

S&S vs. SF in BotNS

The Urth list — 119 messages, 14 voices, 19 Dec 2011

<https://urth.darkrealm.vip/thread/urth/6149>

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Daniel Petersen — 19 Dec 2011, 01:40

In light of the recent discussions about BotNS as appearing to be Sword & Sorcery: just realised I briefly addressed this about a year and a half ago in a post on my Wolfe blog. Paragraph six at:

<http://silkandhornheresy.blogspot.com/2010/06/reading-wolfe-is-dream-like-another.html>

-DOJP

Daniel Petersen — 19 Dec 2011, 01:42 · in reply to Daniel Petersen

Actually, I should just paste it here for ease:

' The other way Wolfe is generally different than Tolkien is that most of his world-building is in authentically *science fictional* terms (barring, of course, the Soldier series and the Wizard-Knight series). That is, in all twelve books of the Solar Cycle Wolfe is creating not 'alternate realms' of 'sword and sorcery' (oh yes, it sometimes looks and feels like this to a large degree so that he is often labeled 'science fantasy'), but genuine far-future, technologically advanced (so vastly advanced that it is in long forgotten decay), space-faring, interplanetary, alien ecospheres and economies. The Solar Cycle is indeed a subversive or alternative or 'punk' form of classic Heroic Fantasy, but it is in irreducibly science fictional terms. Of course, Wolfe also writes these books in a way that richly and readily includes the 'fantastic': the paranormal, the preternatural, the supernatural, the 'transcendant', the spiritual, the 'trans-dimensional' (though curiously, nothing authentically 'magical' that I can see). In this sense it is also fantasy literature but more in the vein of Lovecraft or Gaiman or Tim Powers or 'magic realism' or what have you. This kind of fantasy is neither Tolkien's Middle Earth on the one hand nor Mervyn Peake's Gormenghast on the other (though it includes a 'feel' from both). So when I call Wolfe's writing 'science fantasy' what I mean is something like 'science fiction fantasy', which I know is uncomfortable (not to say oxymoronic!) to some out there. But Wolfe's fiction is nothing if not uncomfortable, uncategorisable, and disturbing — but all, in my opinion, in ways that are ultimately enlightening and humanising.'

-DOJP

On Mon, Dec 19, 2011 at 1:40 AM, Daniel Petersen <danielottojackpetersen@gmail.com> wrote:

In light of the recent discussions about BotNS as appearing to be Sword & Sorcery: just realised I briefly addressed this about a year and a half ago in a post on my Wolfe blog. Paragraph six at:

<http://silkandhornheresy.blogspot.com/2010/06/reading-wolfe-is-dream-like-another.html>

-DOJP

Jerry Friedman — 20 Dec 2011, 19:12 · in reply to Daniel Petersen

From: Daniel Petersen <danielottojackpetersen at gmail.com>

Actually, I should just paste it here for ease:

Very interesting essay. Of course Wolfe's world-building is the kind that Heinlein championed, "The door dilated", but taken much farther than Heinlein ever did, even in /The Moon is a Harsh Mistress/.

' The other way Wolfe is generally different than Tolkien is that most of his world-building is in authentically?science fictional terms (barring, of course, the Soldier series and the Wizard-Knight series). That is, in all twelve books of the Solar Cycle Wolfe is creating not 'alternate realms' of 'sword and sorcery' (oh yes, it sometimes looks and feels like this to a large degree so that he is often labeled 'science fantasy'), but genuine far-future, technologically advanced (so vastly advanced that it is in long forgotten decay), space-faring, interplanetary, alien ecospheres and economies. The Solar Cycle is indeed a subversive or alternative or 'punk' form of classic Heroic Fantasy, but it is in irreducibly science fictional terms. Of course, Wolfe also writes these books in a way that richly and readily includes the 'fantastic': the paranormal, the preternatural, the supernatural, the 'transcendant', the spiritual, the 'trans-dimensional'

(though curiously, nothing authentically 'magical' that I can see).

How about the analept of the alzabo and the effect of drinking blook?on the inhumis? After a moment's thought, the only way I can understand these is as magic, specifically the principle of contagion (if I have it right). Even if you believe in Lamarckian inheritance, the effect of memory and decisions on DNA or anything else located outside the brain is clearly very subtle--for instance, children aren't born knowing their biological parents'?language--not what seems to happen to the inhumis or even to alzabo addicts. Though actually I'm not clear on what happens to alzabo-heads who don't happen to be carrying the Claw.

In this sense it is also fantasy literature but more in the vein of Lovecraft or Gaiman or Tim Powers or 'magic realism' or what have you. This kind of fantasy is neither Tolkien's Middle Earth on the one hand nor Mervyn Peake's Gormenghast on the other (though it includes a 'feel' from both). So when I call Wolfe's writing 'science fantasy' what I mean is something like 'science fiction fantasy', which I know is uncomfortable (not to say oxymoronic!) to some out there. But Wolfe's fiction is nothing if not uncomfortable, uncategorisable, and disturbing — but all, in my opinion, in ways that are ultimately enlightening and humanising.'

Certainly uncomfortable and disturbing in some ways, but genre confusions don't bother me. Wolfe seems to care that what Decuman and Typhon do is hypnotism of some very strange sort, not magic, but I don't see why he cares.

Jerry Friedman

Lee Berman — 20 Dec 2011, 19:53 · follows Jerry Friedman

Jerry Friedman: How about the analept of the alzabo and the effect of drinking blook on the inhumis? After a moment's thought, the only way I can understand these is as magic, specifically the principle of contagion (if I have it right).

I think the alzabo stuff is explainable by time period. There was a very real and serious camp in the 1970's which thought memory might be carried by RNA. Wolfe wouldn't be the only SF writer of that era to base fiction on it.

But that really doesn't wash for 21st century science in Short Sun. You got me thinking Jerry..

I've always thought that there was an echo of 5HoC Shadow Children in the Inhumis. Perhaps, like them, inhumis are essentially non-material beings. So it isn't really the blood, per se, which

facilitates the personality absorption but the spirit associated with blood (eucharist in mind).

Perhaps more importantly, this idea has softened my stiff-necked stance on the Inhumans of flying through the void from Green to Blue. If there is a spiritual essence to them, perhaps they could do it by shedding their material body. Then all my problems with the idea (using muscles to achieve escape velocity, biological survival in the void) are side-stepped. If "contagion" is invoked, that could explain why planetary conjunction is important in setting the timing of the migration.

I kinda like this idea further because it allows the stated "Secret of the Inhumans" to actually be their secret- they are what they eat. But, of course the secret isn't as simple as that. The deeper truth being that they have no material body other than what they eat. They aren't humanoid or reptilian or even parasitic vines. In essence they are only malevolent spirits. (and they are still liars ;-))

Gwern Branwen — 20 Dec 2011, 20:02 · in reply to Lee Berman

On Tue, Dec 20, 2011 at 2:53 PM, Lee Berman <severiansola at hotmail.com> wrote:

I think the albedo stuff is explainable by time period. There was a very real and serious camp in the 1970's which thought memory might be carried by RNA. Wolfe wouldn't be the only SF writer of that era to base fiction on it.

Frank Herbert comes to mind besides Wolfe.

gwern
<http://www.gwern.net>

Daniel Petersen — 20 Dec 2011, 21:24 · in reply to Jerry Friedman

On Tue, Dec 20, 2011 at 7:12 PM, Jerry Friedman <jerry_friedman at yahoo.com> wrote:
From: Daniel Petersen <danielottojackpetersen at gmail.com>
Actually, I should just paste it here for ease:

Very interesting essay. Of course Wolfe's world-building is the kind that Heinlein championed, "The door dilated", but taken much farther than Heinlein ever did, even in *The Moon is a Harsh Mistress*.

' The other way Wolfe is generally different than Tolkien is that most of his world-building is in authentically science fictional terms (barring, of course, the Soldier series and the Wizard-Knight series). That is, in all twelve books of the Solar Cycle Wolfe is creating not 'alternate realms' of 'sword and sorcery' (oh yes, it sometimes looks and feels like this to a large degree so that he is often labeled 'science fantasy'), but genuine far-future, technologically advanced (so vastly advanced that it is in long forgotten decay), space-faring, interplanetary, alien ecospheres and economies. The Solar Cycle is indeed a subversive or alternative or 'punk'

form of classic Heroic Fantasy, but it is in irreducibly science fictional terms. Of course, Wolfe also writes these books in a way that richly and readily includes the 'fantastic': the paranormal, the preternatural, the supernatural, the 'transcendent', the spiritual, the 'trans-dimensional' (though curiously, nothing authentically 'magical' that I can see).

How about the analogy of the albedo and the effect of drinking blood on the Inhumans? After a moment's thought, the only way I can understand these is as magic, specifically the principle of contagion (if I have it right). Even if you believe in Lamarckian inheritance, the effect of memory and decisions on DNA or anything else located outside the brain is clearly very subtle--for instance, children aren't born knowing their biological

parents' language--not what seems to happen to the inhumi or even to alzado addicts. Though actually I'm not clear on what happens to alzado-heads who don't happen to be carrying the Claw.

...

Jerry Friedman

Thanks Jerry. Yes, I wasn't clear in the essay. I meant 'magical' in the spells and incantations sort of sense. If you're explaining the Inhumi and alzado phenomena in non-naturalistic (supernatural, paranormal, etc.) terms, then I agree. Or at least, I'm as open to that possibility as any other.

-DOJP

Jerry Friedman — 21 Dec 2011, 01:23 · in reply to Lee Berman

From: Lee Berman <severiansola at hotmail.com>

Jerry Friedman: How about the analept of the alzado and the effect of drinking

blood on the inhumi? After a moment's thought, the only way I can understand

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Wolfe

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Okay, there aren't any spells or incantations. (The closest thing to that is the one from Isangoma, which may or may not work.)? I think of contagion as specifically magical, not just supernatural or paranormal in general. The blood or flesh carries the memories because it's connected to the brain. I might not be right about that, though. "Contagion" more often means the reason people who believe in it bury their hair and fingernail clippings to keep someone from using them in a curse.

Jerry Friedman

Jeff Wilson — 21 Dec 2011, 04:03 · in reply to Jerry Friedman

On 12/20/2011 7:23 PM, Jerry Friedman wrote:

From: Lee Berman<severiansola at hotmail.com>

Jerry Friedman: How about the analept of the alzado and the effect of drinking

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The leech and the old autarch mention that brains work best, but the extremely well informed Ultan says that hands are sufficient. I think that the memory RNA hypothesis of the time was license to go there, but the exact mechanism is not important, similar to the way a solution to transplant and implant rejection exists by implication in the accounts of the leech and Jonas and Severian's comments on them. The memory transfer is acknowledged subtextually by the author to be more involved in that it requires a special animal, while the rejection cure is apparently so well understood or had been at one time that it is still readily available wherever surgeons are to be found.

Or possibly, Urthers have undergone a change or a culling so that they don't reject implants or one another's tissue.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

Daniel Petersen — 21 Dec 2011, 09:02 · in reply to Jerry Friedman

Ok, Jerry, so I think you, like me, have 'magical' as a subset of 'supernatural' or 'paranormal'. But, if not in terms of spells, etc., then in what sense are these phenomena 'magical'? (I think I normally think there has to be some human agency in terms of cooperation with greater powers through arcane [and usually uncertain] rules or rituals. That's the kind of stuff I feel I don't see in BotNS. If the Thecla ritual eating is to be thought of this way, then, for once, I'd probably tend toward a more 'scientific' explanation as has been discussed.)

-DOJP

On Wed, Dec 21, 2011 at 1:23 AM, Jerry Friedman <jerry_friedman at yahoo.com> wrote:

Daniel Petersen:

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Jerry Friedman

David Stockhoff — 21 Dec 2011, 13:04 · in reply to Jeff Wilson

On 12/20/2011 11:03 PM, Jeff Wilson wrote:

On 12/20/2011 7:23 PM, Jerry Friedman wrote:

From: Lee Berman<severiansola at hotmail.com>

Jerry Friedman: How about the analept of the alzado and the effect of drinking

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Or possibly, Urthers have undergone a change or a culling so that they don't reject implants or one another's tissue.

Ultan's remarks are key, although I think they do not refer only to the analeptic alzado but to larger concepts of interest to Severian and Wolfe. At any rate, the principle of what you might call "spiritual cannibalism" already exists---that is, the pre-scientific concept that when you eat the seat of your dead enemy's soul, you eat his soul. Any further details will be particular to the genre, setting, or audience---in our case, "plausible" science.

In addition, if the brain is so potent, there was plenty of Thecla's to go around the table in thimblefuls. That would seem to make eating the body redundant, but it's easy to construct a social/ritual/magical explanation for this that would be acceptable to the Vodalarii, or to imagine that the feast was so much more, as a sensual or even as a bonding experience, than a simple injection of cells/RNA to acquire memories. The presentation of the body alone suggests a cultural significance on the level of a spectacular wedding feast.

Lee Berman — 21 Dec 2011, 14:33 · follows David Stockhoff

David Stockhoff: Ultan's remarks are key, although I think they do not refer only to the analeptic alzabo but to larger concepts of interest to Severian and Wolfe. At any rate, the principle of what you might call "spiritual cannibalism" already exists---that is, the pre-scientific concept that when you eat the seat of your dead enemy's soul, you eat his soul. Any further details will be particular to the genre, setting, or audience---in our case, "plausible" science.

An excellent point. Along with all the other persistent faerie/magic elements from human mythology, cannibalism belongs in this book along with vampires, giants, shapeshifting, etc. I'll even assert that the only kind of cannibalism among humans is "spiritual". I don't know any examples of cultural prescription of cannibalism for the sake of nutrition.

(FWIW, centuries before "Mad Cow Disease" appeared in our news, Papua-New Guineans, hoping to augment their own courage, were giving each other a prionic dementia disease called "kuru" from eating the brains of fallen warriors.)

Gerry Quinn — 21 Dec 2011, 16:48 · in reply to Jerry Friedman

From: Jerry Friedman

From: Daniel Petersen danielottojackpetersen at gmail.com

(though curiously, nothing authentically 'magical' that I can see).

How about the analept of the alzabo and the effect of drinking blook on the inhumi? After a moment's thought, the only way I can understand these is as magic, specifically the principle of contagion (if I have it right). Even if you believe in Lamarckian inheritance, the effect of memory and decisions on DNA or anything else located outside the brain is clearly very subtle--for instance, children aren't born knowing their biological parents' language--not what seems to happen to the inhumi or even to alzabo addicts. Though actually I'm not clear on what happens to alzabo-heads who don't happen to be carrying the Claw.

It's not magic — it's bad science, just like FTL travel. Wolfe doesn't care too much if the science is questionable, what he cares about is that the world of the story is underpinned by natural laws. The distinction between magic and science is that magic has either no rules, or rules that are arbitrarily connected to their physical effects (they may be psychologically non-arbitrary).

Certainly uncomfortable and disturbing in some ways, but genre confusions don't bother me. Wolfe seems to care that what Decuman and Typhon do is hypnotism of some very strange sort, not magic, but I don't see why he cares.

I think he cares because it would be a different kind of world if it had magic. Not necessarily for the characters in it, but for the readers.

- Gerry Quinn

- Gerry Quinn

Dan'l Danehy-Oakes — 21 Dec 2011, 16:50 · in reply to Gerry Quinn

Gerry Quinn wrote:

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It seems to me that what the sorcerers in the woods do is "real" magic.

Dan'l Danehy-Oakes

Gerry Quinn — 21 Dec 2011, 16:56 · in reply to Lee Berman

From: Lee Berman

I've always thought that there was an echo of 5HoC Shadow Children in the Inhumi. Perhaps, like them, inhumi are essentially non-material beings. So it isn't really the blood, per se, which facilitates the personality absorption but the spirit associated with blood (eucharist in mind).

The Shadow Children are certainly material (they can be eaten), and in fact — as is explained to us - they are descendents of human explorers. As for the inhumi, I think the same applies as elsewhere in the Solar cycle: Wolfe doesn't worry too much about making his science realistic, but inhumi like other creatures are ultimately to be considered physical and obeying physical laws.

God has no true competition in the magic department, and he generally does his stuff by working through the physical laws he has written down.

- Gerry Quinn

Jeff Wilson — 21 Dec 2011, 16:57 · in reply to Dan'l Danehy-Oakes

On 12/21/2011 10:50 AM, Dan'l Danehy-Oakes wrote:

Gerry Quinn wrote:

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legerdemain + psi

Jeff Wilson - jwilson at clueland.com

Computational Intelligence Laboratory - Texas A&M Texarkana

< <http://www.tamut.edu/CIL> >

Dan'l Danehy-Oakes — 21 Dec 2011, 16:58 · in reply to Jeff Wilson

"psi" is a fancy word for magic.

On Wed, Dec 21, 2011 at 8:57 AM, Jeff Wilson <jwilson at clueland.com> wrote:

On 12/21/2011 10:50 AM, Dan'l Danehy-Oakes wrote:

Gerry Quinn wrote:

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too much if the science is questionable, what he cares about is that the world of the story is underpinned by natural laws.

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Gerry Quinn — 21 Dec 2011, 17:01 · in reply to Lee Berman

From: Lee Berman

Sent: Wednesday, December 21, 2011 2:33 PM

To: urth at urth.net

Subject: (urth) S&S vs. SF in BotNS

An excellent point. Along with all the other persistent faerie/magic elements from human mythology, cannibalism belongs in this book along with vampires, giants, shapeshifting, etc. I'll even assert that the only kind of cannibalism among humans is "spiritual". I don't know any examples of cultural prescription of cannibalism for the sake of nutrition.

According to Wikipedia: "Cannibalism was widespread in the past among humans in many parts of the world, continuing into the 19th century in some isolated South Pacific cultures, and to the present day in parts of tropical Africa. In a few cases in insular Melanesia, indigenous flesh-markets existed.

And of course we know of cases when shipwrecked sailors or other groups of isolated survivors ate human flesh to survive.

- Gerry Quinn

Gerry Quinn — 21 Dec 2011, 18:21 · in reply to Dan'l Danehy-Oakes

From: Dan'l Danehy-Oakes

"psi" is a fancy word for magic.

Psi is SF terminology to indicate that certain powers arise from physical causes rather than magic. It is on occasion used to put a thin veneer of SF on a story that might as well be about magic, but in itself it is not a word for magic.

Mucor has powers of this kind (though I don't think Wolfe ever uses the word psi), but her brain is physically abnormal.

- Gerry Quinn

Dan'l Danehy-Oakes — 21 Dec 2011, 18:35 · in reply to Gerry Quinn

Gerry Quinn wrote:

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And yet Mucor's powers turn out to have a great deal to do with the soul.

Magic.

"I say it's spinach, and I say to hell with it." -- James Thurber

Dan'l Danehy-Oakes

Gerry Quinn — 21 Dec 2011, 19:09 · in reply to Dan'l Danehy-Oakes

From: Dan'l Danehy-Oakes

Gerry Quinn wrote:

From: Dan'l Danehy-Oakes

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Why?

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Dan'I Danehy-Oakes — 21 Dec 2011, 19:12 · in reply to Gerry Quinn

Gerry Quinn wrote:

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Magic.

Why?

Because Wolfe is not such a fool as to offer a scientific (or psientific -- which can also mean "pseudo-scientific") explanation for the soul.

Dan'I Danehy-Oakes

Gerry Quinn — 21 Dec 2011, 19:48 · in reply to Dan'I Danehy-Oakes

From: Dan'I Danehy-Oakes

Sent: Wednesday, December 21, 2011 7:12 PM

To: The Urth Mailing List

Subject: Re: (urth) S&S vs. SF in BotNS

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Magic.

Why?

Because Wolfe is not such a fool as to offer a scientific (or psientific -- which can also mean "pseudo-scientific") explanation for the soul.

What powers of Mucor are you saying are magic? The Whorl gods? possession of people is explicitly glossed as technology rather than magic, and that surely also involves the soul. Do chems have souls? One imagines so, and Mucor doesn't mistake Quetzal for one. Yet their soul presumably starts off as a computer program.

I don't think souls are magic in Long Sun / Short Sun.

- Gerry Quinn

Jerry Friedman — 21 Dec 2011, 20:19 · in reply to David Stockhoff

From: David Stockhoff dstockhoff at verizon.net

On 12/20/2011 11:03 PM, Jeff Wilson wrote:

On 12/20/2011 7:23 PM, Jerry Friedman wrote:

[the analeptic alzabo]

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Or possibly, Urthers have undergone a change or a culling so that they don't reject implants or one another's tissue.

To me, the problem of rejection seems quite different, as we know ways to deal with that. Most simply, the boy who "donated" blood may have been O-, and the leech may have known that.

And whether the beliefs of the '70s licensed the alzado or not, I don't see that the beliefs of the '90s licensed the still less plausible inhuman.

Ultan's remarks are key, although I think they do not refer only to the analeptic alzado but to larger concepts of interest to Severian and Wolfe. At any rate, the principle of what you might call "spiritual cannibalism" already exists---that is, the pre-scientific concept that when you eat the seat of your dead enemy's soul, you eat his soul. Any further details will be particular to the genre, setting, or audience---in our case, "plausible" science.

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But then why do we have to imagine it, and why the red herring of Severian's and Ultan's interchange about the corpse's hands, as Jeff mentioned above? If Wolfe had wanted us to think of this as science fiction, he could easily have restricted the whole thing to brains, which would indeed have been licensed by the RNA and planaria beliefs of the time and by the reference to holography, another sf cliché back then (though not tremendously compatible with the RNA theory). He seems to undercut this deliberately by implying that the memory is in the whole body, when we know perfectly well that injuries that don't interfere with brain function don't affect the memory.

Jerry Friedman

Gerry Quinn — 21 Dec 2011, 20:43 · in reply to Jerry Friedman

From: Jerry Friedman

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They wouldn't if they are an epiphenomenon of a holographic memory.

- Gerry Quinn

David Stockhoff — 21 Dec 2011, 21:03 · in reply to Jerry Friedman

On 12/21/2011 3:19 PM, Jerry Friedman wrote:

Ultan's remarks are key, although I think they do not refer only to the analeptic alzado but to larger concepts of interest to Severian and Wolfe. At any rate, the principle of what you might call "spiritual cannibalism" already exists---that is, the pre-scientific concept that when you eat the seat of your dead enemy's soul, you eat his soul. Any further details will be particular to the genre, setting, or audience---in our case, "plausible" science.

In addition, if the brain is so potent, there was plenty of Thecla's to go around the table in thimblefuls. That would seem to make eating the body redundant, but it's easy to construct a social/ritual/magical explanation for this that would be acceptable to the Vodalarii, or to imagine that the feast was so much more, as a sensual or even as a bonding experience, than a simple injection of cells/RNA to acquire memories. The presentation of the body alone suggests a cultural significance on the level of a spectacular wedding feast.

But then why do we have to imagine it, and why the red herring of Severian's and Ultan's interchange about the corpse's hands, as Jeff mentioned above? If Wolfe had wanted us to think of this as science fiction, he could easily have restricted the whole thing to brains, which would indeed have been licensed by the RNA and planaria beliefs of the time and by the reference to holography, another sf cliché back then (though not tremendously compatible with the RNA theory). He seems to undercut this deliberately by implying that the memory is in the whole body, when we know perfectly well that injuries that don't interfere with brain function don't affect the memory.

First, Wolfe undercuts everything he does. Rather than repeat himself, he throws out a data point that is near another one. He also likes to parrot historical concepts, especially commonsense ones that are probably wrong, whether they explain things or not. I think he truly enjoys imagining what the world would be like if it actually ran the way we think it does. When he has Latro see gods, he doesn't mock the Greeks but rather ourselves, including our inability to see miracles.

Second, I think the remarks about hands have to do with how the universe (and the Increate) works as a whole. It's a clue about how Yesod manages Briah, for example, and Tzadkiel.

Third, did Wolfe want us to think BNS was SF? If so, he failed. He had Vodalus give a feast in a scene that contains no SF whatsoever, and gave us enough contradictory theory about the process that we would not know what to expect when the moment came for actual practice. (Science is supposed to predict!) And when the time comes for the real thing with the old Autarch, the ritual's brutal simplicity reveals that feast as orgiastic and hollow pageantry in comparison.

Jerry Friedman — 21 Dec 2011, 21:25 · in reply to Gerry Quinn

From: Gerry Quinn <gerry at bindweed.com>

From: Jerry Friedman

From: Daniel Petersen danielottojackpetersen at gmail.com

(though curiously, nothing authentically 'magical' that I can see).

How about the analeptic of the alzado and the effect of drinking blood on the inhuman?
After a moment's thought, the only way I can understand these is as magic, specifically the principle of contagion (if I have it right). Even if you believe in Lamarckian inheritance, the effect of memory and decisions on DNA or anything else located outside the brain is clearly very subtle--for instance, children aren't born knowing

their biological parents' language--not what seems to happen to the inhumans or even to alzabo addicts. Though actually I'm not clear on what happens to alzabo-heads who don't happen to be carrying the Claw.

It's not magic — it's bad science, just like FTL travel. Wolfe doesn't care too much if the science is questionable, what he cares about is that the world of the story is underpinned by natural laws. The distinction between magic and science is that magic has either no rules, or rules that are arbitrarily connected to their physical effects (they may be psychologically non-arbitrary).

But that's precisely what we've got with the analeptic alzabo and the inhumans. The rules underlying them make psychological sense because they work by "contagion", but they don't make physical sense to me. That's why they feel like magic rather than science-fictional "bad science".

?> Certainly uncomfortable and disturbing in some ways, but genre confusions don't bother me. Wolfe seems to care that what Decuman and Typhon do is hypnotism of some very strange sort, not magic, but I don't see why he cares.

I think he cares because it would be a different kind of world if it had magic. Not necessarily for the characters in it, but for the readers.

But the reader can't tell. Maybe that's why Wolfe felt he had to say it in an interview. In any case, it's a distinction without a difference for this reader, and maybe for Dan'l too. If we were supposed to find valid scientific explanations for everything, that would make a difference to me, but not if we're supposed to find bogus science-fictional explanations.

Daniel Petersen wrote:

Ok, Jerry, so I think you, like me, have 'magical' as a subset of 'supernatural' or 'paranormal'. But, if not in terms of spells, etc., then in what sense are these phenomena 'magical'? (I think I normally think there has to be some human agency in terms of cooperation with greater powers through arcane [and usually uncertain] rules or rituals. That's the kind of stuff I feel I don't see in BotNS. If the Thecla ritual eating is to be thought of this way, then, for once, I'd probably tend toward a more 'scientific' explanation as has been discussed.)

To me, goety and theurgy are only one branch of magic. Another is the kind that works by sympathy and contagion, such as sticking pins in dolls or keeping one's accidental cut from being infected by cleaning the knife that caused it. Maybe in the same category is the kind that works by less obvious correspondences, such as Renaissance alchemy and astrology, or indigenous medicine that works by kinships among species that are based on stories. Then there's knowing true names, as on Earthsea. Another kind is magical devices, such as the One Ring. And the kind that's just an inherent power, and is or isn't the same as psi. I don't think I can classify all the kinds of magic, but "I know it when I see it" (and don't expect everyone to agree).

Jerry Friedman

Dan'l Danehy-Oakes — 21 Dec 2011, 21:25 · in reply to Gerry Quinn

Gerry Quinn wrote:

Because Wolfe is not such a fool as to offer a scientific (or psientific -- which can also mean "pseudo-scientific") explanation for the soul.

What powers of Mucor are you saying are magic?

All of them.

The Whorl gods? possession of people is explicitly glossed as technology rather than magic,

Correct.

and that surely also involves the soul.

Not so fast. We get nothing from the point of view of a possessed person, except at a double remove (what is told to Silk, as re-related from him to the authors of the Book of Silk). We really don't know whether the possessed person is conscious in any way of being/having been possessed -- indeed, when a possessor leaves the possessee, Wolfe seems to deliberately skim around the question of what it was like for the possessee.

Do chems have souls?

They seem to!

One imagines so, and Mucor doesn't mistake Quetzal for one. Yet their soul presumably starts off as a computer program.

No. A chem's mind starts as a program. The mind is not the soul.

Dan'l Danehy-Oakes

Dan'l Danehy-Oakes — 21 Dec 2011, 21:30 · in reply to Jerry Friedman

Jerry Friedman wrote:

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Exactly so. The big distinction is between magia, the application of natural laws like sympathy and contagion; and goetia, dealings with supernatural powers. Some years ago I wrote a mini essay on this for a friend who was defending the Harry Potter books for her church:
http://www.molthagen.de/kerstin/buecher/hp_anleit_ddo.html

Dan'l Danehy-Oakes

Gerry Quinn — 21 Dec 2011, 22:05 · in reply to Dan'l Danehy-Oakes

From: Dan'l Danehy-Oakes

Gerry Quinn wrote:

What powers of Mucor are you saying are magic?
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But she has a modified brain, and the things she does are similar to the things done by others, who do not seem to do them by magic. Why do you say Mucor in particular is magic?

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Yes, but since neither Silk nor Horn was ever possessed, that is the only information we can have. It is intrinsic in the structure of the book, and not a reason to be suspicious. Possession by a god seems to be quite similar to possession by Mucor. It leaves similar traces: Mamelta says "I feel I am Mucor". While the possessee may not remember events, they seem to be compatible with what we are told by Kypris-in-Chenille

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If a chem's soul is not its mind, what is it?

And what about the Whorl gods? We are told what they put inside possesseees is the pattern of the god, the program. That seems to identify the soul with the program, and by extension the mind.

- Gerry Quinn

Dan'l Danehy-Oakes — 21 Dec 2011, 22:16 · in reply to Gerry Quinn

I see the basic problem. You do not know the difference between a soul and a mind.

I suggest you read some basic pneumatic theology.

On Wed, Dec 21, 2011 at 2:05 PM, Gerry Quinn <gerry at bindweed.com> wrote:

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Gerry Quinn — 21 Dec 2011, 22:46 · in reply to Dan'l Danehy-Oakes

From: Dan'l Danehy-Oakes

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I suggest you read some basic pneumatic theology.

Has theology advanced so far as to have a standard answer regarding the souls of robots, or digitised personalities running in a computer?

The Catholic Encyclopaedia (presumably referring only to humans and animals) says:

"The soul may be defined as the ultimate internal principle by which we think, feel, and will, and by which our bodies are animated. The term "mind" usually denotes this principle as the subject of our conscious states, while "soul" denotes the source of our vegetative activities as well.

On "mind" it says:

If we define the soul as the principle within me, by which I feel, think, will, and by which my body is animated, we may provide a definition of mind of fairly wide acceptance by merely omitting the last clause. That is, in this usage mind designates the soul as the source of conscious life, feeling, thought, and volition, abstraction being made from the vegetative functions. On the other hand the term soul emphasizes the note of substantiality and the property of animating principle.

So while they are not identical, they are rather strongly linked. And that is in humans, not the digitised personalities we have been discussing. What do you think their souls consist of?

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Dan'l Danehy-Oakes

David Duffy — 21 Dec 2011, 23:08 · in reply to Dan'l Danehy-Oakes

On Wed, 21 Dec 2011, Dan'l Danehy-Oakes wrote:

Jerry Friedman wrote:

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http://www.molthagen.de/kerstin/buecher/hp_anleit_ddo.html

"Practising yoga is Satanic, it leads to evil just like reading Harry Potter" ;)

<http://www.telegraph.co.uk/culture/harry-potter/8915691/Harry-Potter-and-yoga-are-evil-says-Catholic-Church-exorcist.html>

Cheers, David Duffy

Daniel Petersen — 21 Dec 2011, 23:16 · in reply to Jerry Friedman

On Wed, Dec 21, 2011 at 9:25 PM, Jerry Friedman <jerry_friedman at yahoo.com> wrote:

Daniel Petersen wrote:

Ok, Jerry, so I think you, like me, have 'magical' as a subset of 'supernatural' or 'paranormal'. But, if not in terms of spells, etc., then in what sense are these phenomena 'magical'? (I think I normally think there has to be some human agency in terms of cooperation with greater powers through arcane [and usually uncertain] rules or rituals. That's the kind of stuff I feel I don't see in BotNS. If the Thecla ritual eating is to be thought of this way, then, for once, I'd probably tend toward a more 'scientific' explanation as has been discussed.)

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-DOJP

Dan'l Danehy-Oakes — 22 Dec 2011, 01:41 · in reply to Gerry Quinn

The "Catholic Encyclopedia," while convenient, is actually no more authoritative than Wikipedia.

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On Wed, Dec 21, 2011 at 2:46 PM, Gerry Quinn <gerry at bindweed.com> wrote:

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Jeff Wilson — 22 Dec 2011, 04:22 · in reply to Dan'I Danehy-Oakes

On 12/21/2011 10:58 AM, Dan'I Danehy-Oakes wrote:
"psi" is a fancy word for magic.

Outside the context of speculative fiction, perhaps. It was intended to mean a physical process that could occasionally be mistaken for the magic of myth and legend but could be studied objectively They have very different connotations and spiritual implications.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

Dan'I Danehy-Oakes — 22 Dec 2011, 04:29 · in reply to Jeff Wilson

Jeff Wilson wrote:
On 12/21/2011 10:58 AM, Dan'I Danehy-Oakes wrote:
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Outside the context of speculative fiction, perhaps.

More specifically, outside the hobbyhorses of John W. Campbell, who also took up Dianetics, the Dean Drive, and the Hieronymus machine. He was a nutbar in his later years, but still a pretty good editor.

It was intended to mean
a physical process that could occasionally be mistaken for the magic of myth
and legend but could be studied objectively ?They have very different
connotations and spiritual implications.

More to the point, it was intended to give the impression that such a physical process was being discussed. However, no serious physical mechanism was ever proposed (beyond unspecified

"brain mutations" with no mechanism attached to _them_).

Dan'I Danehy-Oakes

António Pedro Marques — 22 Dec 2011, 12:19 · in reply to Jeff Wilson

Jeff Wilson wrote (22-12-2011 04:22):

On 12/21/2011 10:58 AM, Dan'I Danehy-Oakes wrote:

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But one can't just decree something to be 'psi'. There has to be a shred of plausibility.

António Pedro Marques — 22 Dec 2011, 12:30 · in reply to Daniel Petersen

Daniel Petersen wrote (21-12-2011 23:16):

On Wed, Dec 21, 2011 at 9:25 PM, Jerry Friedman <jerry_friedman at yahoo.com <mailto:jerry_friedman at yahoo.com>> wrote:

Daniel Petersen wrote:

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In my opinion there's no magic in the 'LotR universe', but I won't enter an argument over that.

I'll just say that all 'powers' present in it, even those transferred to objects, seem to come from Eru and exist by Eru - even if some of their wielders are evil, their powers are the same Eru gave them, just misused and consequently diminished - cf. Sauron's increasing inability to take an appealing shape.

For me, magic is something that breaks the physical laws of the universe it exists in. Otherwise, it's just a universe with different laws.

David Stockhoff — 22 Dec 2011, 13:18 · in reply to António Pedro Marques

On 12/22/2011 7:19 AM, António Pedro Marques wrote:
Jeff Wilson wrote (22-12-2011 04:22):

On 12/21/2011 10:58 AM, Dan'I Danehy-Oakes wrote:

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and legend but could be studied objectively They have very different connotations and spiritual implications.

But one can't just decree something to be 'psi'. There has to be a shred of plausibility.

Normally this is accomplished by setting a story far enough in the future that it can't be contradicted, then giving an explanation of how psi powers were discovered or brought forth in the population. But this is just sf convention. "Thirty years after the Heiserman Effect was discovered, Terran ships with Heiserman engines had colonized the three habitable planets of the Tau Ceti system"

Gerry Quinn — 22 Dec 2011, 16:09 · in reply to Dan'I Danehy-Oakes

From: Dan'I Danehy-Oakes

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- Gerry Quinn

Gerry Quinn — 22 Dec 2011, 16:13 · in reply to Dan'I Danehy-Oakes

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It's the difference between a hyperdrive and a magic carriage. No real science is involved in the discussion of the hyperdrive, but the reader is to understand that it is a technology made possible by advanced understanding of physics.

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Dan'l Danehy-Oakes — 22 Dec 2011, 16:25 · in reply to Gerry Quinn

Gerry Quinn wrote:

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? Or Whorl gods?

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Dan'l Danehy-Oakes

Dan'l Danehy-Oakes — 22 Dec 2011, 16:27 · in reply to Gerry Quinn

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Dan'l Danehy-Oakes

Gerry Quinn — 22 Dec 2011, 16:42 · in reply to Dan'l Danehy-Oakes

From: Dan'l Danehy-Oakes

Gerry Quinn wrote:

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Precisely.

The trouble is, I am finding it hard to tell what you are apparently being so precise about.

- Gerry Quinn

Gerry Quinn — 22 Dec 2011, 16:46 · in reply to Dan'l Danehy-Oakes

From: Dan'l Danehy-Oakes

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It's usually glossed more as an innate ability rather than a "mechanical" technology. But it's implied that it is scientifically understood.

To you, maybe, the handwaving does not suggest anything. But I think to most readers it does. For most readers, hyperdrives and psi will be accepted as being on somewhat similar footing.

- Gerry Quinn

Dan'l Danehy-Oakes — 22 Dec 2011, 16:47 · in reply to Gerry Quinn

Gerry Quinn wrote:

The soul is the underlying principle which gives life to both body and mind.

And in chems? Or Whorl gods?

Precisely.

The trouble is, I am finding it hard to tell what you are apparently being so precise about.

Would that I had the humility to have such candor about my ignorance and/or misunderstanding!

I am suggesting -- no, I am saying that the soul is precisely the same thing in chems and Whorl gods, and that the soul is personally and directly created by God (or, if you will, the Outsider) irrespective of whether the body is produced by biology or technology. That is, if a being is ensouled, it is ensouled by God.

Thus, when Typhon uploads his memories as Pas, his soul does not travel with them. If Pas has a soul, it is a new soul created by God.

Dan'l Danehy-Oakes

Lee Berman — 22 Dec 2011, 17:20 · follows Dan'l Danehy-Oakes

Dan'l Danehy-Oakes: I am suggesting -- no, I am saying that the soul is precisely the same thing in chems and Whorl gods, and that the soul is personally and directly created by God (or, if you will, the Outsider) irrespective of whether the body is produced by

biology or technology. That is, if a being is ensouled, it is ensouled by God.

Yes! I think that's it. I almost chimed in earlier with a similar suggestion but I'm glad your pas de deux with Gerry got there on its own. Wolfe is Catholic and it is common for sharers of a belief (not only religious) to speak to each other during public addresss in a certain recognizable code.

It is possible, with patience, study AND empathy, for non-believers like Gerry and me to pick up on the code. But it takes a certain awareness and effort to do so, where it comes almost subconsciously for sharers of the belief.

Thus I think the debates about the "real science" behind alzabo and inhum memory/personality sharing are moot. What we are supposed to pick up on is the cannibalism/eucharistic aspects; the magic/spirituality of it. I think for Gerry, science=real and magic/spirituality=fake, and he applies this personal world-view principle to the works of Wolfe (where they may not belong). Is he Dr. Gerry Crane in Wolfe's eyes? I think it is possible.

Dan'l Danehy-Oakes — 22 Dec 2011, 17:30 · in reply to Lee Berman

Lee Berman wrote:

Thus I think the debates about the "real science" behind alzabo and inhum memory/personality sharing are moot. What we are supposed to pick up on is the cannibalism/eucharistic aspects; the magic/spirituality of it.

Bingbingbingbing! That is exactly what I am getting at. Thank you.

I think for Gerry, science=real and magic/spirituality=fake, and he applies this personal world-view principle to the works of Wolfe (where they may not belong).

Well, except in that "science=real" allows for imaginary science like, well, hyperdrives and psionics. Perhaps, more nuanced, and I do not mean to speak for Gerry, but here's what I think he might say: Science involves a realistic process, and magic/spirituality do not; thus, brushing hyperdrives and psionics with the brush of that process imbues them, at least for the duration of a story, with a certain plausibility.

Gerry, please chime in and speak for yourself ;)

Dan'l Danehy-Oakes

David Stockhoff — 22 Dec 2011, 17:36 · in reply to Dan'l Danehy-Oakes

On 12/22/2011 11:47 AM, Dan'l Danehy-Oakes wrote:

Gerry Quinn wrote:

The soul is the underlying principle which gives life to both body and mind.

And in chems? Or Whorl gods?

Precisely.

The trouble is, I am finding it hard to tell what you are apparently being so precise about.

Would that I had the humility to have such candor about my ignorance and/or misunderstanding!

I am suggesting -- no, I am saying that the soul is precisely the same thing in chems and Whorl gods, and that the soul is personally and directly created by God (or, if you will, the Outsider) irrespective of whether the body is produced by biology or technology.

That is, if a being is ensouled, it is ensouled by God.

Thus, when Typhon uploads his memories as Pas, his soul does not travel with them. If Pas has a soul, it is a new soul created by God.

Face it, despite the theology, souls are not things we can pin down with certainty. Famously, cows were judged to have souls in the Middle Ages, but are no longer considered to have them. Science changes its mind too, but in this case presumably the Church changed its mind.

I don't know the difference between a cow and a robot, but the interchangeability of characters in the Sun Cycle pretty clearly requires that all characters be constructed in the same manner. If one has a mind and a soul, so do all.

David Stockhoff — 22 Dec 2011, 17:37 · in reply to Dan'l Danehy-Oakes

On 12/22/2011 11:27 AM, Dan'l Danehy-Oakes wrote:
Gerry Quinn wrote:

More to the point, it was intended to give the impression that such a physical process was being discussed. However, no serious physical mechanism was ever proposed (beyond unspecified "brain mutations" with no mechanism attached to them).

It's the difference between a hyperdrive and a magic carriage. No real science is involved in the discussion of the hyperdrive, but the reader is to understand that it is a technology made possible by advanced understanding of physics.

Correct, so far as it goes. But there is an implied technology behind "hyperdrive." In the case of psi, something just -- magically? -- happens to give these people powers and abilities far beyond those of mortals. Calling it a brain mutation is just handwaving; and while "hyperdrive" is handwaving also, it is handwaving that suggests something, years of technological and theoretical advances which are not implied in "psi."

Unless "years of technological and theoretical advances" are actually implied by the narration, of course. I hate it when there is none implied whatsoever but the fictional world appears to be our own.

Gerry Quinn — 22 Dec 2011, 18:04 · in reply to Dan'l Danehy-Oakes

From: Dan'l Danehy-Oakes

Well, except in that "science=real" allows for imaginary science like, well, hyperdrives and psionics. Perhaps, more nuanced, and I do not mean to speak for Gerry, but here's what I think he might say: Science involves a realistic process, and magic/spirituality do not; thus, brushing hyperdrives and psionics with the brush of that process imbues them, at least for the duration of a story, with a certain plausibility.

Yes, that is a good summary of what I think. And I treat the powers of Mucor, for example, as theoretically explicable in terms of such an imaginary realistic process.

We are also told something of the process by which Whorl gods possess people — it involves data transmission of the "pattern" of the god, presumably the program. And that pattern gets mixed with the mind and personality, at least, of the recipient.

I don't think Wolfe talks much about souls as such. I'm not sure we can flatly state that he is postulating that they are an entirely separate thing from the mind and its connection to the

universe.
- Gerry Quinn

Gerry Quinn — 22 Dec 2011, 18:11 · in reply to David Stockhoff

From: David Stockhoff

On 12/22/2011 11:47 AM, Dan'I Danehy-Oakes wrote:
Face it, despite the theology, souls are not things we can pin down with certainty. Famously, cows were judged to have souls in the Middle Ages, but are no longer considered to have them. Science changes its mind too, but in this case presumably the Church changed its mind.

I thought the thinking was that animals do have souls, but not immortal ones.
- Gerry Quinn

Dan'I Danehy-Oakes — 22 Dec 2011, 18:14 · in reply to Gerry Quinn

Gerry Quinn wrote:
I thought the thinking was that animals do have souls, but not immortal ones.

Depends on who's doing the thinking.

Aquinas, for example, somewhat-following Aristotle, believed that souls came in three varieties:

The vegetable soul, which gives life and the power of growth and reproduction. The animal soul, which gives the power of movement. And the rational soul, which gives the power of, well, reason.

In Aquinas' schema, only humans have all three souls -- angels do not have the first two but are pure rational soul.

Dan'I Danehy-Oakes

Dan'I Danehy-Oakes — 22 Dec 2011, 18:20 · in reply to Gerry Quinn

Gerry Quinn wrote:
Yes, that is a good summary of what I think.

Thank you. I'm glad I didn't misrepresent you.

And I treat the powers of Mucor, for example, as theoretically explicable in terms of such an imaginary realistic process.

Okay, so far as it goes. But...

We are also told something of the process by which Whorl gods possess people ? it involves data transmission of the "pattern" of the god, presumably the program. And that pattern gets mixed with the mind and personality, at least, of the recipient.

Agreed: we are told this. But...

I don't think Wolfe talks much about souls as such. I'm not sure we can flatly state that he is postulating that they are an entirely separate thing from the mind and its connection to the universe.

...but I think that talking about Lupine fiction, and especially the Briah cycle, without seeing souls everywhere, is akin to Dr. Crane's explanation of Silk's enlightenment as a cerebral accident. It is self-contained and in its way complete, but it misses the point. To insist that

everything be "scientifically" explicable is reasonable; to say that this is the true explanation is to cut oneself off from entire layers of meaning.

And the sad thing is that Crane cannot even conceive of what he is cutting himself off from. Is that true of you also?

(This is a sincere question. I am not trying to "convert" you, but to understand where you're coming from.)

Dan'I Danehy-Oakes

Gerry Quinn — 22 Dec 2011, 18:47 · in reply to Dan'I Danehy-Oakes

From: Dan'I Danehy-Oakes

Gerry Quinn wrote:

I don't think Wolfe talks much about souls as such. I'm not sure we can flatly state that he is postulating that they are an entirely separate thing from the mind and its connection to the universe.

...but I think that talking about Lupine fiction, and _especially_ the Briah cycle, without seeing souls everywhere, is akin to Dr. Crane's explanation of Silk's enlightenment as a cerebral accident. It is self-contained and in its way complete, but it misses the point. To insist that everything be "scientifically" explicable is reasonable; to say that this is the true explanation is to cut oneself off from entire layers of meaning.

And the sad thing is that Crane cannot even conceive of what he is cutting himself off from. Is that true of you also?

I don't think *everything* has to be scientifically explicable. Silk's enlightenment seems to be, in essence, a kind of miracle.

What I'm not convinced by is your particular dualistic understanding of the soul; I'm not sure what it adds to the story. I'm content to leave the concept of the soul as a little mysterious. Perhaps that makes me in your mind like Crane.

- Gerry Quinn

Lee Berman — 22 Dec 2011, 18:57 · follows Gerry Quinn

Dan'I Danehy-Oakes: Well, except in that "science=real" allows for imaginary science like, well, hyperdrives and psionics. Perhaps, more nuanced, and I do not mean to speak for Gerry, but here's what I _think_ he might say: Science involves a realistic _process_, and magic/spirituality do not; thus, brushing hyperdrives and psionics with the brush of that process imbues them, at least for the duration of a story, with a certain plausibility.

I really feel that Wolfe is trying to send a different message. What the ancients called magic, we call science and we tend to denigrate magic to fakery. But 10,000 years hence won't some people snicker at the ridiculous belief in "science" we have; laughing at such folly as neurology and sub-atomic physics as we snicker at thunderbolts from Zeus and witches riding brooms?

There is a Wolfe story about his correspondence with someone who (iirc) wanted to convince him there was no such thing as cheese because it was really just denatured, re-organized lactose and proteins, etc. And Wolfe saying, no he was eating a sandwich at the moment and it had cheese on it (not a scientific reductionist explanation for cheese). In another quote, Wolfe notes that some people don't believe in witches but he could produce one, if asked. There is so-called "objective reality" and there is "experiential reality" and neither is sufficient by itself to understand the world.

Dan'l: To insist that everything be "scientifically" explicable is reasonable; to say that this is the true explanation is to cut oneself off from entire layers of meaning. And the sad thing is that Crane cannot even conceive of what he is cutting himself off from. Is that true of you also? (This is a sincere question. I am not trying to "convert" you, but to understand where you're coming from.)

I have had discussions myself with Gerry on layers of meaning so I hate to interfere in the current productive (imho) conversation. But I would like to ask Dan'l if, when he is discussing missing layers of meaning if he means only in the context of Wolfe literature or also in the realm of our lives and the universe.

Antonin Scriabin — 22 Dec 2011, 19:04 · in reply to Gerry Quinn

Sorry to chime in kind of late, but I just wanted to say that, like Gerry, I am content to leave notions of the soul (and many other things) as mostly mysterious in Wolfe's books. Wolfe tends to avoid writing "hard science fiction" or straight allegory and never (at least, as far as the books I have read go) offers explicit scientific or spiritual explanation for some things. The explanation of deep space travel that Father Inire gives is as much mystical as scientific, for example; whatever the "truth" is, it is so well hidden behind the motives and understanding of Inire, Severian, and the other speakers / narrators that it probably can't be uncovered. Personally, I get more out of the story **not** knowing or pursuing the ins and outs of the scientific or theological explanations that might hold for a given phenomenon. There is something distinctly otherworldly about the **New Sun** books that makes trying to force the events therein into the confines of 20th century physics or Catholic theology inconsequential to my enjoyment of them.

On Thu, Dec 22, 2011 at 1:47 PM, Gerry Quinn <gerry at bindweed.com> wrote:

**From:* Dan'l Danehy-Oakes <danldo at gmail.com>

> Gerry Quinn wrote:

I don't think Wolfe talks much about souls as such. I'm not sure we can flatly state that he is postulating that they are an entirely separate thing from the mind and its connection to the universe.

...but I think that talking about Lupine fiction, and *_especially_* the Briah cycle, without seeing souls everywhere, is akin to Dr. Crane's explanation of Silk's enlightenment as a cerebral accident. It is self-contained and in its way complete, but it misses the point. To insist that everything be "scientifically" explicable is reasonable; to say that this is the true explanation is to cut oneself off from entire layers of meaning.

And the sad thing is that Crane cannot even conceive of what he is cutting himself off from. Is that true of you also?

I don't think **everything** has to be scientifically explicable. Silk's enlightenment seems to be, in essence, a kind of miracle.

What I'm not convinced by is your particular dualistic understanding of the soul; I'm not sure what it adds to the story. I'm content to leave the concept of the soul as a little mysterious. Perhaps that makes me in your mind like Crane.

- Gerry Quinn

Dan'I Danehy-Oakes — 22 Dec 2011, 19:11 · in reply to Lee Berman

Lee Berman wrote:

I really feel that Wolfe is trying to send a different message. What the ancients called magic, we call science and we tend to denigrate magic to fakery. But 10,000 years hence won't some people snicker at the ridiculous belief in "science" we have; laughing at such folly as neurology and sub-atomic physics as we snicker at thunderbolts from Zeus and witches riding brooms?

I'm not sure what people 10000 hence will laugh at. I hope they have something to laugh at.

I have had discussions myself with Gerry on layers of meaning so I hate to interfere in the current productive (imho) conversation. But I would like to ask Dan'I if, when he is discussing missing layers of meaning if he means only in the context of Wolfe literature or also in the realm of our lives and the universe.

By all means, I believe that there are such layers of meaning in experiential reality.

Dan'I Danehy-Oakes

Dan'I Danehy-Oakes — 22 Dec 2011, 19:13 · in reply to Gerry Quinn

Gerry Quinn wrote:

I don't think *everything* has to be scientifically explicable. Silk's enlightenment seems to be, in essence, a kind of miracle.

Then you are not like Crane, who insists that everything have a clear scientific explanation.

What I'm not convinced by is your particular dualistic understanding of the soul; I'm not sure what it adds to the story. I'm content to leave the concept of the soul as a little mysterious.

To me, the soul is extremely mysterious. My "dualism" merely seeks to define the area in which mystery operates, not to explain away that mystery.

Dan'I Danehy-Oakes

Jerry Friedman — 22 Dec 2011, 19:19 · in reply to Dan'I Danehy-Oakes

From: Dan'I Danehy-Oakes danldo at gmail.com

Lee Berman wrote:

Thus I think the debates about the "real science" behind alzabo and inhum memory/personality sharing are moot. What we are supposed to pick up on is the cannibalism/eucharistic aspects; the magic/spirituality of it.

Bingbingbingbingbing! That is exactly what I am getting at. Thank you.

...

Certainly we're supposed to pick up those aspects. This would all be fine, if it weren't for Wolfe's article in /Thrust/ as quoted in LU:

"There are?/no/ fantasy elements involved -- no "magic" in the fantasy sense. There is time-travel, but that belongs to sf, not fantasy. There are hypnotism, sleight of hand, and a few other things, but those belong to the world of reality, if not the world of science." (/Thrust/ no. 19, winter-spring 1983)

So my problem isn't with the books but with this quotation. Of course I could just ignore it.
Jerry Friedman

Gerry Quinn — 22 Dec 2011, 19:20 · in reply to Lee Berman

From: Lee Berman

I really feel that Wolfe is trying to send a different message. What the ancients called magic, we call science and we tend to denigrate magic to fakery. But 10,000 years hence won't some people snicker at the ridiculous belief in "science" we have; laughing at such folly as neurology and sub-atomic physics as we snicker at thunderbolts from Zeus and witches riding brooms?

Some people do even now. However, I don't think our understanding of such matters is likely to be reversed, though it may be deepened.

When I say there is no magic in the Sun books, I'm not talking about fakery, just saying that it is the kind of universe that runs on natural rather than magical laws. By contrast, there is magic in Aelfrice, because that's how stuff works in that other universe.

- Gerry Quinn

Jeff Wilson — 22 Dec 2011, 19:28 · in reply to Jerry Friedman

On 12/21/2011 2:19 PM, Jerry Friedman wrote:
From: David Stockhoff dstockhoff at verizon.net
On 12/20/2011 11:03 PM, Jeff Wilson wrote:

On 12/20/2011 7:23 PM, Jerry Friedman wrote:

[the analeptic alzabo]

Yes, but RNA in cooked flesh? Surely it would have to be in the brain, but nothing in that scene (CotC, Ch. XI) seems to suggest that they ate Thecla's brain. On the other hand, nothing seems to rule it out, either.

...

The leech and the old autarch mention that brains work best, but the extremely well informed Ultan says that hands are sufficient. I think that the memory RNA hypothesis of the time was license to go there, but the exact mechanism is not important, similar to the way a solution to transplant and implant rejection exists by implication in the accounts of the leech and Jonas and Severian's comments on them. The memory transfer is acknowledged subtextually by the author to be more involved in that it requires a special animal, while the rejection cure is apparently so well understood or had been at one time that it is still readily available wherever surgeons are to be found.

Or possibly, Urthers have undergone a change or a culling so that they don't reject implants or one another's tissue.

To me, the problem of rejection seems quite different, as we know ways to deal with that. Most simply, the boy who "donated" blood may have been O-, and the leech may have known that.

It may have, but there's never any mention of bad blood mixing, Sev speaks as if he's observed several people with artificial limbs before, and Jonah's crew apparently had access to technology that allowed arbitrary combinations of flesh and machine to restore his frame. Jonah has apparently been half-man, half-machine for decades, where is he getting the anti-rejection drugs that no one sees him taking? What about Typhon and Piaton?

And whether the beliefs of the '70s licensed the alzabo or not, I don't see that the beliefs of the '90s licensed the still less plausible inhum.

They don't need to, the Inhumans' borrowed sapience can proceed by extrapolation from the alphas. Not that the continuity between the series is particularly tight.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

Jeff Wilson — 22 Dec 2011, 19:57 · in reply to Dan'l Danehy-Oakes

On 12/21/2011 3:30 PM, Dan'l Danehy-Oakes wrote:
Jerry Friedman wrote:

To me, goety and theurgy are only one branch of magic.
Another is the kind that works by sympathy and contagion,
such as sticking pins in dolls or keeping one's accidental
cut from being infected by cleaning the knife that caused it.....

Exactly so. The big distinction is between magia, the application of
natural laws like sympathy and contagion; and goetia, dealings with
supernatural powers. Some years ago I wrote a mini essay on this for a
friend who was defending the Harry Potter books for her church:
http://www.molthagen.de/kerstin/buecher/hp_anleit_ddo.html

As you note, this very broad definition of magia envelops science and technology and medicine
and 2-3 other chunks of the Dewey Decimal System within "magic." In this sense, almost every
cause and effect in the BotNS is magical, because it is also material.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
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Jeff Wilson — 22 Dec 2011, 20:07 · in reply to Dan'l Danehy-Oakes

On 12/21/2011 10:29 PM, Dan'l Danehy-Oakes wrote:
Jeff Wilson wrote:

On 12/21/2011 10:58 AM, Dan'l Danehy-Oakes wrote:

"psi" is a fancy word for magic.

Outside the context of speculative fiction, perhaps.

More specifically, outside the hobbyhorses of John W. Campbell, who
also took up Dianetics, the Dean Drive, and the Hieronymus machine. He
was a nutbar in his later years, but still a pretty good editor.

It was intended to mean
a physical process that could occasionally be mistaken for the magic of myth
and legend but could be studied objectively. They have very different
connotations and spiritual implications.

More to the point, it was intended to give the impression that such a
physical process was being discussed. However, no serious physical
mechanism was ever proposed (beyond unspecified "brain mutations" with
no mechanism attached to _them_).

You speak as if it's necessary to have actual science behind one's appeal to its authority.

"Ever" is overstated, IIRC Wheeler conjectured at length that microtubules within brain cells were
at the correct scale to yoke conscious states' biological processes to quantum events.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

Lee Berman — 22 Dec 2011, 20:20 · follows Jeff Wilson

But 10,000 years hence won't some people snicker at the ridiculous belief in "science" we have; laughing at such folly as neurology and sub-atomic physics as we snicker at thunderbolts from Zeus and witches riding brooms?

Gerry Quinn: Some people do even now. However, I don't think our understanding of such matters is likely to be reversed, though it may be deepened.

Well of course you would think that. Your belief in science is akin to the ancient Greek's belief in Zeus or a Medieval villager's belief in witchcraft. If asked, they would predict a future in 2011 where knowledge and belief in Zeus or witches would remain intact though perhaps deepened.

I hope you won't try the argument that Zeus' thunderbolts and witches crop hexings was fake while sub-atomic physics and neurosurgery are real. Ancient experts predicted thunderstorms and crop failures and they were usually right and came to be believed. You have never seen an electron and you have not done original research on the subject. Electricity seems to work so you believe the experts who tell you how it works. Same for brain surgery when you submit to the knife. Belief in science and technology is fully a matter of faith as much as mythology/religion.

When I say there is no magic in the Sun books, I'm not talking about fakery, just saying that it is the kind of universe that runs on natural rather than magical laws.

I tend to agree. But don't discount fakery. Wolfe doesn't, as Jerry's quote illustrates. In our discussion on inhumans you expressed the belief that they really do achieve escape velocity using muscles and survive for long periods in the void because Wolfe doesn't worry much about natural laws in his work.

Jeff Wilson — 22 Dec 2011, 20:25 · in reply to António Pedro Marques

On 12/22/2011 6:19 AM, António Pedro Marques wrote:
Jeff Wilson wrote (22-12-2011 04:22):

On 12/21/2011 10:58 AM, Dan'l Danehy-Oakes wrote:

"psi" is a fancy word for magic.

Outside the context of speculative fiction, perhaps. It was intended to mean a physical process that could occasionally be mistaken for the magic of myth and legend but could be studied objectively. They have very different connotations and spiritual implications.

But one can't just decree something to be 'psi'. There has to be a shred of plausibility.

Severian perceives that he is being zapped by the twin hemispheres of Decuman's brain in a way that illuminates him but also imposes a particular depressive emotion that saps his will to continue in the contest. This is apparently direct brain to brain coercion.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

David Stockhoff — 22 Dec 2011, 20:27 · in reply to Dan'l Danehy-Oakes

On 12/22/2011 1:14 PM, Dan'l Danehy-Oakes wrote:
Gerry Quinn wrote:

I thought the thinking was that animals do have souls, but not immortal ones.

Depends on who's doing the thinking.

Aquinas, for example, somewhat-following Aristotle, believed that souls came in three varieties:

The _vegetable_ soul, which gives life and the power of growth and reproduction.

The _animal_ soul, which gives the power of movement.

And the _rational_ soul, which gives the power of, well, reason.

In Aquinas' schema, only humans have all three souls -- angels do not have the first two but are pure rational soul.

Now THAT'S food for thought, in the context of Long Sun.

David Stockhoff — 22 Dec 2011, 20:38 · in reply to Antonin Scriabin

On 12/22/2011 2:04 PM, Antonin Scriabin wrote:

Sorry to chime in kind of late, but I just wanted to say that, like Gerry, I am content to leave notions of the soul (and many other things) as mostly mysterious in Wolfe's books. Wolfe tends to avoid writing "hard science fiction" or straight allegory and never (at least, as far as the books I have read go) offers explicit scientific or spiritual explanation for some things. The explanation of deep space travel that Father Inire gives is as much mystical as scientific, for example; whatever the "truth" is, it is so well hidden behind the motives and understanding of Inire, Severian, and the other speakers / narrators that it probably can't be uncovered. Personally, I get more out of the story /not/ knowing or pursuing the ins and outs of the scientific or theological explanations that might hold for a given phenomenon. There is something distinctly otherworldly about the /New Sun /books that makes trying to force the events therein into the confines of 20th century physics or Catholic theology inconsequential to my enjoyment of them.

I totally agree with this sentiment, but I see physics and theology as inspirations and jumping off points for Wolfe, not as restrictions. I do get the sense that they are wielded as such by some here. But I don't think talking about them is the same as enforcing them.

David Stockhoff — 22 Dec 2011, 20:44 · in reply to Jerry Friedman

On 12/22/2011 2:19 PM, Jerry Friedman wrote:

From: Dan'I Danehy-Oakes danldo at gmail.com

Lee Berman wrote:

Thus I think the debates about the "real science" behind alzabo and inhum memory/personality sharing are moot. What we are supposed to pick up on is the cannibalism/eucharistic aspects; the magic/spirituality of it.

Bingbingbingbing! That is _exactly_ what I am getting at. Thank you.

...

Certainly we're supposed to pick up those aspects. This would all be fine, if it weren't for Wolfe's article in /Thrust/ as quoted in LU:

"There are /no/ fantasy elements involved -- no "magic" in the fantasy sense. There is time-travel, but

that belongs to sf, not fantasy. There are hypnotism, sleight of hand, and a few other things, but those belong to the world of reality, if not the world of science." (/Thrust/ no. 19, winter-spring 1983)

So my problem isn't with the books but with this quotation. Of course I could just ignore it.

Granting that that comment was made in a particular context, even so I think it leaves room for everything discussed above. After all, belief in ritual magic is quite real; eating brains for magical purposes actually happened. That phrase "a few other things" could hide anything.

David Stockhoff — 22 Dec 2011, 20:46 · in reply to Jeff Wilson

On 12/22/2011 2:57 PM, Jeff Wilson wrote:

On 12/21/2011 3:30 PM, Dan'I Danehy-Oakes wrote:

Jerry Friedman wrote:

To me, goety and theurgy are only one branch of magic.
Another is the kind that works by sympathy and contagion,
such as sticking pins in dolls or keeping one's accidental
cut from being infected by cleaning the knife that caused it.....

Exactly so. The big distinction is between magia, the application of natural laws like sympathy and contagion; and goetia, dealings with supernatural powers. Some years ago I wrote a mini essay on this for a friend who was defending the Harry Potter books for her church:
http://www.molthagen.de/kerstin/buecher/hp_anleit_ddo.html

As you note, this very broad definition of magia envelops science and technology and medicine and 2-3 other chunks of the Dewey Decimal System within "magic." In this sense, almost every cause and effect in the BotNS is magical, because it is also material.

Yes!

Lee Berman — 22 Dec 2011, 21:01 · follows David Stockhoff

Jeff Wilson: Severian perceives that he is being zapped by the twin hemispheres of Decuman's brain in a way that illuminates him but also imposes a particular depressive emotion that saps his will to continue in the contest. This is apparently direct brain to brain coercion.

But IIRC, Decuman is humming and chanting the whole time. I think this might be the "hypnotism" Wolfe mentions in Jerry's quote. The "twin hemispheres" brain might be just Severian's self-experiential description of the event, much like the initially real-seeming hallucinations he gets later from eating mushrooms. (makes sense for a torturer to picture another's mind in anatomically correct brain fashion; I'll guess Little Severian didn't picture it the same way, though they share the emotion of fear)

Dan'I Danehy-Oakes — 22 Dec 2011, 21:08 · in reply to David Stockhoff

David Stockhoff wrote:

On 12/22/2011 2:57 PM, Jeff Wilson wrote:

As you note, this very broad definition of magia envelops science and technology and medicine and 2-3 other chunks of the Dewey Decimal System within "magic." In this sense, almost every cause and effect in the BotNS is magical, because it is also material.

Yes!

I second this "Yes!" -- and so, I add would Aleister Crowley.

Dan'I Danehy-Oakes

Gerry Quinn — 22 Dec 2011, 21:30 · in reply to Lee Berman

From: Lee Berman

But 10,000 years hence won't some people snicker at the ridiculous belief in "science" we have; laughing at such folly as neurology and sub-atomic physics as we snicker at thunderbolts from Zeus and witches riding brooms?

Gerry Quinn: Some people do even now. However, I don't think our understanding of such matters is likely to be reversed, though it may be deepened.

Well of course you would think that. Your belief in science is akin to the ancient Greek's belief in Zeus or a Medieval villager's belief in witchcraft. If asked, they would predict a future in 2011 where knowledge and belief in Zeus or witches would remain intact though perhaps deepened.

I thought this kind of relativism was one of the concepts that have been superseded! Are you trying to resuscitate the Science Wars?

There's a difference between science and the study of Zeus and witches (and the ideas of the ancients regarding these may well retain validity in their own sphere, but not the sphere of science).

I hope you won't try the argument that Zeus' thunderbolts and witches crop hexings was fake while sub-atomic physics and neurosurgery are real. Ancient experts predicted thunderstorms and crop failures and they were usually right and came to be believed. You have never seen an electron and you have not done original research on the subject. Electricity seems to work so you believe the experts who tell you how it works. Same for brain surgery when you submit to the knife. Belief in science and technology is fully a matter of faith as much as mythology/religion.

Sorry, but that is incorrect. The epistemology by which we learn the truths of science is different and more robust than the epistemology which led to the type of explanations you are talking about.

Now for purposes of discussing Gene Wolfe's books, the balance tilts a little more in your direction compared to the study of the natural world. Nevertheless, the books describe a universe that, like our own, is under the rule of natural and permanent laws. The speed of light will be about the same in a million years, even if we can measure it more accurately. It was the same when it was first usefully measured in the seventeenth century, though Romer was out by about 20%.

When I say there is no magic in the Sun books, I'm not talking about fakery, just saying that it is the kind of universe that runs on natural rather than magical laws.

I tend to agree. But don't discount fakery. Wolfe doesn't, as Jerry's quote illustrates. In our discussion on inhumani you expressed the belief that they really do achieve escape velocity using muscles and survive for long periods in the void because Wolfe doesn't worry much about natural laws in his work.

He doesn't worry too much about accurate science. But natural laws are very important to him. It's the sort of world he's creating that matters, not the exact laws that are applicable.

- Gerry Quinn

António Pedro Marques — 22 Dec 2011, 21:50 · in reply to Gerry Quinn

Gerry Quinn wrote (22-12-2011 21:30):

There's a difference between science and the study of Zeus and witches
(...)

In abstract and technical terms, yes, but not really in the people who combine these terms with many other things in order to do real life work. Motivations, approaches, imagination, prejudice, outlooks, may have been tentatively epistemised, but not commoditised.

David Duffy — 22 Dec 2011, 22:56 · in reply to Dan'I Danehy-Oakes

On Thu, 22 Dec 2011, Dan'I Danehy-Oakes wrote:

Gerry Quinn wrote:

I don't think Wolfe talks much about souls as such. I'm not sure we can flatly state that he is postulating that they are an entirely separate thing from the mind and its connection to the universe.

...but I think that talking about Lupine fiction, and _especially_ the Briah cycle, without seeing souls everywhere, is akin to Dr. Crane's explanation of Silk's enlightenment as a cerebral accident.

It's pretty clear (to me at least) that Wolfe is very interested in souls, and how they can be consistent with modern neuroscience and "strong AI". That is, answering questions like

If there is an immortal soul that underlies our personality and cognition, what happens to it when a brain injury causes a permanent change in personality or thinking? What qualities persist despite drastic changes in the personality and thinking?

In split brain experiments, with competing sources of intentionality, are there one or two souls?

If there are multiple souls present in the same individual (eg demonic possession, multiple personality disorder), how do they interact? Can they merge?

If sufficiently advanced technology can replicate minds, are there associated souls, and are they copies of the original?

If sufficiently advanced technology can design, control, engineer minds, what happens to the soul?

Wolfe has played with various answers to all these questions in different stories. Broadly, his type of soul continues to make choices in those domains where it is free to do so, but those domains might be extremely narrowed eg Piaton [who is possessed, in every sense], Sand [who cannot choose to reject orders, but can think freely about other matters].

Cheers, David Duffy.

David Stockhoff — 23 Dec 2011, 00:27 · in reply to David Duffy

On 12/22/2011 5:56 PM, David Duffy wrote:

On Thu, 22 Dec 2011, Dan'I Danehy-Oakes wrote:

Gerry Quinn wrote:

I don't think Wolfe talks much about souls as such. I'm not sure we can flatly state that he is postulating that they are an entirely separate thing from the mind and its connection to the universe.

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If there are multiple souls present in the same individual (eg demonic possession, multiple personality disorder), how do they interact? Can they merge?

If sufficiently advanced technology can replicate minds, are there associated souls, and are they copies of the original?

If sufficiently advanced technology can design, control, engineer minds, what happens to the soul?

Wolfe has played with various answers to all these questions in different stories. Broadly, his type of soul continues to make choices in those domains where it is free to do so, but those domains might be extremely narrowed eg Piaton [who is possessed, in every sense], Sand [who cannot choose to reject orders, but can think freely about other matters].

Also the replication of bodies via cloning.

Jeff Wilson — 23 Dec 2011, 04:42 · in reply to Lee Berman

On 12/22/2011 3:01 PM, Lee Berman wrote:

Jeff Wilson: Severian perceives that he is being zapped by the twin hemispheres of Decuman's brain in a way that illuminates him but also imposes a particular depressive emotion that saps his will to continue in the contest. This is apparently direct brain to brain coercion.

But IIRC, Decuman is humming and chanting the whole time. I think this might be the "hypnotism" Wolfe mentions in Jerry's quote.

Doubtless it serves several purposes, like keeping the subject's attention on the coercer, coordinating different parts of the coercer's brain, keeping the other sorcerers informed of his progress, etc.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

Jeff Wilson — 23 Dec 2011, 05:42 · in reply to Lee Berman

On 12/22/2011 2:20 PM, Lee Berman wrote:

I hope you won't try the argument that Zeus' thunderbolts and witches crop hexings was fake while sub-atomic physics and neurosurgery are real. Ancient experts predicted thunderstorms and crop failures and they were usually right and came to be believed. You have never seen an electron and you have not done original research on the subject. Electricity seems to work so you believe the experts who tell you how it works. Same for brain surgery when you submit to the knife. Belief in science and technology is fully a matter of faith as much as mythology/religion.

You're overlooking reproducible results. Preindustrial crop hexings are not reproducible by witches, while electrons are tamed well enough that we can reproduce Zeus-strength lightning as necessary and prevent it from striking houses when it occurs naturally.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

António Pedro Marques — 23 Dec 2011, 11:15 · in reply to Jeff Wilson

Jeff Wilson wrote (23-12-2011 05:42):

On 12/22/2011 2:20 PM, Lee Berman wrote:

I hope you won't try the argument that Zeus' thunderbolts and witches crop hexings was fake while sub-atomic physics and neurosurgery are real. Ancient experts predicted thunderstorms and crop failures and they were usually right and came to be believed. You have never seen an electron and you have not done original research on the subject.

Electricity seems to work so you believe the experts who tell you how it works. Same for brain surgery when you submit to the knife. Belief in science and technology is fully a matter of faith as much as mythology/religion.

You're overlooking reproducible results. Preindustrial crop hexings are not reproducible by witches, while electrons are tamed well enough that we can reproduce Zeus-strength lightning as necessary and prevent it from striking houses when it occurs naturally.

It may be so, but we could do much of that with classical science. 'Our Theory of Gravitation is as good as perfect', ironical or not, was written in the first half of the 19th century. 'We' got to the Moon without the fancy computers and mobile communications of today. Current science may be impressive in comparison to that of just a few decades ago, but it doesn't follow that it has a technological import of the same magnitude. At the end of the day, it works better than praying to Zeus, but so does Classical Physics. For the common man, it's a matter of having access to services. This is a matter in which I find myself in complete agreement with Lee - '[y]ou have never seen an electron and you have not done original research on the subject', '[e]lectricity seems to work so you believe the experts who tell you how it works' express very well my own view on the subject. The only thing missing - unless it was there but you haven't quoted it - is ... after a 2 hour break for a meeting, I don't remember anymore what it was that I thought was worth mentioning here, only that it was worth it.

Gerry Quinn — 23 Dec 2011, 13:44 · in reply to António Pedro Marques

From: António Pedro Marques

Jeff Wilson wrote (23-12-2011 05:42):

You're overlooking reproducible results. Preindustrial crop hexings are not reproducible by witches, while electrons are tamed well enough that we can reproduce Zeus-strength lightning as necessary and prevent it from striking houses when it occurs naturally.

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Physiscs.

Yes, but classical physics *is* part of modern science. Our understanding is deeper now, but we still use Newtonian gravity over 99% of the time because the equations are simpler and it's more than accurate enough for most purposes. The same applies to Newtonian dynamics; 99% of the time you don't have to care about relativistic mass increase with velocity. A million years from now, Newtonian gravity will still be applicable if there are humans on Earth. [Newton himself knew, by the way, that his theory wasn't quite there — he accepted instantaneous action at a distance most reluctantly because he could find no way around it. That's been fixed now, though general relativity is still under persistent challenge (even special relativity is under an unusual degree of challenge at the moment from these neutrino experiments). If GR is superseded, it will still be useful in many domains though, because it's a safe bet that the equations of the more accurate theory will be even harder.]

Zeus and witches are an entirely different kettle of fish.

For the common man, it's a matter of having access to services.

This is a matter in which I find myself in complete agreement with Lee -

'[y]ou have never seen an electron and you have not done original research on the subject', '[e]lectricity seems to work so you believe the experts who tell you how it works' express very well my own view on the subject.

The experts don't just tell me how it works, they produce extensive and consistent mathematical models covering a wide range of domains and invite me to pick holes in them, or carry out any experiment that might invalidate them.

Lee is spouting a tired old argument which uses cultural relativism to assail all notions of objective truth.

- Gerry Quinn

Lee Berman — 23 Dec 2011, 14:10 · follows Gerry Quinn

Gerry Quinn: Sorry, but that is incorrect. The epistemology by which we learn the truths of science is different and more robust than the epistemology which led to the type of explanations you are talking about.

So you say. An understandable sentiment of faith from a believer of the religion of science. Likewise believers in other modern religions often think their own current belief in God is light years more advanced than the religion of the ancient Greeks. Gene Wolfe explicitly disagrees.

I am only suggesting that in 3-4000 years, humans may be doing something to understand the universe which is so advanced it lumps our modern science and ancient religion into the same category. (of course even that new tool will be subject to the limitations of the human and human-created minds).

He (Gene Wolfe) doesn't worry too much about accurate science. But natural laws are very important to him.

This sounds like a contradiction to me. Anyway, the example of the inhumi really achieving escape velocity by using flaps of skin and flying unprotected through space seems to violate numerous natural laws of physics and biology. Until we have seen them do it, Inhumi lying is the parsimonious explanation. I think Wolfe believes in lying a lot more than he believes in flying reptiles in the void.

There's a difference between science and the study of Zeus and witches

Antonio Pedro Marques: In abstract and technical terms, yes, but not really in the people who combine these terms with many other things in order to do real life work.

Jeff Wilson: You're overlooking reproducible results. Preindustrial crop hexings are not reproducible by witches, while electrons are tamed well enough that we can reproduce Zeus-strength lightning as necessary and prevent it from striking houses when it occurs naturally.

I don't overlook or discount reproducible results. They are a human thing to want. But ancient religions were based on it also. Do something to anger Zeus and within a few months you'll get a thunderstorm. You might have to wait a few years after angering a witch but you'll eventually get your crop failure also.

Science currently rules much of the faith and beliefs of humanity because the reproducible results are faster and more accurate than superstition. But they are not perfect. Lightning still strikes unpredictably. Disease and earthquakes and famine also. When a more perfect system of predicting and controlling these events is invented, science will be dropped like Zeus worship was.

In my (and perhaps Antonio's) view, math and science are human tools created by humans and subject to all the error and fallibility of the human brain. I know some people, perhaps some here, feel that math and science transcend humanity and are above it, creating a window to a higher, universal truth.

I think this is more evidence that science and religion are very much the same. Priests and scientists both feel they are in touch with a superhuman truth, which is sometimes worn as mantle of superiority above those not privy to knowledge found in holy or scientific scriptures. But at the end of the day, we are all, even scientists and priests, just a bunch of guys trying to get some food, stay comfortable, and in our spare time, make a little sense of the world.

David Stockhoff — 23 Dec 2011, 14:22 · in reply to Lee Berman

On 12/23/2011 9:10 AM, Lee Berman wrote:

Jeff Wilson: You're overlooking reproducible results. Preindustrial crop hexings are not reproducible by witches, while electrons are tamed well enough that we can reproduce Zeus-strength lightning as necessary and prevent it from striking houses when it occurs naturally.

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Nothing is more reproducible than witchcraft or God. Look at all the damage homosexuals have done to the tornado/hurricane belt by angering him.

In the real world, I don't find myself making this point often. But in fiction, the necessary suspension of disbelief does a lot of work to put science and "magic" on an equal footing. If the proper formulas are followed, as in my example regarding hyperdrives, then the appropriate authority is invoked and the narrative may proceed.

Dave Lebling — 23 Dec 2011, 14:52 · in reply to Gerry Quinn

<http://blogearth.wordpress.com/2008/02/27/electron-filmed-for-the-first-time/>

I have seen a photo of an electron. The link above is one of many that will enable you to see one for yourself.

-- Dave Lebling

On 12/23/2011 8:44 AM, Gerry Quinn wrote:

From: Ant?nio Pedro Marques <mailto:antonio at gmail.com>

Jeff Wilson wrote (23-12-2011 05:42):

You're overlooking reproducible results. Preindustrial crop hexings are not reproducible by witches, while electrons are tamed well enough that we can reproduce Zeus-strength lightning as necessary and prevent it from striking houses when it occurs naturally.

It may be so, but we could do much of that with classical science. 'Our Theory of Gravitation is as good as perfect', ironical or not, was written in the first half of the 19th century. 'We' got to the Moon without the fancy computers and mobile communications of today. Current science may be impresssive in comparison to that of just a few decades ago, but it doesn't follow that it has a technological import of the same magnitude. At the end of the day, it works better than praying to Zeus, but so does Classical Physiscs.

Yes, but classical physics *is* part of modern science. Our understanding is deeper now, but we still use Newtonian gravity over 99% of the time because the equations are simpler and it's more than accurate enough for most purposes. The same applies to Newtonian dynamics; 99% of the time you don't have to care about relativistic mass increase with velocity. A million years from now, Newtonian gravity will still be applicable if there are humans on Earth. [Newton himself knew, by the way, that his theory wasn't quite there -- he accepted instantaneous action at a distance most reluctantly because he could find no way around it. That's been fixed now, though general relativity is still under persistent challenge (even special relativity is under an unusual degree of challenge at the moment from these neutrino experiments). If GR is superseded, it will still be useful in many domains though, because it's a safe bet that the equations of the more accurate theory will be even harder.] Zeus and witches are an entirely different kettle of fish.

For the common man, it's a matter of having access to services. This is a matter in which I find myself in complete agreement with Lee -

'[y]ou have never seen an electron and you have not done original research

on the subject', '[e]lectricity seems to work so you believe the experts who tell you how it works' express very well my own view on the subject.

The experts don't just tell me how it works, they produce extensive and consistent mathematical models covering a wide range of domains and invite me to pick holes in them, or carry out any experiment that might invalidate them.

Lee is spouting a tired old argument which uses cultural relativism to assail all notions of objective truth.

- Gerry Quinn

David Stockhoff — 23 Dec 2011, 14:56 · in reply to Dave Lebling

On 12/23/2011 9:52 AM, Dave Lebling wrote:

<http://blogearth.wordpress.com/2008/02/27/electron-filmed-for-the-first-time/>

I have seen a photo of an electron. The link above is one of many that will enable you to see one for yourself.

-- Dave Lebling

I'm not usually playing advocate for this particular devil, but (a) videos can be faked and (b) we have all seen Jesus and Mary on a potato chip. Get back, Satan!

The funny thing here is that, to most people, SF fans are **more** gullible than the common run of humanity, not **less.** Go figure.

António Pedro Marques — 23 Dec 2011, 15:16 · in reply to Gerry Quinn

Gerry Quinn wrote (23-12-2011 13:44):

From: Ant?nio Pedro Marques <mailto:antonio at gmail.com>

Jeff Wilson wrote (23-12-2011 05:42):

> > You're overlooking reproducible results. Preindustrial crop hexings are
> > not reproducible by witches, while electrons are tamed well enough that
> > we can reproduce Zeus-strength lightning as necessary and prevent it from
> > striking houses when it occurs naturally.

> It may be so, but we could do much of that with classical science. 'Our
> Theory of Gravitation is as good as perfect', ironical or not, was written
> in the first half of the 19th century. 'We' got to the Moon without the
> fancy computers and mobile communications of today. Current science may be
> impresssive in comparison to that of just a few decades ago, but it doesn't
> follow that it has a technological import of the same magnitude. At the end
> of the day, it works better than praying to Zeus, but so does Classical
> Physics.

Yes, but classical physics **is** part of modern science. Our understanding is deeper now, but we still use Newtonian gravity over 99% of the time because the equations are simpler and it's more than accurate enough for most purposes (...)

What we use doesn't matter, because this discussion is about how things really are. Classical Physics is very at odds with Current Science in respect to how the Universe works. This discussion is about giving credence to explanations of the Universe, and Jeff pointed out the usefulness of a given explanation is the criterion for credibility. The criterion works psychologically, but not scientifically, so it actually supports rather than negates Lee's

original assertion that people function by belief.

> For the common man, it's a matter of having access to services.
> This is a matter in which I find myself in complete agreement with Lee -
> '[y]ou have never seen an electron and you have not done original research
> on the subject', '[e]lectricity seems to work so you believe the experts who
> tell you how it works' express very well my own view on the subject.
The experts don't just tell me how it works, they produce extensive and
consistent mathematical models covering a wide range of domains and invite
me to pick holes in them, or carry out any experiment that might invalidate
them.

And since you don't, you believe they are correct. Unless you do, and then you are not
merely a believer in that domain.

Lee is spouting a tired old argument which uses cultural relativism to
assail all notions of objective truth.

Such an argument, tired and old or not, may exist somewhere, but that's not what's being
discussed here.

António Pedro Marques — 23 Dec 2011, 15:24 · in reply to Dave Lebling

Dave Lebling wrote (23-12-2011 14:52):

<http://blogearth.wordpress.com/2008/02/27/electron-filmed-for-the-first-time/>

I have seen a photo of an electron. The link above is one of many that will
enable you to see one for yourself.

No, you haven't seen a photo of an electron, nor will the link above allow you to.

Lee Berman — 23 Dec 2011, 15:32 · follows António Pedro Marques

On 12/23/2011 9:52 AM, Dave Lebling wrote:

<http://blogearth.wordpress.com/2008/02/27/electron-filmed-for-the-first-time/>

I have seen a photo of an electron. The link above is one of many that
will enable you to see one for yourself.

David Stockhoff: I'm not usually playing advocate for this particular devil, but (a)
videos can be faked and (b) we have all seen Jesus and Mary on a potato
chip. Get back, Satan!

Heh, yep. Not to detract from the coolness of Dave's link! It is on a par with that photo spelling
of "IBM" with atoms.

But I think it is an important part of retaining our essential humanity to remember that Dave's
link is not "seeing an electron" but rather seeing a photo of an electron. A photo which, even
with the best intentions of veracity has been enhanced so that human eyes may perceive the
image in a way which makes sense to our brains.

Remembering that we cannot see an electron is, to me, a way of retaining a sense of our
essential humanity. Tools such as nanotechnology, math and science do not show us "reality".
What they do is bend and distort reality, whatever that may be, so that we may perceive it by
our limited human facilities.

The funny thing here is that, to most people, SF fans are **more**
gullible than the common run of humanity, not **less.** Go figure.

That is funny. I had a short stint in the world of professional sales and some things I noticed about the top salesmen are: 1. They are very nice, good people. 2. They are liars, often without being conscious of it in the moment. 3. They are highly susceptible to the lies of other salesmen. So many times those fat commission checks were blown on the dumbest scams. Later met with a shrug of the shoulders and "hey, that's business".

Academicians (in science and other fields) are stereotypically proud of their ability to reject the illusions of religion which entrance the populace, but are often susceptible to the pitfalls of their own professional beliefs. Not a surprise that academicians often divide into rival camps which operate much like religious sects.

David Stockhoff — 23 Dec 2011, 15:37 · in reply to Lee Berman

On 12/23/2011 10:32 AM, Lee Berman wrote:

What they do is bend and distort reality, whatever that may be, so that we may perceive it by our limited human facilities.

Ooh, that almost sounds like it could be applied to theology!

Dave Lebling — 23 Dec 2011, 15:55 · in reply to António Pedro Marques

I'm curious what you think I (and you, if you followed the link) have seen, then. Stockhoff's response, puerile as it is, is at least comprehensible.

Dave Lebling

On 12/23/2011 10:24 AM, António Pedro Marques wrote:

Dave Lebling wrote (23-12-2011 14:52):

<http://blogearth.wordpress.com/2008/02/27/electron-filmed-for-the-first-time/>

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No, you haven't seen a photo of an electron, nor will the link above allow you to.

David Stockhoff — 23 Dec 2011, 16:12 · in reply to Dave Lebling

Ah, the online slinging of insults without the slightest attempt at either comprehension or explanation. It must be Christmas!

On 12/23/2011 10:55 AM, Dave Lebling wrote:

I'm curious what you think I (and you, if you followed the link) have seen, then. Stockhoff's response, puerile as it is, is at least comprehensible.

Dave Lebling

On 12/23/2011 10:24 AM, António Pedro Marques wrote:

Dave Lebling wrote (23-12-2011 14:52):

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Dave Lebling — 23 Dec 2011, 16:19 · in reply to Lee Berman

Actually it is much more impressive. The "IBM" photo created by using a scanning tunneling electron microscope to move xenon atoms around on a metal substrate is about 30 years old. A xenon atom is on the order of 100 picometres (10^{-12} metres) in size (I don't know the number exactly). An electron is at least 1000 and possibly even 1,000,000 times smaller. In fact, there is really no reason to believe electrons have any sort of small hard point-mass type existence at all. If they do it is smaller than 10^{-18} metres.

So, imaging an electron is a significantly harder thing than imaging an array of xenon atoms.

As to the second point, Plato's Cave is an old and well-worn thing. Everything we see is "enhanced" so that the human brain can construct an image. This happens in the eyes first, and continues in the visual cortex. Does anyone on the list doubt the reality of telescopic images because they have been "enhanced"?

To get back to the topic of Wolfe, he is clearly an engineer (and "scientist" in the lay sense) who also happens to believe in God (though in a heretical way, or so he says). Some on the list seem to be arguing that science is useless or on a par with religious belief in terms of provability. I doubt Wolfe would agree. Science is provable, religion is all about faith: believing the unprovable. In tBotLS, Silk repeatedly wrestles with the idea that his enlightenment might have been a brain aneurysm rather than a true revelation. He ultimately decides that it doesn't matter.

Dave Lebling

On 12/23/2011 10:32 AM, Lee Berman wrote:

Heh, yep. Not to detract from the coolness of Dave's link! It is on a par with that photo spelling of "IBM" with atoms.

But I think it is an important part of retaining our essential humanity to remember that Dave's link is not "seeing an electron" but rather seeing a photo of an electron. A photo which, even with the best intentions of veracity has been enhanced so that human eyes may perceive the image in a way which makes sense to our brains.

António Pedro Marques — 23 Dec 2011, 16:26 · in reply to Dave Lebling

Dave Lebling wrote (23-12-2011 15:55):

I'm curious what you think I (and you, if you followed the link) have seen, then. Stockhoff's response, puerile as it is, is at least comprehensible.

My reply is perfectly comprehensible, even if it may not be explanatory. What you and everyone else have seen who followed the link is a 'video' of concentric bluish circles. Through belief in Science and its round shape, you accepted the description of it as a photo of an electron. However, it is not one. If it really is true, it's a rendering of the diffraction caused on a stream of

photons by the successive electron ionisation events. But that is not a photo as is commonly understood, which involves reflection, nor of 'an electron', nor is it a photo in a sense that would constitute autonomous evidence for the reality of electrons, though it may be corroborating of the model. Images of electrons, as the term 'image' is understood, are not possible, if they were there'd be something seriously wrong with the Standard Model. Electrons aren't little rubber balls.

On 12/23/2011 10:24 AM, António Pedro Marques wrote:

Dave Lebling wrote (23-12-2011 14:52):

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António Pedro Marques — 23 Dec 2011, 16:28 · in reply to Dave Lebling

Dave Lebling wrote (23-12-2011 16:19):

Some on the list seem to be arguing that science is useless or on a par with religious belief in terms of provability.

Some of the Lee's recent statements I've seen look a bit like that, but they were made in a context.

David Stockhoff — 23 Dec 2011, 16:35 · in reply to Dave Lebling

On 12/23/2011 11:19 AM, Dave Lebling wrote:

Some on the list seem to be arguing that science is useless or on a par with religious belief in terms of provability.

I'm not sure anyone is actually arguing this, nor that the topic under discussion actually extends beyond the realm of fiction to the real world. I can follow the work of scientists, as I do, and still be a believer in God, or not, and I can trust the science for the wrong reasons as well as for the right ones. What is interesting is that the standards of proof in science can change---as indeed they should and must. What was proven 2 decades ago may not be proven today. So some degree of faith is needed to accept proof, especially to accept it without any doubt.

As for the distinction between scientific proof and religious faith, obviously I see it much the way you do and I don't see the two domains as in direct conflict. But I have spoken to supposedly religious people (Prot fundies) who have told me the existence (and superiority to all others) of God was proven. They were confused, but clearly "faith in the unprovable" and "proof" can be *functionally* interchangeable in the human mind, however contradictory they plainly are. If you can't tolerate doubt, either source of authority will serve. That's what Lee's on about.

António Pedro Marques — 23 Dec 2011, 16:37 · in reply to Dave Lebling

Dave Lebling wrote (23-12-2011 16:19):

As to the second point, Plato's Cave is an old and well-worn thing. Everything we see is "enhanced" so that the human brain can construct an image. This happens in the eyes first, and continues in the visual cortex. Does anyone on the list doubt the reality of telescopic images

because they have been "enhanced"?

It all depends on degree. Like interpretation of Scripture, beyond a point, enhancement is just superimposing your paradigm on the data.

Lee's 'photo' idiom is quite clear - something which is as close to immediately understandable raw data as possible. In the case of subatomic particules, nothing close to raw data is immediately understandable, since they are more than order of magnitude away from us.

António Pedro Marques — 23 Dec 2011, 16:39 · in reply to David Stockhoff

David Stockhoff wrote (23-12-2011 16:35):

If you can't tolerate doubt, either source of authority will serve.
That's what Lee's on about.

And authority is what so many people are looking for. Those aren't usually the people who contribute.

Sergei SOLOVIEV — 23 Dec 2011, 17:09 · in reply to Dave Lebling

You should not trust so much journalists, even scientific. Once I've seen a picture of a sort of orange solar disk and a smaller black disk crossing it - with the title "an exoplanet photographed. This was rubbish, because no telescope is powerful enough to make a star (except our Sun) visible as a disk, not to speak about an exoplanet. It was just a reconstruction (star is dimmer when the planet passes before it). And when they write "a photo of an electron" - what is it? The trace of some process on photographic film, usually with many intermediate steps and a lot of mathematical formulas and nuclear physics to convince you that it is related to an electron. Like they photograph flashes of light in big tank of pure water underground and they say that they photograph neutrinos (and you have to believe).

regards

Sergei Soloviev

Dave Lebling wrote:
<http://blogearth.wordpress.com/2008/02/27/electron-filmed-for-the-first-time/>

I have seen a photo of an electron. The link above is one of many that will enable you to see one for yourself.

-- Dave Lebling

On 12/23/2011 8:44 AM, Gerry Quinn wrote:

From: António Pedro Marques <mailto:antonio at gmail.com>
Jeff Wilson wrote (23-12-2011 05:42):

You're overlooking reproducible results. Preindustrial crop hexings are not reproducible by witches, while electrons are tamed well enough that we can reproduce Zeus-strength lightning as necessary and prevent it from striking houses when it occurs naturally.

It may be so, but we could do much of that with classical science.

'Our
Theory of Gravitation is as good as perfect', ironical or not, was
written
in the first half of the 19th century. 'We' got to the Moon without
the
fancy computers and mobile communications of today. Current science
may be
impressive in comparison to that of just a few decades ago, but it
doesn't
follow that it has a technological import of the same magnitude. At
the end
of the day, it works better than praying to Zeus, but so does
Classical
Physics.

Yes, but classical physics *is* part of modern science. Our
understanding is deeper now, but we still use Newtonian gravity over
99% of the time because the equations are simpler and it's more than
accurate enough for most purposes. The same applies to Newtonian
dynamics; 99% of the time you don't have to care about relativistic
mass increase with velocity. A million years from now, Newtonian
gravity will still be applicable if there are humans on Earth.

[Newton himself knew, by the way, that his theory wasn't quite there
? he accepted instantaneous action at a distance most reluctantly
because he could find no way around it. That's been fixed now, though
general relativity is still under persistent challenge (even special
relativity is under an unusual degree of challenge at the moment from
these neutrino experiments). If GR is superseded, it will still be
useful in many domains though, because it's a safe bet that the
equations of the more accurate theory will be even harder.]
Zeus and witches are an entirely different kettle of fish.

For the common man, it's a matter of having access to services.
This is a matter in which I find myself in complete agreement with
Lee -

'[y]ou have never seen an electron and you have not done original
research
on the subject', '[e]lectricity seems to work so you believe the
experts who
tell you how it works' express very well my own view on the subject.

The experts don't just tell me how it works, they produce extensive
and consistent mathematical models covering a wide range of domains
and invite me to pick holes in them, or carry out any experiment that
might invalidate them.

Lee is spouting a tired old argument which uses cultural relativism
to assail all notions of objective truth.

- Gerry Quinn

Sergei SOLOVIEV — 23 Dec 2011, 17:17 · in reply to David Stockhoff

Merry Christmas!

(About New Sun - recently I had on my car radio a "spiritual" - "Jesus shine on me" ...)

Sergei Soloviev

David Stockhoff wrote:

Ah, the online slinging of insults without the slightest attempt at either comprehension or explanation. It must be Christmas!

On 12/23/2011 10:55 AM, Dave Lebling wrote:

I'm curious what you think I (and you, if you followed the link) have seen, then. Stockhoff's response, puerile as it is, is at least comprehensible.

Dave Lebling

On 12/23/2011 10:24 AM, António Pedro Marques wrote:

Dave Lebling wrote (23-12-2011 14:52):

<http://blogearth.wordpress.com/2008/02/27/electron-filmed-for-the-first-time/>

I have seen a photo of an electron. The link above is one of many that will enable you to see one for yourself.

No, you haven't seen a photo of an electron, nor will the link above allow you to.

António Pedro Marques — 23 Dec 2011, 17:27 · in reply to António Pedro Marques

António Pedro Marques wrote (23-12-2011 16:39):

David Stockhoff wrote (23-12-2011 16:35):

If you can't tolerate doubt, either source of authority will serve. That's what Lee's on about.

And authority is what so many people are looking for. Those aren't usually the people who contribute.

...contribute to Humankind, not the list, of course.

Marc Aramini — 23 Dec 2011, 17:48 · in reply to David Stockhoff

--- On Fri, 12/23/11, David Stockhoff <dstockhoff at verizon.net> wrote:

From: David Stockhoff <dstockhoff at verizon.net>

Subject: Re: (urth) S&S vs. SF in BotNS

To: "The Urth Mailing List" <urth at lists.urth.net>

Date: Friday, December 23, 2011, 8:35 AM

On 12/23/2011 11:19 AM, Dave Lebling wrote:

Some on the list seem to be arguing that science is useless or on a par with religious belief in terms of provability.

I'm not sure anyone is actually arguing this, nor that the topic under discussion actually extends beyond the realm of fiction to the real world. I can follow the work of scientists, as I do, and still be a believer in God, or not, and I can trust the science for the wrong reasons as well as for the right ones. What is interesting is that the standards of proof in science can change---as indeed they should and must. What was proven 2 decades ago may not be

proven today. So some degree of faith is needed to accept proof, especially to accept it without any doubt.

As for the distinction between scientific proof and religious faith, obviously I see it much the way you do and I don't see the two domains as in direct conflict. But I have? spoken to supposedly religious people (Prot fundies) who have told me the existence (and superiority to all others) of God was proven. They were confused, but clearly "faith in the unprovable" and "proof" can be *functionally* interchangeable in the human mind, however contradictory they plainly are. If you can't tolerate doubt, either source of authority will serve. That's what Lee's on about.

And I, at times a scientist, (biochemistry degree but not a practicing scientist now), a narcissist, and a Catholic, have no problem with OBJECTIVE ABSOLUTES. I am that most awful of creatures: one who believes the evidence of his senses, and when those senses encounter a mirror, see a being so profoundly perfect that an eternal all powerful unlimited God must have existed to have made something like this.

The ancient Greek mathematician Eratosthenes who predicted the size of the spherical earth and the distance to the sun based on shadows in a well was using what he could to come to correct conclusions when thousands of years of incorrect thought would follow him. But he was using scientific practice and his approximations were GOOD. There is a bottom to get to, and reproducibility is key. Thus I, who believe God set everything in motion but allowed the freedom of that creation, would never deny evolution, when on a small scale with simple organisms it can be reproduced in a lab. So I believe in the infinite wisdom of man to get to the bottom of things completely accurately and in the absolute power of God to never be limited by words on a page.

David Stockhoff — 23 Dec 2011, 17:55 · in reply to António Pedro Marques

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David Stockhoff wrote (23-12-2011 16:35):

If you can't tolerate doubt, either source of authority will serve.
That's what Lee's on about.

And authority is what so many people are looking for. Those aren't usually the people who contribute.

To this list? No, with exceptions.

David Stockhoff — 23 Dec 2011, 17:56 · in reply to António Pedro Marques

On 12/23/2011 12:27 PM, António Pedro Marques wrote:

António Pedro Marques wrote (23-12-2011 16:39):

David Stockhoff wrote (23-12-2011 16:35):

If you can't tolerate doubt, either source of authority will serve.
That's what Lee's on about.

And authority is what so many people are looking for. Those aren't usually
the people who contribute.

...contribute to Humankind, not the list, of course.

OH! Thanks for the clarification.

David Stockhoff — 23 Dec 2011, 18:05 · in reply to Marc Aramini

On 12/23/2011 12:48 PM, Marc Aramini wrote:

--- On Fri, 12/23/11, David Stockhoff<dstockhoff at verizon.net> wrote:

From: David Stockhoff<dstockhoff at verizon.net>

Subject: Re: (urth) S&S vs. SF in BotNS

To: "The Urth Mailing List"<urth at lists.urth.net>

Date: Friday, December 23, 2011, 8:35 AM

On 12/23/2011 11:19 AM, Dave Lebling wrote:

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And I, at times a scientist, (biochemistry degree but not a practicing scientist now), a narcissist, and a Catholic, have no problem with OBJECTIVE ABSOLUTES. I am that most awful of creatures: one who believes the evidence of his senses, and when those senses encounter a mirror, see a being so profoundly perfect that an eternal all powerful unlimited God must have existed to have made something like this.

The ancient Greek mathematician Eratosthenes who predicted the size of the spherical earth and the distance to the sun based on shadows in a well was using what he could to come to correct conclusions when thousands of years of incorrect thought would follow him. But he was using scientific practice and his approximations were GOOD. There is a bottom to get to, and reproducibility is key. Thus I, who believe God set everything in motion but allowed the freedom of that creation, would never deny evolution, when on a small scale with simple organisms it can be reproduced in a lab. So I believe in the infinite wisdom of man to get to the bottom of things completely accurately and in the absolute power of God to never be limited by words on a page.

Man! What a piece of work.

(Hamlet, Act II, Sc. 2)

Lee Berman — 23 Dec 2011, 18:58 · follows David Stockhoff

Dave Lebling: So, imaging an electron is a significantly harder thing than imaging an array of xenon atoms.

But isn't the question more on whether it was harder to do that 30 years ago or image an electron today? Anyway, I still think it is cool. But I temper the temptation to pride in this accomplishment ("Homo sapiens scientistensis- masters of the universe!") with Antonio's reminder that electrons are not and cannot be round or blue. Our deficiencies created that image. (and yes, many question the reality or "truth" of astronomical photo renditions)

To get back to the topic of Wolfe, he is clearly an engineer (and "scientist" in the lay sense) who also happens to believe in God (though in a heretical way, or so he says). Some on the list seem to be arguing that science is useless or on a par with religious belief in terms of provability. I doubt Wolfe would agree. Science is provable, religion is all about faith: believing the unprovable.

This dichotomy of science and religion is a common one. I understand it. But for me, (my education and professional experience is in science) I am willing to take the further step of understanding science with science. I don't accept the principles of science on faith. But many (most?) scientists do. And I think there is a reason. It is difficult to maintain the drive of being a successful scientist in that competitive, dog-eat-dog world if you waste time doubting your own methods.

What I mean is that most scientists are willing to recognize that religion works because it appeals to the human psyche. It gives people what they want. It makes them feel good about themselves and their place in the world. But who is willing to recognize that science operates on the same sort of appeal?

Why are "hypothesis testing" and "replicable results" and "mathematical modelling" so popular among scientists? Who decided these criteria constitute "proof"? Scientists did. And they did it for one basic reason. Agreement on these things make scientists feel good about what they are doing; about themselves and their place in the world. It just feels right to most scientists. There is no other possible reason. (is there?)

[btw, rigorous application of scientific method involves disproof only. There is no "proof"]

My reading of Wolfe suggests that he is aware of the faith and feel-good component inherent in science.

You could be projecting your own philosophy on him. But so could I.

Jeff Wilson — 23 Dec 2011, 21:13 · in reply to Lee Berman

On 12/23/2011 8:10 AM, Lee Berman wrote:

In my (and perhaps Antonio's) view, math and science are human tools created by humans and subject to all the error and fallibility of the human brain.

The scientific method and mathematical rigor are human behaviors that are used to discover and refine knowledge of abstract and objective concepts, many of which are found in analagous physical processes that evidently continue independently of human agency. For example, circular craters are observed on the surfaces of planets and satellites where humans are simply not equipped to go, establishing the independence of circular geometry from imperfect humanity.

I don't overlook or discount reproducible results. They are a human thing to want. But ancient religions were based on it also. Do something to anger Zeus and within a few months you'll get a thunderstorm. You might have to wait a few years after angering a witch but you'll eventually get your crop failure also.

Science currently rules much of the faith and beliefs of humanity because the reproducible results are faster and more accurate than superstition. But they are not perfect. Lightning still strikes unpredictably. Disease and earthquakes and famine also. When a more perfect system of predicting and controlling these events is invented, science will be dropped like

Zeus worship was.

You have departed the land of rational thought freely and of your own will. Good luck on your journey into magical thinking, and I look forward to your speedy return.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

David Duffy — 23 Dec 2011, 23:45 · in reply to Lee Berman

On Fri, 23 Dec 2011, Lee Berman wrote:
But who is willing to recognize that science operates on the same sort of appeal
[...as religion]?

Why are "hypothesis testing" and "replicable results" and "mathematical modelling" so popular among scientists? Who decided these criteria constitute "proof"? Scientists did. And they did it for one basic reason. Agreement on these things make scientists feel good about what they are doing; about themselves and their place in the world. It just feels right to most scientists. There is no other possible reason. (is there?)

[btw, rigorous application of scientific method involves disproof only. There is no "proof"]

The only problem with Popperian falsificationism is that it doesn't say anything about where the hypothesis that is being tested comes from - it deals with experimental design, and with a bare-bones minimum of decision making after seeing the results. Sure, in one sense all scientific knowledge is contingent, but logical and mathematical consistency, and coherence with all other currently accepted scientific bodies of observation are all vital. In the Popperian framework, these properties are modelled as being a large number of failures to falsify ("my hypothesis is not falsified by an inconsistency with the laws of arithmetic" ;)).

Mathematical modelling is "popular" because mathematics summarizes or abstracts what is. We don't have to have faith that "2+2=4": it is a simple tautology. We don't have arguments about this, and we don't bother designing experiments to falsify it. Sure, Newtonian and Einsteinian geometries are different, and we use experiments to decide which one best describes our universe, but each model is logically and mathematically internally consistent.

And finally, replication shows you understand something, you can do it again. Even nonscientists like to be able to do the same thing twice and get the same result.

Anyway, these are not things I read Gene Wolfe for ;).

Cheers, David Duffy.

Dave Lebling — 24 Dec 2011, 00:12 · in reply to Lee Berman

No one suggests that any scientific "proof" is the case in any absolute sense. "Proof" means that if you tweak the universe in a certain way, it responds in a particular predictable way. Scientists do this not because it "feels good," but because if you have building blocks of predictability, you can create further and deeper edifices. Eventually you come to the part you don't yet understand, and can attempt to move on. The idea that scientists do this because it "feels right" trivializes a lot of intense philosophical discussion about what makes science work. To use an ugly phrase, it is "methodological naturalism." That is, predictable effects flow from observed causes. If you do X, then Y happens.

Thus the "possible reason" is that if you understand some aspect of the universe, you can accurately predict its behavior. In the mundane world, this leads to degrees, Nobel prizes, the approbation of their peers, etc. In the intellectual world, this means that you know the microcode of the universe. The more we know of it, the less we need superstition and false enlightenment.

Dave L.

On 12/23/2011 1:58 PM, Lee Berman wrote:

Why are "hypothesis testing" and "replicable results" and "mathematical modelling" so popular among scientists? Who decided these criteria constitute "proof"? Scientists did. And they did it for one basic reason. Agreement on these things make scientists feel good about what they are doing; about themselves and their place in the world. It just feels right to most scientists. There is no other possible reason. (is there?)

Gerry Quinn — 24 Dec 2011, 02:15 · in reply to Marc Aramini

From: Marc Aramini

The ancient Greek mathematician Eratosthenes who predicted the size of the spherical earth and the distance to the sun based on shadows in a well was using what he could to come to correct conclusions when thousands of years of incorrect thought would follow him. But he was using scientific practice and his approximations were GOOD. There is a bottom to get to, and reproducibility is key. Thus I, who believe God set everything in motion but allowed the freedom of that creation, would never deny evolution, when on a small scale with simple organisms it can be reproduced in a lab. So I believe in the infinite wisdom of man to get to the bottom of things completely accurately and in the absolute power of God to never be limited by words on a page.

I was scanning this list tonight, I have no time to reply for some days. But I must say to this: well said, Marc!

And Happy Christmas all.

- Gerry Quinn

Jeff Wilson — 24 Dec 2011, 08:29 · in reply to António Pedro Marques

On 12/23/2011 10:26 AM, Ant?nio Pedro Marques wrote:
But that is not a photo as is commonly understood,
which involves reflection, nor of 'an electron', nor is it a photo in a
sense that would constitute autonomous evidence for the reality of
electrons, though it may be corroborating of the model.

How are the sun and other luminous objects photographed then, sans reflection?

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

Jeff Wilson — 24 Dec 2011, 08:34 · in reply to Ant?nio Pedro Marques

On 12/23/2011 9:16 AM, Ant?nio Pedro Marques wrote:
This discussion is about giving
credence to explanations of the Universe, and Jeff pointed out the
usefulness of a given explanation is the criterion for credibility. The
criterion works psychologically, but not scientifically, so it actually
supports rather than negates Lee's original assertion that people
function by belief.

I think I was speaking about how credibility aids suspension of
disbelief in a given work of science fiction. Demonstrated scientific accuracy greatly aids
credibility, but it's totally optional: Wells articulated that his books were based on
impossibilities, yet they are undeniably science fiction by the standards of their time as well as
ours.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
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Jeff Wilson — 24 Dec 2011, 08:45 · in reply to Sergei SOLOVIEV

On 12/23/2011 11:09 AM, Sergei SOLOVIEV wrote:
You should not trust so much journalists, even scientific. Once I've
seen a picture of a sort of orange solar disk
and a smaller black disk crossing it - with the title "an exoplanet
photographed. This was rubbish, because
no telescope is powerful enough to make a star (except our Sun) visible
as a disk, not to speak about
an exoplanet. It was just a reconstruction (star is dimmer when the
planet passes before it).

http://en.wikipedia.org/wiki/Methods_of_detecting_extrasolar_planets#Direct_imaging

And when they
write "a photo of an electron" - what is it? The trace of some process
on photographic film, usually
with many intermediate steps and a lot of mathematical formulas and
nuclear physics to convince
you that it is related to an electron. Like they photograph flashes of
light in big tank of pure water
underground and they say that they photograph neutrinos (and you have to
believe).

Do you believe any images that you see on television are truly representative? They also
require many intermediate steps and manipulation via mathematical formulas and
electromagnetic physics to relate them to the scene observed by those present.

http://en.wikipedia.org/wiki/Gamma_correction

http://en.wikipedia.org/wiki/NTSC#Color_encoding

http://en.wikipedia.org/wiki/PAL#PAL_signal_details

Can you name an instrument that produces a photograph that you agree is truly representative?

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

antonio at gmail.com — 24 Dec 2011, 10:11 · in reply to Jeff Wilson

No dia 24 de Dez de 2011, às 08:29, Jeff Wilson <jwilson at clueland.com> escreveu:

On 12/23/2011 10:26 AM, Antonio Pedro Marques wrote:

But that is not a photo as is commonly understood, which involves reflection, nor of 'an electron', nor is it a photo in a sense that would constitute autonomous evidence for the reality of electrons, though it may be corroborating of the model.

How are the sun and other luminous objects photographed then, sans reflection?

That's grasping at straws and you know it.

antonio at gmail.com — 24 Dec 2011, 10:13 · in reply to Jeff Wilson

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And when they write "a photo of an electron" - what is it? The trace of some process on photographic film, usually with many intermediate steps and a lot of mathematical formulas and nuclear physics to convince you that it is related to an electron. Like they photograph flashes of light in big tank of pure water underground and they say that they photograph neutrinos (and you have to believe).

Do you believe any images that you see on television are truly representative? They also require many intermediate steps and manipulation via mathematical formulas and electromagnetic physics to relate them to the scene observed by those present.

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http://en.wikipedia.org/wiki/PAL#PAL_signal_details

Can you name an instrument that produces a photograph that you agree is truly representative?

I covered this with my 'understandable raw data' comments.

antonio at gmail.com — 24 Dec 2011, 10:18 · in reply to Jeff Wilson

No dia 24 de Dez de 2011, às 08:34, Jeff Wilson <jwilson at clueland.com> escreveu:

I think I was speaking about how credibility aids suspension of disbelief in a given work of science fiction. Demonstrated scientific accuracy greatly aids credibility,

But if the science is demonstrably accurate, where does said disbelief come from? Is it something like the rejection of technology by magic folks in *The Changeling*, where the guy to no avail claims that what he's doing is just like boiling water?

but it's totally optional: Wells articulated that his books were based on impossibilities, yet they are undeniably science fiction by the standards of their time as well as ours.

Sure thing.

Lee Berman — 24 Dec 2011, 13:25 · follows antonio at gmail.com

Jeff Wilson: For example, circular craters are observed on the surfaces of planets and satellites where humans are simply not equipped to go, establishing the independence of circular geometry from imperfect humanity.

I don't see that. It is still a human being who is calling the crater circular.

People see a crater as resembling a round bowl. An alien intelligence might find

nothing in common between these objects.

David Duffy: The only problem with Popperian falsificationism is that it doesn't say anything about where the hypothesis that is being tested comes from.

I agree. The hypothesis came from a person's guess, hunch, intuition or whatever. In his quest for establishing an objective process for science, Karl couldn't fully eliminate the human factor.

Mathematical modelling is "popular" because mathematics summarizes or abstracts what *is*.

We don't have to have faith that "2+2=4": it is a simple tautology. We don't have arguments about this, and we don't bother designing experiments to falsify it.

Tautologies are also based on human agreement. "It is what it is" as the saying goes. Sane human beings all agree that 2+2=4. But by what criteria do we know that insane people are wrong? We voted, and majority rules. And don't we sometimes benefit from out-of-the-box "insane" thinking. (I think Einstein would sound insane to Euclid)

But even counting insane people, there is one box we cannot think outside of: the box of human intelligence. Our every thought is confined within it. And I have trouble thinking

it must be the be-all, end-all way of understanding the universe. I will need confirmation from a number of independently evolved alien life forms before I accept that ape brains on a small planet on the fringe of the Milky Way have managed to discover a method for understanding everything in the universe in the only way they can be figured out (i.e. science).

And finally, replication shows you understand something, you can do it again.
Even nonscientists like to be able to do the same thing twice and get the same result.

Yes, we humans do like replication of results. But I don't see how that makes our view so universally perfect. Other intelligences may be more attuned to indeterminacy and for them quantum physics might make perfect sense to every child while bouncing a ball is a deep mystery.

Dave Lebling: The idea that scientists do this because it "feels right" trivializes a lot of intense philosophical discussion about what makes science work.

Not for me. Science is an amazing tool. Surely the best tool we currently have for understanding the world. But I don't feel the need to think it grants us the potential for total understanding of everything in every possible dimension. That's where I think science starts to fill the role that religion fills among the faithful. Since I don't need that "master of the universe" feeling, I am willing to recognize the limits of science and enjoy its fruits in my own small slice of the cosmos.

Jeff Wilson — 25 Dec 2011, 06:14 · in reply to antonio at gmail.com

On 12/24/2011 4:11 AM, antonio at gmail.com wrote:
No dia 24 de Dez de 2011, às 08:29, Jeff Wilson<jwilson at clueland.com> escreveu:

On 12/23/2011 10:26 AM, Antônio Pedro Marques wrote:

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How are the sun and other luminous objects photographed then, sans reflection?

That's grasping at straws and you know it.

Sunlight comes from the luminous gas that makes up the solar photosphere. And from what part of an atom of that luminous gas does that luminosity emanate?

The electrons. When you look at the sun, you're seeing light given off by electrons shifting from higher to lower energy states.

Along the way, that light encounters electrons of the atoms in the atmosphere and undergoes some refraction.

And even when it does illuminate non-luminous, opaque materials here on earth. what is the light reflecting from? The nucleus of each atom?

Light is reflected by electrons. While it's unusual and difficult to see the light emitted from a single electron, it's also unusual to encounter light that doesn't come from, through, or bounce off of, electrons. And the receptive cells in your eye, with chemicals that absorb light? Yup, they do it with electrons.

It's electrons all the way down, and you know it.

Jeff Wilson - jwilson at clueland.com
Computational Intelligence Laboratory - Texas A&M Texarkana
< <http://www.tamut.edu/CIL> >

antonio at gmail.com — 25 Dec 2011, 07:47 · in reply to Jeff Wilson

No dia 25 de Dez de 2011, às 06:14, Jeff Wilson <jwilson at clueland.com> escreveu:

On 12/24/2011 4:11 AM, antonio at gmail.com wrote:

No dia 24 de Dez de 2011, às 08:29, Jeff Wilson <jwilson at clueland.com> escreveu:

On 12/23/2011 10:26 AM, Antonio Pedro Marques wrote:

But that is not a photo as is commonly understood, which involves reflection, nor of 'an electron', nor is it a photo in a sense that would constitute autonomous evidence for the reality of electrons, though it may be corroborating of the model.

How are the sun and other luminous objects photographed then, sans reflection?

That's grasping at straws and you know it.

Sunlight comes from the luminous gas that makes up the solar photosphere. And from what part of an atom of that luminous gas does that luminosity emanate?

The electrons. When you look at the sun, you're seeing light given off by electrons shifting from higher to lower energy states.

Along the way, that light encounters electrons of the atoms in the atmosphere and undergoes some refraction.

And even when it does illuminate non-luminous, opaque materials here on earth. what is the light reflecting from? The nucleus of each atom?

Light is reflected by electrons. While it's unusual and difficult to see the light emitted from a single electron, it's also unusual to encounter light that doesn't come from, through, or bounce off of, electrons. And the receptive cells in your eye, with chemicals that absorb light? Yup, they do it with electrons.

It's electrons all the way down, and you know it.

I also know that has no relevance for the matter at hand. Letters are composed of strokes. That doesn't mean you can determine the phonetic value of a given stroke.

antonio at gmail.com — 25 Dec 2011, 07:51 · in reply to antonio at gmail.com

No dia 25 de Dez de 2011, às 07:47, antonio at gmail.com escreveu:

Letters are composed of strokes. That doesn't mean you can determine the phonetic value of a given stroke.

Or semantic.

Jeff Wilson — 25 Dec 2011, 10:53 · in reply to entonio at gmail.com

On 12/25/2011 1:51 AM, entonio at gmail.com wrote:

No dia 25 de Dez de 2011, às 07:47, entonio at gmail.com escreveu:

Letters are composed of strokes. That doesn't mean you can determine the phonetic value of a given stroke.

Or semantic.

O I C

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