Comment

Strange days

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It's hard to do satire when reality is so bizarre as to be self-parodying. As I write this, the President of Iraq, Jalal Talabani, has left his war-torn country for three weeks to travel to the United States. To consult with President Bush, you ask? No. To beg Congress for more money or more American troops? Nope. To appeal to the American people to support the US presence in Iraq? Not at all. He came here to lose weight. He has checked himself into what is non-euphemistically called a fat farm - a place that combines the physical discipline of an army boot camp with the motivation of an evangelical tent meeting - all in the service of shedding unwanted pounds. It's the sort of place that's particularly popular with rich matrons.

Now, am I the only one who sees something mindnumbingly peculiar about the symbolic head of a country where a significant proportion of the population is malnourished, leaving that country in the middle of a civil war to go to the country with the most obese population on the face of the earth so he can slim down? I guess I shouldn't be. After all, nothing else has been logical about Iraq - why should this be any different? Yet, when it comes to strangeness, Iraq is just one example out of many. We seem to be living in a period characterized by events - and human behavior - that don't just defy reason. They laugh in its face.

For example, the most popular new tourist attraction in the US is The Creation Museum in Petersburg, Kentucky. You have to see this place to believe it - and you can see some of it - without the bother of actually going there, because they have a website [http://www.creationmuseum.org]. The Creation Museum is sort of a theme park for the irrational (I call it Dizzy World), a place where four billion years of geologic and biologic history simply didn't happen, because, after all, the earth is only about 6,000 years old. This figure was arrived at in the 17th century by one Bishop James Ussher, based on the ages of the prophets in the Old Testament: he concluded that the first day of creation began at nightfall preceding Sunday, 23 October 4004 (BC); Dr. John

Lightfoot, Vice-Chancellor of the University of Cambridge, UK, refined that calculation to 23 October 4004 (BC) at 9 am (it's not clear to me whether that was Greenwich Mean Time). In the Creation Museum, Adam and Eve live happily in the Garden of Eden alongside animatronic dinosaurs; computer animations show how plate tectonics could have produced tsunamis that covered the earth with water in about a month; the Tower of Babel explains the multitude of human languages, and so on.

Surprisingly, the museum does not spend much effort 'disproving' evolutionary ideas or 'proving' creation. It is assumed that anyone who visits needs no convincing of the literal truth of the Bible - that, as one supporter wrote, "God's Word is placed first and human reason is last". Despite that, there are a number of attempts to show that biblical explanations can fit 'scientific' facts: for example, that the diversity of life today can be understood in terms of what went into Noah's Ark. Some of the exhibits show modern times and imply that families and society are hurt by the acceptance of evolution. In one video, a male teenager is shown sitting at a computer looking at internet pornography and a female teenager speaks with Planned Parenthood about having an abortion; both acts are blamed on their belief that the earth is "millions of years" (sic) old. The Creation Museum cost about \$27 million and is privately funded through donations. It opened on 28 May 2007. Based on projections, the museum is anticipating 250,000 paying visitors in its first year of operation and it's a good bet that it will exceed that: total attendance already surpassed 200,000 visitors on 20 September. (By comparison, the Smithsonian Institution Museum of Natural History typically draws around 5 million visitors a year, but it's in Washington, DC, not northern Kentucky).

Speaking of history, remember Al Gore, Vice President under Bill Clinton? He was elected President of the United States in 2000, until a Florida ballot count that many believe was rigged, and a Supreme Court decision that many believe

was repayment for political favors, said that he wasn't, which made George W Bush president and relegated Al Gore to a footnote in the history books. (Can you remember who lost even half of the presidential elections in your lifetime? Try it - it's not easy.) Or maybe, he lost because he believes the earth is millions of years old, since that seems to be the root of all evil. Anyway, George W Bush became something of a hero after the tragic events of 11 September 2001. Al Gore disappeared off most people's radar, and gained a lot of weight.

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But then something happened: George W Bush and his cronies began making mistakes - not just little ones either, but colossal blunders. Al Gore became highly visible as a champion of the cause of global warming. (No, I don't mean he's in favor of global warming, I mean - oh, heck, you know what I mean.) He won an Academy Award for his excellent documentary film An Inconvenient Truth. He didn't lose the weight he'd gained, but he did begin showing a side of himself - relaxed, confident, in command of his material, self-deprecatingly funny and passionate about things other than the pursuit and exercise of power - that somehow never came through during his overly managed 2000 presidential campaign. Right now, a large percentage of the US population wouldn't vote for George Bush for garbagecollector, and Al Gore might just be the most popular politician in the country.

So he's going to run again in 2008, right? Of course not. That would make too much sense. If you believe what he says - and I do - he has no interest in running again. He's too busy, and having too much fun, doing other things. One of the other things he's done is write a book. And as befits a man who has always seemed to me to be more thoughtful and forthright than your typical US politician, it's quite a good book. It's called The Assault on Reason and no, it's not a discussion of the Creation Museum, though with that title it sure could be. It's a very well constructed argument that America is currently in the hands of an administration that is simply not interested in the truth. The book talks about the corrupting influence of the 300 second television 'sound bite'; the politics of fear; the cynical manipulation of people of faith; and the possible power of technology like the internet to reestablish a democracy based on facts, not driven by ideology. It's a powerful, disturbing, yet ultimately uplifting book. He doesn't have a lot to say about science explicitly, except in his chapter on the climate crisis, but he does point out that there are a number of scientific issues that have been treated by the Bush administration as religious issues, including several connected to genomics - research into human stem cells among them. And he cites a number of instances where scientific information has been distorted or suppressed because it did not fit the ideology of those in power. I suppose it shouldn't be surprising that an administration headed by a president who doesn't believe in evolution and is more likely to visit the Creation Museum than the Museum of Natural History would adopt illogical positions on a host of issues.

What else would constitute a completely illogical notion? Well, how about the idea that doubling funding for biomedical research would lead to a crisis in biomedical research funding? If you had proposed that idea prior to, say, 2004, you would probably have been laughed out of almost every scientific society in the US, but that's exactly what happened. Through the efforts of many prominent scientists, together with Congress, and, yes, the Bush administration, the budget of the National Institutes of Health doubled from \$13.6 billion in 1998 to \$27.3 billion in 2003 (interestingly enough, it already was doubling, on average, every 9 years since 1972). But then, starting in 2004, the budget essentially went flat, and it's stayed that way since. Now, given that by 2007 this would still make a 9-year doubling period, same as usual, we ought to be OK, but that isn't the case. Human nature being what it is, everyone, from science administrators to scientists themselves, started spending money - and applying for more - during the doubling period as though the 15% annual increases in funding would continue forever. New programs were started, including a number of 'big science' projects aimed at exploiting, or imitating, the success of the Human Genome Project. New faculty were hired; new research buildings were built; existing research programs were greatly expanded - in short, growth in the biomedical sciences became, briefly, exponential. And in a period of flat funding, that spells disaster. It's now harder than ever to get a new research grant, conservatism permeates the grant-reviewing process, and young people are being discouraged from entering or staying in science. All because funding went up. And given that it's very hard to scale back or kill ongoing programs, especially big ones, it looks like the only cure for what ails science at the moment would be another large increase in research funding, even though that's sort of what caused the problem in the first place. The Bush administration, scrambling to find money to continue the quagmire in Iraq, is clearly not going to support that. Interestingly, most of the other presidential candidates, Democratic and Republican, don't seem to be too interested either. They seem to be too busy shoring up their credentials as people of faith and attacking each other to spend any time, or political capital, planning to do anything about the crisis in biomedical science.

Well, we know someone who might: Al Gore. But remember, he's not running. I think it's too bad that someone who might be one of the few Democrats to be a good friend to science, who believes that reason, not faith or ideology, should decide issues, who is more likely to visit the Museum of Natural History than the Creation Museum, who has eight years of executive experience and actually knows something about the world outside his own country, isn't going to run for president. It's even harder to believe that a man who is so passionate about global warming isn't going to try for the one office where he could really do something about that problem, an office all the pundits say he has an excellent chance of winning. But he's not.

Unless, of course, he changes his mind. Which he might, because in these profoundly weird times, when strange is normal, up is down, and irony has become superfluous, the only thing we should expect is the unexpected. At least we'll have ample warning if Al Gore does change his mind: look for the telltale sign of him preparing himself to look good on television. By which I mean, of course, that he'll start to lose weight. Just like the President of Iraq.