

**Thrillin' at the MacMillan #4: THEY SHOULDA MADE A PILE OF 'EM...**  
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THEY SHOULDA MADE A PILE OF 'EM...

[by]

Spider Robinson

To my surprise, not even the wonderful Wizard Of Google can pin down exactly when the militarization of space became unstoppable. In the first place, China's finally sussed out the secret to the Information Age: smother it with so much contradictory information nobody can say for sure just what you said, or when...much less why. And they've *always* known what to do about military information: lie. Pin me down, I'll say no later than 1999. At Expo 2000 in Hannover, the centrepiece of the Chinese pavilion was a display of two Chinese taikonauts planting the flag of the People's Republic on the Moon. By October, Shuang Feggan, VP of the China Association of Sciences, was talking to reporters about a permanent lunar base. He even bothered to invent a nearly plausible scientific reason for one.

But we can safely guess when the President of the United States first *noticed* that the militarization of space was underway, and responded—I think I can pin it down to within a minute or two. Based on his known performance when the Twin Towers fell, I make it roughly five minutes before he told someone to write the speech he delivered on January 14, 2004—in which he finally got around to telling us all of his deep and abiding lifelong interest in manned space exploration, which he'd neglected to mention over the last few decades—and especially in a manned lunar base, that will achieve important scientific goals he hasn't had time to name to this day, what with one Iraq and another.

That is, over three years after the People's Republic progressed from unmistakable hints to bald admission of its own intent to establish one. That's how long it took for *some* anonymous hero in America's armed forces to get past the civilian morons currently misrunning all military matters and explain to Mr. Bush that an actual war, with enemies that really exist and could actually hurt America, has been in progress—on his watch!—since well before September 11. And he's losing.

I'm NOT talking about the antisatellite technology China demonstrated last week, to the horror of the rest of the world, by blowing up one of its own satellites with a missile fired from the ground...although that's demonstrably better than the US can do after decades of StarWars funding. Naturally the American media have decried this weaponization of space—this more-successful-than-theirs weaponization, I mean. Few mention that way back in the mists of 2002, China and Russia together formally *asked* for a treaty banning weaponization of

space...and not only did Dubya tell them to take a hike, he declared last August America has the right to use space for “defense and intelligence-gathering purposes,” as well as “to stop adversaries” who use space in any way it finds threatening, if it ever figures out how.

Forget that. Let’s just grant China undeniably superior missile technology, and admit that it, too, will soon be stopping adversaries who use earth orbit in ways that threaten it. The worst missiles can do, after all, is carry nuclear weapons, and nukes are nothing. High orbit’s the wrong battleground: a feint. Let’s talk about the *really* dangerous weapons of this century:

Moon rocks.

Let’s play a game. Imagine you’re the undisputed Olympic gold medal champion rock-thrower of all time. You can put a rock in each eye of a challenger fifty meters away faster than he can throw one, every time. Let’s even say you have as many rocks of your favorite throwing size and mass as you could possibly want, close to hand. You’re facing a rock-fight with a blindfolded prepubescent girl who’s never been in a fight of any kind before, and though she has many rocks, they’re hard for her to even lift. Will you bet your life, and your family’s?

Oh, I forgot: you’re at the bottom of a hundred-meter well. She’s at the top.

That’s what it’s like to fight a global war against a single platoon...who are on the Moon. They perch, it doesn’t matter how precariously, at the top of a *very* deep gravity well. One so honkin’ deep that all they need are rocks, steel to wrap them in, and an induction catapult to fling ‘em over the edge of the well with a degree of accuracy...and they own the world beneath them.

Robert A. Heinlein explained the math over forty years ago in his classic *THE MOON IS A HARSH MISTRESS*, which depicted a Lunar penal colony winning independence, with rocks. By the time they reached the bottom of the well, each carried kinetic energy equivalent to a nuclear weapon... but without all that nasty radiation contaminating the conquered territory for centuries.

Think the nuclear arms race was harsh? Wait’ll you see the lunar rock race!

The Apollo astronauts picked up a total of 381.69 kilograms (841.6 pounds) of lunar rocks...and *brought them home*, at a cost of 24 billion dollars. Call it CAN\$15,285 a kilo, US\$28,500 a pound. The ghost of Korolyev alone knows how many quintillion rubles the USSR spent, but they barely got their money’s worth: a whopping 139 *grams* of Moon rock. Even God doesn’t know why either side did it: of that combined grand total, less than 20 kilos have been given to scientists (35,000 of them!), and 5 to museums for public viewing and even touching. The other 357 kilos have been filed, forever, in that warehouse you saw at the end of *Raiders Of The Lost Ark*.

(They've also lost, I swear this is true, the actual footage of Armstrong stepping onto the surface. Fewer than a dozen people ever saw it; the best image you or anyone else has ever seen is a TV-broadcast conversion with the relative quality of a tenth-generation photocopy. If they ever *do* locate the original—a true Lost Ark long-shot—there's one machine left in all the world that can play it, and one man who knows how to keep it running, so far, and he's retired. S'welp me. Right Stuff, my foot.)

Right now, *Russia's* much closer to landing men on the Moon than America: it still makes a rocket powerful enough. (China's is better.) Believe it or not, *America burned the plans for theirs, to save storage costs*, years ago: they're currently scurrying around trying to find young engineers who grew up reading science fiction instead of Harry Potter, without much luck.

The kids in my neighborhood were smarter than either the US or USSR. Believe me, we knew what to do with rocks—and if the best fighting rocks had cost us \$28,500 a pound, we'd have done the same thing: made a big pile of 'em on high ground, left it there, and hid behind it with one in each hand. Ancient China, heir to the military wisdom of Sun Tzu, advanced to the tactical sophistication of my buddies and me at least seven years ago. Even President Bushleague caught up three years ago. The media, mighty with money and the latest hi-tech tools...are finally gearing up to cover a desert war with no point or end that's been going on since Dubya took office, before 9/11. The weaponization of space *already happened*, has been in progress for years, and newsnitwits are just beginning to realize it's a theoretical possibility worth mild concern, once we settle really important matters like whether Sunnis or Shiites produce worse psychotics.

Heinlein also said, forty years ago, that “progress in space is inevitable...but there's no guarantee the working language will be English.” Qiǎo miào de zuò zhě.\*

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***BC writer Spider Robinson's 33rd book VARIABLE STAR, a collaboration with Robert A. Heinlein, is available in hardcover from Tor Books; for further information visit [www.spiderrobinson.com](http://www.spiderrobinson.com) or [www.variablestarbook.com](http://www.variablestarbook.com).***

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\* — (Smart cobber.)