



## Sf Author David Brin Comments on the Year 2001

Sf Author David Brin was not happy with the apocalyptic theme of **ArmageddonCon**. He wrote as follows to Dotan Dimet:

“In today's world, which is the most commonly heard message? Optimism? Hah! Pessimism is the standard cliché.

“And I can see that where you stand feels tense. My essay on ‘how much progress we have made’ is an artifact of the place where I live, where we felt things might fall apart... back in 1968. Today, I can write such things because it honestly seems that we have made things better here.

“I pray that you will feel the same way in a few years.” **David Brin**, [www.davidbrin.com](http://www.davidbrin.com)

### *2001: A Space Odyssey* Shining Light on How Far We've Come Commentary by David Brin

The coming millennium -- (and yes, Alice, it starts January 1, 2001) -- has got me thinking. With just a few shopping days left, where are all the flying cars, antigravity belts, immortality pills, and space liners to balmy Venus we were promised! What about the muscle pills? Robot butlers? Teleportation?

The future's almost here, and the most science fictiony thing around seems to have been our recent, weird U.S. Presidential Election, one last spasm of Twentieth Century silliness.

Oh, there are so many aspects to this looming milestone that we could talk about. But let me focus on just one... the cardinal numeric figure of the year ahead -- 2001.

Before we get accustomed to writing it on our checks - (and yes, Virginia, we still have checks in the Twenty-First Century, who'd have figured?) - what does the figure 2001 mean to you?

Why of course, it's a movie! One that, remarkably despite its age, still shines some amazing sparkles of perspective on our time. I'd like to use it in that vein right now, to point out a few things about the surprising world we're living in. A world that's even more amazing than Arthur C. Clarke imagined.

Yes, yes. Of course the book and film influenced me. How could they not? I was sixteen years old. **Star Trek** had been canceled and Norman Mailer was grouching that NASA engineers had achieved the impossible -- by

somehow managing to make Project Apollo boring.

It would be more than a year before the space program delivered its most important product -- not the moon landing itself, but rather the greatest art work in history -- the image of Earth floating as a blue oasis in the desert of space. That gift wouldn't arrive till the end of 1968. Meanwhile, just about the only images that seemed to offer anything like promethean vision were contained in *2001: A Space Odyssey*.

Oh, I could go on and on about mixed messages in the film. Its love-hate relationship with technology, for example. Or the story's ambivalence toward the notion of artificial intelligence. Or the quaint combination of optimism and pessimism that we saw repeated over and over again in the works of Arthur C. Clarke and Isaac Asimov -- leading visionaries of their era -- both of whom worried that humanity might be far too snared by the sticky fibers of an aggressive neolithic heritage ever to break free on its own.

Strangely, for one known as an idealist, Clarke seemed to be saying in *2001* (and in other works like *Childhood's End*) that we have no hope of transcending the mire of the past all by ourselves. Transcendence must come from without, via some kind of external intervention. Many felt that way during the turbulent sixties -- a time when it seemed Western Civilization might all-too easily destroy itself with the very brightest of its shiny new tools. If such

intervention wasn't coming from old-time religion, it seemed possible to hope for delivery by kindly creatures from the sky.

Yes, I might talk about all that notion, which in the years since has become a grindingly tedious cliché. ("Oh, save us from ourselves, kind aliens!")

Or else I could switch levels and describe how exciting the film *2001: A Space Odyssey* was to a teenager like me! Especially a teen whose brain seemed better tuned to stories and images than the torrents of ecstatic music that sloshed over contemporary culture during those years -- the era of the Beatles, Doors and Rolling Stones.

There were millions of us, you know, though we tried to hide our deviancy. Oh, we liked the music just fine. But guys like me also felt just a bit alienated from the frenzied ardor that our peers devoted to rock 'n roll. All those songs were mere *sounds*, after all, and what was sound compared to light!

We hungered to be fed through the *eyes*, and through those flashing-cerebral prefrontal lobes. We wanted to be turned on by images, preferably active ones, supple, changing and MacLuhan-cool, not lying dead on some canvas. Today there is a veritable feast of manic color, a full-spectrum orgy! But in the sixties we had little more than sardonic Warhol, some cartoony psychedelia... and science fiction.

During such a time, for visual-junkies like me, *2001* seemed to fall like manna in the desert. I came to watch again and again, staring for hours at Kubrick's voluptuously gray-blue-modern imagery, with those added touches of faux realistic grime.

Oh, I might wax effusive about how the film affected and inspired me, perhaps helping motivate my career in science. But how many tributes of that kind have you already read?

So let me shine a final beam from this epochal artwork onto quite a different direction. There is yet another perspective... one that just occurred to me a few months back, while watching *2001: A Space Odyssey* for about the fortieth time.

Consider the following two hoary old clichés.

"Isn't it a shame that human decency and justice haven't kept pace with our technological progress?"

and

"No past era featured as much cruelty and misery as this one."

In spite of their vogue, both of these oft-parroted passages are patently false. It's incredibly easy to disprove them!

Over half of those alive on Earth today never saw war, starvation or major civil strife with their own eyes. Most never went more than a day without food. Only a small fraction have seen a city burn, heard the footsteps of a conquering army, or watched an overlord brutalize the helpless. Yet all these events were routine for our ancestors!

Of course, hundreds of millions have experienced such things, and terrors continue at unacceptable levels across the world. Our consciences, prodded by the relentless power of television, must not cease demanding compassion and vigorous action.

Still, things have changed since humanity wallowed in hopelessness and horror, during the middle years of the Twentieth Century. Look in places that were festering maelstroms back then -- from Tokyo and Kuala Lumpur to Warsaw and Istanbul. From Alabama to South Africa. The ratio of humans who now live modestly safe and comfortable lives - or at least better than their parents - has never been greater.

As for contrasting technical and moral progress, there's no contest! Technical advance has been small potatoes by comparison! For example, while I truly love the Internet, its effects on real life have so far been vastly exaggerated. Telephones and radio had far greater immediate effects when they entered the home! Oh yes, we have fancier autos and sleeker airplanes. But people still pack their kids in a car and fight traffic to reach the airport in time to meet Grandma's flight from Chicago... as we did when I was seven. Life's tempo has quickened, but the basic patterns differ little from 1958.

It is our attitudes that have undergone a transformation unlike any in history. All kinds of unjust assumptions that used to be considered inherent -- from racial, sexual and class stereotypes to ideological oversimplifications -- have been tossed onto the trash heap where they long deserved to go, in favor of a generalized notion of tolerance, pragmatism and eccentricity that seems to grow more vibrant with each passing year.

Where does *2001: A Space Odyssey* come into all this?

When the famous Stanley Kubrick film appeared in the mid-sixties, two monumental projects transfixed the people of the United States -- conquering outer space and overcoming deeply ingrained social injustice. This

juxtaposition is clear in the film... and its sequel, **2010**. Both movies portray the scientific and manipulative power of humanity far outstripping our wisdom.

But is that, in fact, what happened?

Consider those wonderful toys. The "wheel" space stations, rotating to Strauss waltzes. Or those marvelous moon cities. Or vibrant, argumentative computer minds like Hal 9000. We have none of them, alas.

Now recall the human political hierarchies portrayed in **2001: A Space Odyssey** - hierarchies that were rigidly pyramidal, officious, patronizing and relentlessly white-male. Remember the film's basic plot premise? Every tragedy arose from obsessive secrecy, as aloof bureaucrats like Heywood Floyd contemptuously concealed information from the public - and even from professional astronauts - out of fear their poor sheeplike minds would suffer "social disorientation."

What horribly disorienting information were they protection people from? An archeological dig on the moon?

Oooh!

Now don't get me wrong. That scenario seemed totally plausible then! The predictions -- both technical and social -- appeared to be so on-target.

But they weren't. And that's where it gets so interesting.

Who would have imagined that colonizing space would prove so grindingly slow -- and yet, by the real year 2001 we'd refute so many cruel bigotries that were once taken for granted, way back in 1967? We still don't (again, alas!) have the fancy space stations of **2001: A Space Odyssey** - but today our astronauts come in all sexes and colors. And kids who watch them on TV feel less fettered by presumed limitations. Each may choose to hope, or not, without relentlessly hearing you can't.

In this year 2001, an officious prig like Heywood Floyd would be haunted by whistleblowers. And one crewmember of Discovery, being female, might actually listen to poor HAL instead of bullying the poor conflicted machine into feeling cornered and lashing out.

No, this is not a criticism of **2001: A Space Odyssey**! The film did a great job in the context of its time and it remains terrific art. Indeed, it is not the job of art -- even sci fi -- to predict!

Especially in science fiction, art is at its best when it helps put things into perspective, which is what this venerable collaboration between Kubrick and Clarke still does, even where the forecasts proved wrong.

**2001: A Space Odyssey** can, and should, make you think. About all the fancy toys we were promised, but don't yet have as the millennium rolls around. And about a society that Clarke feared would stay the recalcitrant... but hasn't.

(Does this sense of guarded optimism apply, beyond the comfortable borders of America and Europe?)

(To some extent, it may depend on how far the "culture of science fiction" has spread. Look at a map of the world. Ponder the rate at which science fiction stories and novels have become incorporated in various cultures. The popularity of science fiction correlates almost perfectly with cultures where egalitarianism, tolerance, openness, technology and suspicion of authority have become ingrained. Or in places where these concepts have begun to take hold, as happened in the former Soviet Union, where SF became a vehicle of conceptual resistance for those dreaming of a different order.

(Indeed, might science fiction be the best way to proselytize those same values, in lands where they haven't yet taken root? Could **2001** and its cousins be our secret weapon, in an ancient struggle against intolerant ways?)

I think that may be the most important thing to notice, as we turn away from the past and face the future. The road ahead remains long, hard and murky. Our achievements often seem dim compared to imperfections that are left unsolved. But at this rate, who will bet me that a woman or a person of color won't preside in the White House long before the first human being steps on Mars?

Progress doesn't always go the way we expect it to.

It is sometimes wiser than we are.

# מעבר BEYOND

עיתון חובבי מדע דמיוני ופנטזיה עצמאי בהגשתו של אלון איצקוביץ

ינואר 2001

דבר העורך

בניסיון ליצור עיתון חובבים בסגנון יותר קליל, יותר צבעוני ושאר דברים שאהרון שיר לא בהכרח מעוניין לפרסם החלטתי להביא בפניכם כיף בפירוש, ללא כל יומרות. אני מקווה שתיהנו ממגוון החומר ולא תתעצלו להגיד את דעתכם: טוב או רע, אם תרצו לראות גיליונות נוספים.

"מעבר" או BEYOND יופץ חינם לכל המעוניין. אלון איצקוביץ – 9223171-03

## Truth is Stranger than (Science) Fiction

In the November 2000 issue of *CyberCozen* I reviewed Charles Sheffield's book *Cold as Ice*. One of the things that bothered me about this book was that a number of people did some strange, impossible things. The only explanation given (at the end of the book) was that these unusual people had been genetically modified. But how human beings could ever do such impossible things was not explained. The infuriating thing about the book was that the author seemed to take it for granted that such things will be possible – even though in the book itself, in the future described, such things are considered completely impossible.

I'm going to describe one such event, and then bring a possible explanation as to what the author is hinting at. This strange event involved *a woman scientist who was frozen to death, but fully recovered*. We know that when a body is frozen, ice crystals form which destroy cells permanently. A frozen brain can never recover from being frozen. A frozen heart will never beat again. The incident takes place on Europa, the moon of Jupiter. The woman is trapped in a car outside on the ice. The car has fallen into a hole and she cannot move it. Nor can she get out of the hole. She has food and water for several days, but air for only thirty hours. After that she will freeze solid, since the car does not have an adequate heating mechanism for more than twenty hours. A real puzzle! So she decides to spend her last hours doing some work on the computer. Either they rescue her in time, or she will die. Now here are some quotes:

"The data analysis continued, and Camille began to see patterns. At the same time, her hands and mouth were continuously at work. She was eating the food supplies, and without thinking about

it, she kept on doing so long after her hunger was satisfied. And while she ate, she was drinking water, as hot as her mouth and throat could tolerate it.

"Drinking, and drinking, and drinking. A gallon; a second whole gallon.

"And then a third, as after many hours the cabin temperature began to fall ... slowly, but steadily dipping toward a level where the carbon dioxide and water vapor in Camille's exhaled breath would become no more than a puff of ice crystals. Except that long before that, there would be no breath." (p. 220)

After a couple of days they find Camille, frozen.

"It was [the body] of a hugely fat person, swollen and grotesquely misshapen as though it had been inflated like a balloon. The corpse did not appear to be that of a normal woman who had simply frozen to death....

..." the energy for the heaters was totally exhausted. All of the car's food was gone, and most surprising, so was all of the water....

"... they say it sounds all wrong. Camille Hamilton was *thin*, thin and blonde and fragile.'

"Lammerman ... placed the body of Camille Hamilton on a long trestle table in the next room. Her suit helmet was off, and the double suit that she was wearing was peeled away from her arms and torso. Wilsa saw a bloated neckless head and pale, swollen limbs, each as thick as her own thighs. The skin of the upper arms was translucent and tight-stretched, like a milky latex film....

"She stared down at Camille Hamilton and realized that the stony rigidity of the corpse was disappearing in the warm air. The bulging forearms were sagging, their stretched skin dimpling as body liquids pooled under Europa's gentle gravity....

"Then the mouth of the corpse moved in a tiny, near-invisible spasm.

"Escaping body gases? But the sodden eyelashes were quivering.

"'Oh, my God. She's alive!' Wilsa touched the swollen cheek. The skin was clammy, but it had warmed to more than room temperature....

"The eyes remained closed, but a whimper came from the parted lips....

"The swollen cheeks puffed in and out. And the slack mouth spoke. 'Bathroom. Need ... go bathroom.... Gotta pee.'" (p. 253-258)

Now how do you explain that? The author doesn't.

However, thanks to the **Israeli Society for Science Fiction and Fantasy** (<http://sf-f.org.il>), we have a partial explanation. In a lecture on November 29, 2000, called "**The Bionic Man and the Cryonic Woman**", Dr.

at Berkeley, told us about the North American wood frog. Every year this frog freezes in the Canadian winter, yet revives in the spring and returns to full activity. It can be revived from a temperature as low as minus 8 degrees Centigrade, well below freezing. As much as 65% of its body crystallizes into ice. Outwardly it is frozen solid. Its breathing and heartbeat stop entirely. However, the heart and the brain do NOT freeze – thus avoiding damage from ice crystals in these crucial parts of the body. How does the wood frog do it? If I understood correctly, the wood frog concentrates glucose in parts of its body. Since the freezing temperature of glucose is much below that of water, these crucial areas do not freeze. (There are more primitive animals – insects, for example - which use glycerol, which freezes below minus 40 C.) Let's face it, Europa's temperature is far below minus 8 degrees C, the lowest temperature the wood frog can survive! So how did Camille do it? Perhaps Camille's massive eating spree in *Cold as Ice* is explained as a way of getting raw materials for generating glycerol or some other substance with an even lower freezing point. I don't understand how the massive drinking helped to keep her from dying, but maybe one of our readers can explain it.

**Boris Rubinsky**, of the University of California



Science Fiction and Fantasy

News and Rumors

Collected and brought to you by **Guy Eldar**

Not much room, once more, but I did want to let you know of the two hottest news items of the last weeks or so.

The first is the well-publicized press conference that presented the upcoming movie version of *Spiderman*. The big surprise is the choosing of *Tobey Maguire* (*Cider House Rules*) to take the lead. On top of that, pictures

of the well-designed suite can be found on the web.

The second hot news I came across, was the new idea for *Terminator 4*. If you didn't know, *3* is on its way with a female terminator opposing *Schwarzenegger*. The fourth part will bring *Schwarzenegger* as a human in the future that the terminators were based on.

Comments, News and Rumors, facts and sites would be appreciated. Write to: [eldarguy@netvision.net.il](mailto:eldarguy@netvision.net.il)  
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