



Welcome to Vol. 9 No. 9 of Design Science News, the e-bulletin of the Buckminster Fuller Institute

Design Science News brings you news from around the world related to humanity's option for success and comprehensive design science. It also features updates from BFI and periodic special offers for our members.

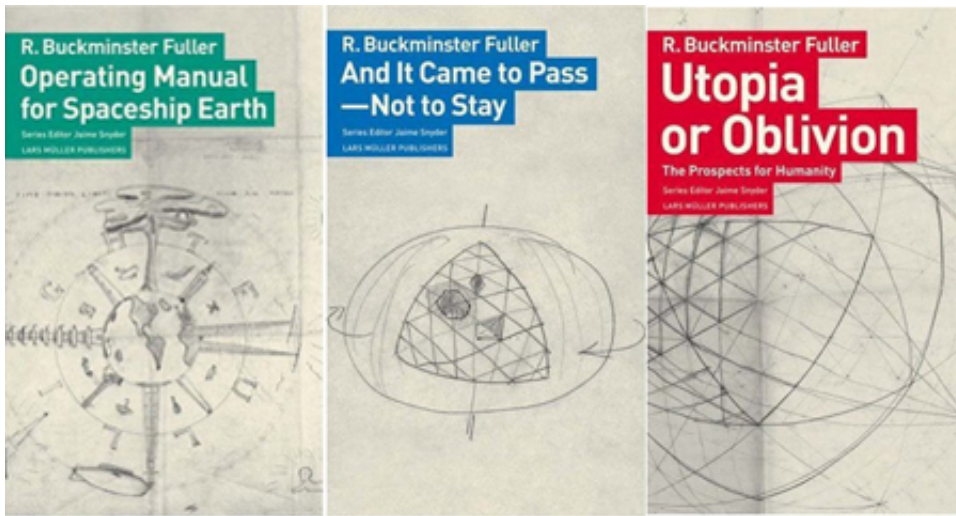
One month left to enter the 2009 Buckminster Fuller Challenge

http://vimeo.com/moogaloop.swf?clip_id=1163719

The world needs solutions to our most pressing problems and we know that they are out there, so if you're up to the Challenge, visit <http://challenge.bfi.org> and enter today! **The deadline for entries is November 7th, 2008 at midnight (Eastern Time).**

To read about last year's winner and over 150 other entries to the 2008 Challenge, visit the [Idea Index](#)

DYMAXION ARTIFACTS STORE: New editions of three of Fuller's classic books now available



Three of Fuller's most celebrated books – [Operating Manual for Spaceship Earth](#), [And it Came to Pass...Not to Stay](#), and [Utopia or Oblivion: The Prospects for Humanity](#) – have been brought back into print by Fuller's grandson Jaime Snyder and Lars Müller Publishers. These new editions have been beautifully redesigned and include introductions and updated footnotes by Snyder.

[Order yours today!](#)

TRENDS & PERSPECTIVES

Change everything now – one of the nation's most mainstream environmentalists says it's time to get a lot more radical



photo by [Nuno Leitao](#)

James Gustave “Gus” Speth’s office at Yale reeks of Old World charm, with a high ceiling and dark, wood-paneled walls adorned with souvenirs from his travels in Africa and Asia. Speth, sixty-six, the dean of the Yale School of Forestry and Environmental Studies, is a tall, genial man who wears conservative striped ties and speaks in a quiet southern drawl. If America can be said to have a distinguished elder statesman of environmental policy, Speth is it. Before he arrived at Yale, he cofounded the Natural Resources Defense Council, one of the most powerful environmental groups in the U.S., then went on to serve as a top environmental policy advisor to President Jimmy Carter. In 1982, he founded the World Resources Institute, an environmental think tank, which he headed for a decade. He also served as a senior advisor to President-elect Bill Clinton’s transition team and spent seven years as the top administrator in the Development Programme at the United Nations.

It’s not surprising that Speth would end up in a wood-paneled office at Yale. What is surprising, however, is that he uses his bully pulpit in academia to push for a 1960s-style take-it-to-the-streets revolution. (Source: [Orion Magazine](#))

<http://www.orionmagazine.org/index.php/articles/article/3222/>

Art and science, virtual and real, under one big roof



On a hillside overlooking this college town on the banks of the Hudson, the Rensselaer Polytechnic Institute has erected a technological pleasure dome for the mind and senses.

Eight years and \$200 million in the making, the Experimental Media and Performing Arts Center, or Empac, resembles an enormous 1950s-era television set.

But inside are not old-fashioned vacuum tubes but the stuff of 21st-century high-tech dreams dedicated to the marriage of art and science as it has never been done before, its creators say – 220,000 square feet of theaters, studios and work spaces hooked to supercomputers.

Within its walls, the designers say, scientists can immerse themselves in data and fly through a breaking wave or inspect the kinks in a DNA molecule, artists can participate in virtual concerts with colleagues in different parts of the world or send spectators on trips through imaginary landscapes, and architects can ponder their creations from the inside before a single brick or two-by-four has been put in place.

It opens for business on Oct. 3 with a three-week gala of performances including classical music, virtual reality rides,

symposiums and celebrations. Some scientists dream of eventually using the new center to create a version of the “Star Trek” holodeck where humans can interact with life-size “synthetic creatures” who live only in a computer. Others plan to teach surgery by doing virtual procedures or taking doctors on tours through models of actual hearts and circulatory systems. (Source: [The New York Times](http://www.nytimes.com/2008/09/23/science/23troy.html?pagewanted=1&r=1))

<http://www.nytimes.com/2008/09/23/science/23troy.html?pagewanted=1&r=1>

U.N. forecasts boom in green jobs



The UN says millions of new jobs will be created worldwide over the next few decades by the development of alternative energy technologies.

More than a million people already work in biofuels, but a UN report says that could rise by 12 million by 2030.

It says “green jobs” depend on a shift of subsidies from oil and natural gas to wind, solar, and geothermal power. New jobs could also include the expansion of recycling and making environmentally friendly vehicles.

The report, ‘Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World’, was commissioned and funded by the UN’s Environment Programme (UNEP). It says the manufacture, installation and maintenance of solar panels should add 6.3 million jobs by 2030, while wind power should add more than two million jobs.

UNEP director Achim Steiner said that if the world did not transform to a low-carbon economy it would “miss a major opportunity for the fast tracking of millions of new jobs.”

The report was written before the current global economic crisis. However, Mr Steiner said that to ditch green energy policies because of the crisis would be a mistake because in the long term the new jobs will make economies stronger and help make goods with less oil and gas.

[Click here](#) to download a summary of the report. (Source: [BBC News](#))

<http://news.bbc.co.uk/2/hi/science/nature/7634792.stm>

O3b Networks: a far-out plan to deliver the web



Greg Wyler worked in Rwanda from 2004 to 2006, trying to stitch together a modern Internet infrastructure for the African country, finally putting itself back together after a devastating civil war.

But no matter how hard he tried, Mr. Wyler realized there was a problem beyond his control: At some point, he had to connect his in-country network to the outside world. Satellite links were far too expensive and designed for one-way television broadcasting, not two-way Web traffic. And land lines were far, far away.

“You needed to be able to reach all the way across Africa...to where the global Internet was,” he recalls. In the United States, the challenge was often to connect “the last mile” to a home or business. In Africa, Wyler realized, the problem was “the first 5,000 miles.”

Today, Wyler is back in the US with a fresh perspective on the problem. Instead of slugging it out on the African landscape, the high-tech entrepreneur will attack from space. His new company, O3b Networks, plans to launch 16 satellites into low-earth orbit around the equator, opening up inexpensive Internet access to billions of people in remote parts of Africa, Asia, the Middle East, and Latin America.

O3b is short for the “Other Three Billion,” the nearly half of

the world's population that has little or no access to the Web.
(Source: [Christian Science Monitor](#))

<http://features.csmonitor.com/innovation/2008/09/24/o3b-networks-a-far-out-plan-to-deliver-the-web/>

RESOURCES

Green Recovery, A New Program to Create Good Jobs and Start Building a Low-Carbon Economy

This report from the Center for American Progress by Dr. Robert Pollin and University of Massachusetts Political Economy Research Institute economists demonstrates how a new Green Recovery program that spends \$100 billion over two years would create 2 million new jobs, with a significant proportion in the struggling construction and manufacturing sectors. It is clear from this research that a strategy to invest in the greening of our economy will create more jobs, and better jobs, compared to continuing to pursue a path of inaction marked by rising dependence on energy imports alongside billowing pollution.

To visit the website and download the report, [click here](#)

Follow Bucky on Twitter.com

It seems Bucky has his very own [Twitter feed!](#) Twitter.com is “a service for friends, family, and co-workers to communicate and stay connected through the exchange of quick, frequent answers to one simple question: What are you doing?”

EVENTS

Social Capital Markets Conference



When: October 13-15, 2008

Where: [Fort Mason Center](#), San Francisco, California

Who: Hundreds of leading social entrepreneurs and investors from around the world

What: Bringing together the people who are accelerating the flow of capital to good

Doing well and doing good is the mantra of a new generation of entrepreneurs and the organizations that invest in them. And Social Capital Markets 2008 (SoCap08) is a new event designed to bring together all of the people and organizations with a similar deep passion to change the world through sustainable businesses.

We're at the cusp of a massive sea-change in the ways that businesses can impact global and local problems. In the past, startup profit-motivated businesses were funded by risk capital, and socially-focused organizations were supported by philanthropy. The profit-oriented were rarely allowed to let a social mission intrude, and the socially-oriented were discouraged from building sustainable businesses. But a new breed of entrepreneurs – and a new mentality of those who fund them – is changing the landscape of business, investing and philanthropy.

At SoCap08, attendees will learn what works and what doesn't in this new world of social capital and social entrepreneurs, which hybrid social & business models reach sustainability and which don't, and where this emerging industry is headed. Attendees will be able to network with their peers, discovering a whole new realm of people they had hoped existed – organizations, groups, and individuals who share the same intention to launch and support sustainable businesses designed to impact global and local problems. Investors and entrepreneurs will find themselves helping to build a new community, gaining encouragement as they realize that they are not alone, but are part of

something big, important – and rapidly growing.

To learn more, visit socialcapitalmarkets.net

Have you come across interesting Design Science news articles, resources, or events?

We invite you to forward them so we can consider them for inclusion in future e-bulletins. Send them to:

[designsciencenews \(at\) bfi \(dot\) org](mailto:designsciencenews@bfi.org)

If we use your suggestion for future e-bulletins and you would like to be credited by name, please indicate it in your e-mail.

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