mind either that the set C of initial or antecedent conditions may very properly extend to the state of every nano-pixel of space since time began.

Unless we can satisfy Hempel's conditions we are not qualified to understand anything.

These are the same formalists who like to define knowledge in such a way that no one can ever be said to *know* anything. Indeed they may justify their perversion of Explanation by classifying it under their category of 'epistemology', which they take as the business of knowledge.

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They are misguided. The old Greek word from which their ology is derived is $\iota\sigma\tau\eta\mu\iota$ I stand. And $\epsilon\pi\iota\sigma\tau\epsilon\mu\iota$ is almost literally 'I under-stand' or I stand in a relation to the thing understood. There is no objective criterion of whether I understand something or understand it 'properly'.

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BTW do check out, if you haven't come across them already, a very funny and extended refutation of these formalistic approaches in Hofstadter's Tortoise and Achilles dialogues. Tortoise reduces poor Achilles to a nervous wreck by simply refusing to accept any step in Achilles argument until it has itself been formally proved as a valid step, and so, recursively, on.

So, away with them! Nobody is entitled to tell me that I do not understand something on this basis, and if they are, nobody has ever understood anything.

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It is not up to anyone else to say whether I understand something – or *me* to say if *they* do. Of course we may disagree – eg about the causes of the English Civil War. I say that you are wrong, you say I am. But the test is not whether we agree. It is whether you can ask me a Why question and I can't think of a Because which satisfies me.

Ask me a relevant question about a topic which I can't answer to my own satisfaction,

Ask me a relevant question about a topic which I can't answer to my own satisfaction, and OK there is an aspect that I don't understand. But even that may not disturb my sense that I grasp the aspects of the question which I regard as important or interesting, ie that I have an explanation that I satisfies me.

Explanation as a mental process has no problems with any of the cases which trouble causation as a physical or metaphysical process

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Why did the aspidistra die? Because I did *not* water it. I see. Or perhaps, why didn't I water it? Because I was *not* there – truly absent cause. Why didn't I get someone else to do it? Because I did *not* have time . . . etc etc

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So perhaps I see, or perhaps go on. Not go on till we have uncovered every node and arrow in some causal network, but go on till curiosity is satisfied. You understand.

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Likewise the explanatory model is quite happy with statistical answers, with something that is satisfactorily explained as a frequent, though not a regular occurrence.

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It is happy with reasons that are not *contiguous and anterior* in time to the outcome in question. The satisfying explanation *may* be simply another way of describing that outcome. Or it may be delve into the distant past, as where today's landscape is explained in terms of Cambrian geology.

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It is at home with motives as explanations of human behaviour whether or not the prodnosed philosophers will accept them as 'causes'.

So I hope I have explained Causation to you all. I hope indeed that I have explained it away.

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I hope I have explained Explanation itself. I hope, in fact, for a resounding chorus of 'I see'.