

Creative Creatures

The ideas and the work of the American and European painters, songwriters, photographers, fiction and non-fiction authors, musicians, film makers, architects, designers, poets, and dreamers I met during my 20 years in America.



33 / Janine Benyus, scientist, lecturer, writer, Stevensville, Montana

One day not too long ago, she was invited to dine intimately with the Prince of Wales and the Duchess of Cornwall, who, showing a sincere interest in her thoughts and works, did not want to share her company with distracting others. So, Janine Benyus dressed up nicely (I expect she had to borrow a dress fitting the occasion) and made her way to Kensington Palace only to splash her first glass of red wine all over her robe. Rumor has it that both the Prince and the Duchess busied themselves at helping clean up as good as possible; that the Duchess loaned Janine a very English knitted piece, a cardigan is my guess, to cover the damage; and that the evening became very enjoyable, and no doubt extremely instructive for the princely couple, after all.

When I first met Janine, in 1996 it was, she was a published writer of, amongst other titles, 'Beastly Behaviors: A Zoo Lover's Companion' and 'Wildlife in the Upper Great Lakes Region: A Community Profile'. Janine, not yet mingling with royalty, was staying in the Matfield Green home Ans and I bought in 2009, where at the time The Land Institute had its *dépendance*. She was writer in residence by invitation of the Land's Wes Jackson and finishing what would become her major opus, 'Biomimicry: Innovation Inspired by Nature'. I was lucky enough to be asked to read her manuscript. Biomimicry was to change her life; as a matter of fact, the book set about a change of Life in general, at least a change of thinking about life. In this book Janine develops the thesis that human beings should consciously emulate nature's genius in designs.

In 1997, she became President of the Center for Living Education, a nonprofit dedicated to place-based living and learning, a joint initiative of a few people from Colorado, Arizona, Montana and Matfield Green, Kansas. Sixteen years later she is still a Director, and very unscientific I now am the board's President. Meanwhile biomimicry entered the vocabulary and Janine became its ambassador; an esteemed speaker, much in demand all over the world; a member of several respectable think tanks; and a regular visitor of the White House and other distinguished places that remain closed to me. She was honored by Time Magazine and now is a Hero of the Environment; was named a Woman of Discovery; and became a Design Futures Council Senior Fellow. She is also

the receiver of the Champion of the Earth Award from the United Nations. Don't think hers was an easy path. Janine is essentially a shy and humble woman. I remember that I once proposed she hire a good-looking stand-in whom she would brief on the answers to the fifty most asked questions, so that Janine could stay home, research, and continue writing with the stand-in as her public alter ego. She would never have had her wine-splashed dress cleaned by royalty if she had listened to my advice.

I lost touch with Janine soon after the book came out. Shortly after its introduction, she co-founded the Biomimicry Guild, the Innovation Consultancy which helped innovators from 250+ companies worldwide learn from and emulate natural models in order to design sustainable products, processes, and policies that create conditions conducive to life. She also founded the Biomimicry Institute, a non-profit whose mission was to naturalize biomimicry in the culture. These two organizations now work under one canopy, *Biomimicry 3.8*. Janine, an educator at heart with degrees in natural resource management and English literature & writing from Rutgers University, lectures at the University of Montana in Missoula and eagerly works towards restoring and protecting wild lands.

Biomimicry was already a burgeoning scientific approach before Janine's book was published—think of the Swiss engineer George de Mestral who, whilst out walking his dog became annoyed by the burrs catching and sticking to his clothes and in his dog's fur. He decided to study them under a microscope. The magnification revealed a network of tiny hooks. The product of his labors was Velcro. The year was 1951... Yet Janine was the one who created the field and who introduced and promoted its possibilities to the world. She was the one who made clear that drawing design inspiration from nature's wisdom, not people's cleverness, is the smarter way. She was the one who introduced a new era based not on what we can *extract* from organisms and their ecosystems, but on what we can *learn* from them. Find which organism from billions of years of experience knows how to solve a specific problem. "Do things nature's way," says Janine, "because it has the potential to change the way we grow foods, make materials, harness energy, heal ourselves, store information, and conduct business."

In the past fifteen years, many innovators have learned to use nature as model, measure and mentor. Think of solar cells inspired by leaves; paint that self-cleans like a lotus leaf; detachable adhesives that mimic gecko feet; buildings designed to ventilate like termite mounds. One scientist has mimicked the abalone's self-assembly process to create an ultra-tough optically clear glass in a low-temperature, silent manufacturing process; another has developed a heat-stable vaccine storage based on nature that eliminates the need for costly refrigeration; someone else studied the blue mussel to find a solution for an under-water glue. Biomimicry zeroes in on medical compounds by watching chimps heal themselves with plants from nature's medicine cabinet. Mimicking natural selection in computer software leads to genetic algorithms. And so on...

Janine and her joint staffs of scientists and communicators organize workshops for architects, engineers and biologists and give 'Biologist-at-the-Design-Table' trainings. The 'Innovation for Conservation' program is another endeavor, as is www.AskNature.org. It's not about changing nature, says Janine. "Biomimicry says: if it cannot be found in nature, there is probably a good reason for its absence. It may have been tried, and long ago edited out of the population. Natural selection is wisdom in action." She believes that the more people learn from nature's mentors, the more they will want to protect them. "That's why I write, speak and revel in describing the wild teachers in our midst." I hope Janine will soon revisit Matfield Green—the Center for Living Education is thinking of organizing a Biomimicry event in this tiny little town where both Wes Jackson and Janine Benyus started their climb to a sustainable earth, and to international respect and fame.

Ton Haak, August 2013