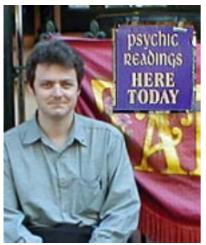
Holes in the Plot

Filling in holes is what we are good at, sometimes with odd results.



Richard Saunders, NSW Skeptics President, is responsible for the Skeptic CD *and* Water Divining DVD

As far as we know, reality is continuous and flawless, even if we don't perceive it in this way. There are no holes in the plot so to speak, in real life. If somebody walks through a door wearing a red shirt they do not appear on the other side an instant later wearing a green shirt.

However, as strange as it may seem, mistakes do happen from time to time in movies and TV programs. A popular movie web site, the *Internet Movie Database*, even offers thousands of pages of what it calls *goofs*. Some people take great pleasure in watching the same movie over and over again in order to catch possible goofs. It's like an armchair sport.

For example:

Goofs spotted in the Bond movie *Diamonds Are Forever* (1971)

In the opening scene, mud splatters over Bond as he falls to the floor. When he stands up his jacket is perfectly clean.

The moon buggy loses a wheel, but is back on again later.

When Peter Franks arrives at Dover he gets a message. He parks his car outside an office and as he walks in the camera crew is reflected in the window.

When Bond is hanging from the elevator shaft, his shadow is clearly visible on the rear projection screen containing the street scene below. The helicopter that blows up in the desert is originally green. As it turns away, it turns red.

When Bond is released from the burning coffin, Shady Tree's diatribe against him about the phoney diamonds doesn't match the movement of his mouth.

The man Bond attacks in the very first scene manages to scream "Cai-Cai-Cairo!" without moving his mouth.

At Dover, Bond arrives (and departs) in a Triumph Stag (V8 engine). When he drives away, we hear the sound of a Triumph Spitfire (1200cc 4 cylinder). (Wow!)

During the opening scene, a string can be seen attached to the final knife that 007 throws at the guard.

As long as you don't take any particular movie too seriously, reading about these goofs can be lots of fun. For you and me holes in the plot or mistakes in continuity are quite acceptable provided they do not turn the story into a farce, but there are those for whom these sort of plot holes are too much to bear. People whose lives are entwined in their favourite fantasy. In the recent Star Trek movie, Nemesis the audience sees a photo of a young JeanLuc Picard at Star Fleet Academy, except he's bald. In one episode of TNG (TV), we went back in time to when he was at the Academy, only this

time he had a full head of hair. OK, a bit of sloppy writing. But if your life is wrapped up in *Star Trek*, something like this has to have a reason.

Here are some explanations invented by fans:

he shaved his head for a bet; he lost his hair for a few months due to a rare Vulcan disease;

the picture was that of his clone who shaved his head.

And to honour the 40^{th} anniversary of my favourite show, here is a

classic blunder from Doctor Who and a justification. In one episode, the Doctor and his friends, travelling through space in the TARDIS are hurtling back through time, trying to escape being sucked into the Big Bang. It's not looking good until the Doctor decides to convert 25% of the internal space of the TARDIS into pure power in order to give them the extra thrust they need to avoid disaster. But as we all know, the internal space of the TARDIS is infinite! How can you have 25% of infinity? Here's how. The Doctor must have meant 25% of the *known* internal space, not the entire internal space. That makes sense. Well, it did to me at the time I thought it up.

Why?

To the fans, all of these justifications are acceptable, especially to the ones who thought them up. But what is it in us that sparks the brain to come up with these justifications? Why bother when we know it's only a show? Some people are able to quite happily grab some popcorn and a coke and "suspend their disbelief" while watching the latest SF offering. I suspect that the vast majority of even the hard core fans know when to separate fiction from reality. But maybe not all.

It's only natural that when humans construct stories and even go so far as to film a story, holes in the plot will appear. There's not much we can do about it. These are the actions and thoughts of those who know it's all make-believe. Fans and others who love to escape into their fantasy realms. Nevertheless, look at all the intellectual effort needed to maintain this 'extra' reality in their lives. The time and thought that goes into filling in the gaps that plot lines always leave in their wake. The more complex and involved the plot, the more holes and more time and effort needed to justify the apparent errors.



Many fans relish this activity and let me say right now that I am one of them. I love SF. I grew up with *Doctor Who*, *Star Trek* and many other shows. It's very easy to slip into that world. So much for the fans of this sort of fiction. We'll take another look at them soon. Now, how about fans of another kind of fiction?

Water Diviners

It might come as no surprise that I pick these people to illustrate part of my talk, since I spent over a year putting together *The Great Water Divining DVD and Video*. More importantly, diviners and divining has

been studied all over the world and in particular, in Australia. These are people who have a real, physical phenomenon, happening right before their eyes. The rods move! When these people dig, water is often found. How much clearer can it be? Why do you people even doubt it? How could you doubt it? How?? Many of these diviners are 2nd or 3rd generation. They watched as their parents and grandparents found water and they would not lie, would they!?

When, as has been the case for over 50 years, water diviners fail in demonstrating their power to find water or metal, it is, as we all know, not because they lack the magic power to do it, it's due to other reasons ... ANY other reasons. To quote from a conversation between James Randi and Dick Smith seen in the documentary James Randi in Australia – 1980

Dick: What do you reckon they'll say if they fail?

Randi: Oh the rationalisations, the rationalisations, you'll be amazed what they come up with as rationalisations. They'll invoke astrological signs, unfortunate aspects of the moon, all kinds of things.. also they'll say negative vibrations.

Dick: Wait a sec, how can they do that if they're going to sign with us and say they are very happy and they checked the bit of pipe....

Randi: Doesn't make much difference. They'll find a rationalisation. Now I've been 35 years in this business, you'd think that I'd be able to come up with all the rationalisations. I'm surprised. The dowsers particularly are very adept at this.

Dick Smith later told me that he was uncomfortable about doing the tests as he thought it could destroy the reputations of the diviners. Randi told him not to worry, it would not make one bit of difference to the believers, the diviners or their reputations.

Holes in the plot

What must it be like for these people when they see their powers fail? First of all, there is no doubt whatsoever that their powers are real and they work. Therefore, the power did not fail at all — it cannot ever fail. There must be another reason. (Remember, all diviners were happy with the conditions *before* the test.)

The water in the calibration bottle is not the same as the target bottles.

The underground streams are interfering.

Some of the bottles have tap water, some have rain water.

You cannot divine water on water.

Divining cannot be put to the test.

The earth spirit knows when divining is really needed and that's when it works.

You cannot divine using two rods.

You cannot divine using only one rod.

The static electricity in the bottles drained out during the day.

I was nervous.

You cannot divine still water, only running water.

This isn't the right grounds for divining.

Sun spots interfere with divining.

Some metals leave a residue in the box.

Psychics, clairvoyants and Tarot readers.

Like the diviners, these are people who have a real, physical phenomenon, happening before their eyes. Their clients respond. It's as real and obvious as any rods moving.

Again, what must it might be like for these people when they see their powers fail? First of all, there is no doubt whatsoever that their powers are real and they work. Therefore, the power did not fail at all. There must be another reason.

When NSW committee members Alynda, Ian Bryce and I have tested one psychic, she said all her information came from the 'Spooks', we found real confusion when even she could see all did not go as she expected. Some of the justifications she and others have used include;

You are closed minded.

There was a wall coming down in your mind blocking the psychic energy.

I was reading someone else in the room.

You cannot take this sort of test seriously.

The 'spooks' tell me things. If I'm wrong, the spooks are to blame.

As with divining, you cannot put this to the test.

You are blocking me with your own psychic power or energy.

Skeptics are closed minded and just don't understand.

There is another angle to the psychic reading, this happens in the mind of the client. As our guest Ian Rowland will no doubt tell you, it is the client of the psychic who does most of the reading, even if it's in their own head. We can see that the client also engages in these justifications. If the psychic tells them something that really does not fit, say that they see a pet cat in their past when there was none, the client will almost always forget this statement, it's called forgetting the misses and remembering the hits.

But even more interesting is the way in which people make the readings fit their own lives. For example, if the client is told about "Uncle Robert" and there was no "Uncle Robert", the client will often make "Uncle Robert" — somehow — fit. The justification engine kicks in and "Uncle Robert" may well turn out to be the uncle of a spouse, friend, a TV character or anyone called Robert or Bob to whom they can find a link. Maybe it's someone they will meet in the future!

Here, the justifications are used to keep the reading real and to maintain the faith the client has in the psychic. The client has made quite an emotional, intellectual and financial investment and all these are in need of protection, or, as our old friend John Edward would say, validation.

Is it any wonder the psychics are in no doubt whatsoever of their own powers when in almost every case, the client gives positive feedback, even when the psychic is nothing short of pathetic. This we have seen first hand when Richard Lead and I attended a performance of 'The Amazing Valda' who chatted to the dead. I'm afraid this was the best she could come up with:

I'm getting the initial 'D' with a man in his late 50s.

She kept at it until it was apparent that the man knew of no one that fit. OK, how to get out of this? Ah!

'D' stands for 'Dad'.

The initial 'H', to a lady also in her late 50s, also met with a blank.

Who is 'H'?

No response, so finally Valda said:

They're telling me that you're a Helper!

And many similar examples, yet, people in the audience were hanging on to every word and clapping each time.

Justification

The justifications and excuses are quite real and reasonable to the believer. Anything, no matter how farfetched or outrageous makes more sense than the unthinkable — that they could be wrong. This thought does not even enter their heads. It flies in the face of everything they know and expect. If there are any questions, the justifications come at breakneck speed. And the true believers are **so** good at it. I've found myself using the term 'mental gymnastics' when referring to this practice. Try as I might, I just cannot come up with as many wacko justifications and in such a short time as do the believers.

So, I must put it to you that the same root process that helps the SF fan from losing the 'magic' of their favourite TV show by "filling in" any plot holes, is in full swing with the true believer when also confronted with holes in the plot. In this case, holes in the very fabric of their reality. The difference is the SF fan will willing and knowingly suspend disbelief in order to make the fictional world more real and more enjoyable. The believer has no need to suspend disbelief, as there is no disbelief to begin with, or if there ever was, it has gone.

The first thing we might consider here is self-preservation. The mind doing its best to keep intact the worldview of its owner. We cannot forget the role imagination plays in this. I would suspect the average psychic doing readings for paying clients, convinced of their own powers, would have a vivid imagination. It would certainly help in giving a good reading. Also, the stronger the emotional attachment the

... Happy Medium from p 21

then a range where good health prevails; and beyond that another harmful region where the agent is increasingly toxic, leading to death by poisoning. Nuclear radiation is such an agent. The radiation dose for good health extends from levels below natural background levels of less than two millisieverts per year right up to over 200 mSv per year. In some regions the indigenous population remains healthy at environmental levels of at least 300 mSv per year. We know that radiation sickness becomes apparent somewhere between 500 and 1,000 mSv per year, while 6,000 or more is lethal.

On the other hand there are three models which ignore hormesis. There is. The linear — no threshold (LNT) model which has unfortunately been favoured in the past by authorities; the threshold model regarded by Calabrese and Baldwin as an error of historic proportions; and the quite ludicrous model touted by many anti-nuclear activists who argue that radiation is worse at low doses. By ignoring hormesis, all three of these models make no recognition of the role of thousands of agents in promoting good health in appropriate doses. Their advocates fail to appreciate that living organisms evolved

more we see justifications playing a part. If I was not a fan of *Doctor Who*, I would not have given any thought at all as to coming up with a reason as to why the Doctor mentioned the 25% of infinity. The Doctor would not make an error... would he?

We may also consider the psychological phenomenon of "cognitive dissonance". According to cognitive dissonance theory, there is a tendency for individuals to seek consistency among their cognitions (ie, beliefs, opinions). When there is an inconsistency between attitudes or behaviours (dissonance), something must change to eliminate the dissonance. In the case of a discrepancy between attitudes and behaviour, it is most likely that the attitude will change to accommodate the behaviour.

Conclusion

We must realise that many people, be they diviners, psychics or clients are simply following their best judgment based on what they know and expect to occur. I reject the simple notion, pushed by so-called current affairs shows on TV, (now that's where suspension of disbelief comes in handy) that people are all either:

A. (In the case of psychics) frauds and con sharks $\label{eq:sharks}$

B. (In the case of clients) idiots Justification of holes in the plot is a very human activity. It gives us comfort. You just gotta know where to draw the line.



by making use of the chemicals and other agents in their environment.

Emeritus Professor Peter Parsons of LaTrobe University spent much of his career as an environmental biologist supporting hormesis and refuting the false LNT dose model. His latest paper is "Energy, stress and the invalid LNT premise: a generalization illustrated by ionising radiation." In other words: for nuclear radiation LNT is bulldust. Even so, it has been official dogma for decades.

A linear model says that harm from radiation doses is additive. The fact that it improves health (in moderation — remember my Dad) is ignored. This leads to the absurd regulation that members of the public must not receive more than one millisievert (mSv) per year in addition to the natural annual exposure here in much of Australia of 2 to 3 mSv, with medical radiation ("holy radiation") excepted. It is ridiculous that a company can face huge fines for adding a few millisieverts of radiation above the natural background level when the effect of such an addition would, through beneficial hormesis, promote better health!

Furthermore, application of the LNT model led to the needless relo-

cation of 400,000 people from the Chernobyl region after the disaster. They'd have been healthier and less stressed had they stayed living at home, vacuumed their living quarters and gave the authorities the task of disposing of the radioactive dustbags!

Radiation protection based on the LNT model is claimed (by Jaworowski - see my book mentioned above) to cost over two billion dollars per life saved, money that could save millions of lives through disease control programs in Third World countries. There are literally scores of examples of other unnecessary costs mandated by regulatory authorities employing false criteria, namely the LNT approach to radiation safety.

So why do authorities still cling to the invalid LNT model? Answer: they are too lazy to use a hormesis model because the maths is harder! It's a shame they fail to heed my late father's maxim and revise their regulations to enshrine a happy medium — nature's own paradigm.

 \ast Available from the Skeptics on-line shop.

