



Delve into the science of Daleks

Alie Ford is a grown-up now and is that most fearless and rational of things, an astrophysicist (she's at Monash University) but reminisces that "I'll admit that, as a child, I used to hide behind the couch when the Daleks [the rasp-voiced fascist mutants of the BBC TV *Doctor Who* series] came on the screen."

It's a good thing that she's overcome that quite understandable fear (your columnist is old enough to remember, as a hitherto apple-cheeked boy, being left ashen-faced by the first-ever ever appearance of the Daleks in *Doctor Who* in 1963) because these days she takes part in *Science of Doctor Who* presentations. They require her not to tremble when she speaks to audiences. She and some colleagues are presenting *Science of Doctor Who* entertainments during this week's sessions in Canberra of National Science Week.

She and co-presenters comedian Rob Lloyd and physicists Martin White and David Jennens have a show, already performed at two festivals, that takes "a light-hearted look inside *Doctor Who*" examining some of the science-fantasy ideas that the BBC's talismanic series wallows in. Those ideas include the one that makes the whole *Doctor Who* creation possible, the Doctor's belief (indeed his everyday experience) that time is not straight but is actually "wibbly wobbly".

Lloyd, a comedian who bears an eerie resemblance to the ninth *Doctor Who* David Tennant and who dresses and performs as Tennant's Doctor and the MC for the show, spoke to *Gang-gang* yesterday. What happens in the extravaganza, he bubbled, is that he puts to the three scientists ideas that are common currency in the series ("things such as teleportation, cloning, time

travel, black holes, regeneration, and life on other planets") and then the scientists who are all extreme and knowledgeable *Doctor Who* fans who "adore the show" mull over whether there's any scientific possibility of these zany things being possible. And they don't do this in a cold, sceptical agnostic way. "They adore *Doctor Who* and they want all these things to be possible. So they let their inner nerd out and invest a lot of hope in dreaming of ways fantastic things might come true."

Lloyd pretended not to know what on-stage props there would be for the Canberra shows but in my probing, investigative way I've found that there will be three chilling-looking Daleks. They will, though, only be the famous empty shells (described by one blasphemous sceptic as "looking like giant salt shakers with toilet plungers sticking out of them"). The repulsive, but fiendishly smart beings that once dwelled in the salt shakers (squishy, fleshy, mutant humans) have long since gone. Thank goodness. Why were the Daleks so successfully scary? Of all the monstrosities there have ever been in the series they have been the most enduring (although at the show audiences can vote, using their personal "clicker pads" to vote for which of the series' beasts have been "the worst of the worst"). Yesterday Lloyd, a *Doctor Who* scholar, quoted chapter and verse and dates of occasions in the life of the series (it has its 50th anniversary next year) when there have been attempts to replace Daleks with something else, but almost always in vain. There have been the Cybermen, the Seaweed Creature, the Krotons and the Quarks, and dozens more, but so many of them were laughable and lacked the Daleks' aura of menace and malice.

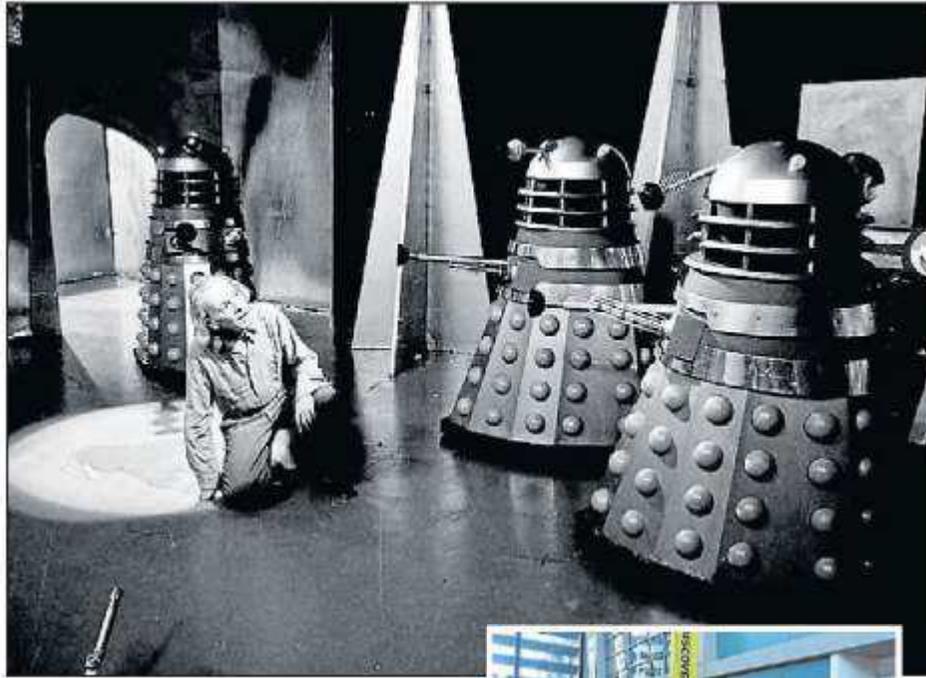
A Cambridge philosopher, Robin

Bunce, has given the Daleks a lot of thought in an essay in a book, *Doctor Who and Philosophy: Bigger on the Inside*.

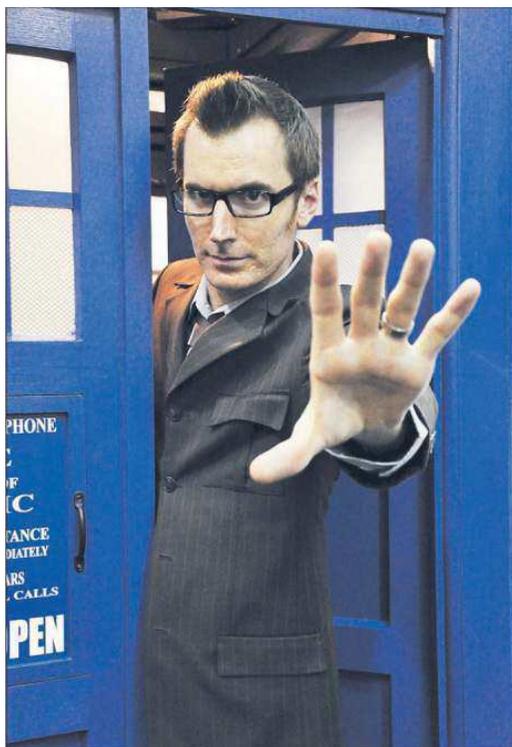
When he was a child the Daleks really put the wind up him and when he grew up he felt the need, the way a philosopher does, to analyse what it is that gives Daleks their chilling charisma. He says that among many other things the Dalek's writers have consciously modelled the callous fiends and their doctrines on the Nazis and that this is always a powerful force for dread. Then "What happens in the early 20th century," Bunce reasons "is that we get a new set of metaphors for being inhuman. And this new set of metaphors are based on the human being who has become like a robot or a human being who's become like a computer . . . the human being who's gone through a rational process and through this kind of scientific rational process, has had their humanity, their emotions, stripped out of them [Daleks can't feel love and are baffled by the concept] . . . so their bodies have been mutated, but also their psychology is mutated, too. And so yes, I think it's very important they're not just robots. It's very important they are human – they used to be human and they have become like robots. That's chilling."

Patrons of this weekend's four *Science of Doctor Who* shows at the CSIRO Discovery Centre on Clunies Ross Street (look up times and prices on scienceweek.net.au) will probably feel happy to go on being the envy of the world by living in Canberra in 2012. And yet in a show that Lloyd promises has "audience participation all the way through" everyone at the shows gets invited to use their clicker pads to vote for when and where in time they'd most like to go.





CHILLING VILLAINS: Daleks in the first *Doctor Who* series, and at right, consider exterminating the CSIRO Discovery Centre.



TIME TRAVELLER: Rob Lloyd, above, impersonates David Tennant's Doctor Who