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The Guardian Profile: Stewart Brand

Whole Earth visionary

A former soldier, he joined the Merry Pranksters and learned business skills from hippie drug dealers. He gave away profits from his successful publishing venture, moved into computers and is currently raising funds to catalogue every species on the planet. Andrew Brown on an influential, highly idiosyncratic American thinker

Andrew Brown
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Stewart Brand stands as if the world were rushing at him like a bull and he was ready to vault it: balanced on the balls of his feet, grinning and eager in the car park of an industrial estate outside San Francisco. At his belt hangs a sheath knife. He lives on a houseboat, works in a prefabricated shed and has a fair claim to be one of the most influential thinkers in modern America. He is currently intent on raising $3bn for his latest project: he wants to find every species of living thing on earth, so that when we talk about biodiversity, we know what we really mean.

The All Species project, as he calls it, has the simple ring of his first really successful campaign, when he was a hippie photographer living in San Francisco in 1966 and hitch-hiked across the country selling badges that said simply "Why haven't we seen a photograph of the whole Earth yet?" The story of the Whole Earth badges is a nice example of how Brand gets things done, starting with an idea that appears completely crazy, and insinuating it through the cracks in society until it becomes just a piece of the common sense on which we all stand. Pictures of Earth from space are commonplace now, but when he had the idea it was 10 years since the first Sputnik launch and no one had pointed a camera back at Earth and photographed the whole planet.

That first idea came from idleness. "I was just a loafing artist in North Beach, and I went up on the roof, took a few mikes of LSD and watched the day go by, shivering in a blanket. I noticed that the buildings of downtown San Francisco were not parallel. They diverged slightly - it's a standard psychedelic illusion. But at the same time, I was thinking that given that the surface of the earth is curved, they do diverge slightly, especially on the fault line. And I can see that from my altitude of 200 micrograms and three storeys. But I would see it a great deal more if I were up higher. At a certain distance, the curved horizon closes and you get the image of the Earth as a whole. That's why I conjured up the badges, and I started selling them the following week. A bunch of them got to Nasa and various other places in Washington, and, some say, may have been influential in the photos we got back from Apollo 8."

What distinguished Brand from a lot of hippie visionaries is that phrase: "I started selling them the following week" - he acted on the idea as soon as he had it. When Tom Wolfe was being rattled up and down the streets of San Francisco in a pickup truck full of crazed freaks - the scene which opens Ken Kesey's Electric Kool-Aid Acid Test - Brand was the straight man doing the driving. There is something conservative, serious, almost Victorian about the ways in which he has promoted revolutions; yet this upright quality has enabled him to keep his balance through 40 years of varied enthusiasms.

He was into ecology and American Indians - nobody called them Native Americans then - in the early 60s, and personal computers by the early 70s. In the 80s he was one of the

first to exploit the early internet, and then he founded a business consultancy which set out to spread the gospel of the new economy around the world. By the 90s, his interests had switched to architecture: his book How Buildings Learn is a wonderful manifesto against the ambitions of most modern architecture. The millennium was celebrated with a project to build the biggest and slowest clock in the world: one that will last 10,000 years. And now there is the ambitious All Species project, a return to his roots as a biology student in California in the late 50s.

His friend and protege, Kevin Kelly, one of the founders of Wired magazine, says: "He has an appetite for where things are happening; lots of other people have good instincts, like journalists, for what will be interesting. Stewart's take on the world is to do things. He will take an idea, say within a few minutes that this could be turned into action, and then pursue it until it happens."

His background was solid, educated, upper middle-class: he was born in 1939, in Rockford, Illinois, where his father, a graduate of the Massachusetts Institute of Technology, ran an advertising agency. His mother had graduated from another elite university, Vassar. Stewart was the youngest of four children. He says: "All of us got out of the Midwest just as soon as we could: headed for the various coasts and stayed there." He spent two years at an East Coast prep school, ended up at Stanford University, south of San Francisco, where he read biology and, in his spare time, did officer training.

After Stanford, he joined the army as a lieutenant for two years. He qualified for the paratroops, but never fought anywhere. Instead, he was trained as a photographer. He still appreciates his time in the army: "At government expense I was trained in leadership and small- unit management." He is businesslike and bellicose in his assessment of the modern American army: "They are given rules of engagement that strike me as impractical and basically cowardly - it offends me as an infantry officer to treat our troops that way. It's a lack of respect for their capabilities."

Yet outside the army, his life was bohemian. He hung around with artists in New York and San Francisco; he spent one summer working as a logger, and after his military service found a summer job photographing a Native American reservation in central Oregon. In the winter of 1963 he was living in the steeple of a church outside New York that had been converted into a "psychedelic tabernacle".

Even at this stage, Brand, it seems, knew interesting people: "Through Ansel Adams [the photographer], I got work with Stuart Udall, secretary of the interior, photographing Indians. The Indians were not on anyone's map at that time. They had just disappeared. Hanging out there gave me a glimpse of a completely different and in some ways much more interesting America. So then I started hanging out on reservations basically every summer. In the course of one of those things I went to a conference in Sheridan, Wyoming, where I met Lois Jennings, a Chippewa woman from Washington DC, and a couple of years later married her."

It was in this period that he met Ken Kesey, the novelist and apostle of LSD, partly because Kesey's first novel, One Flew Over The Cuckoo's Nest, had a Native American hero, Chief Broom. He became a member of Kesey's group, the Merry Pranksters; and was a link between the urban bohemian and Native American cultures. He ran a series of shows, something between multimedia art and street theatre, called "America Needs Indians", so that in the middle of the chaos of an acid test, you might find Stewart Brand, short-haired, in a wigwam on the floor of whatever warehouse had been taken over for the night. He was always short-haired: he never even grew a beard.

The idea that indigenous people are the natural allies of the hip, young, and fashionable is so obvious now that it is easy to forget that someone must first have had it and Brand, in the early 60s, may have been that person. His take on what happened is characteristically wry: "By the end of the 60s, Indians had been adopted by the hippies as a source of inspiration and possible alliance; and to everyone's astonishment, not least mine, it basically worked out. There was a transmission of traditional frames of reference from older Indians to hippies, who were then passing it to their young peers on the reservations and a lineage was inadvertently, but I think genuinely, preserved."

By the time everyone else was on the reservations, Brand had moved down the peninsula from San Francisco to the university town of Palo Alto, on the edge of what is now Silicon Valley. There he founded and ran the Whole Earth Catalogue, an extraordinary collection of short reviews of books, clothes, stoves, and even early computers, along with fiction and anything else that might be used to change the world. It was done with characteristic military briskness: his rule was to read a book for 15 minutes before reviewing it. These were books for people who wanted things done. At the front of each edition he placed a slogan that faced the world as he did, witty, profound, high-spirited and serious: "We are as Gods, and we might as well get good at it."

His vision of the psychedelic era was essentially businesslike - as he tells the story, a lot of the founding hippie generation learned their manners as drug dealers in Haight Ashbury, San Francisco: "I wasn't one myself, though I knew a lot of people that were. But when the Mob came in and killed a few of us, then we got out of that business, because they sliced up [the hippie dealer] Superspade and hung his torso from a tree out on the beach.

"So my friends went into legitimate business with the same moves they learnt as dealers - being honest with your customers, being honest with your sources. We were rejected by all large institutions. They did not want to be sullied by the likes of us. They didn't need to be. The people who did want to be sullied were small business people who noticed that we paid our bills on time. We didn't know any better. So we became small business people, and technology enjoyers, appreciators, users, and inventors. That's why the 60s had a lasting impact and effect."

The catalogue became an extraordinary success, even in Britain, where Penguin had a huge success with the last edition. In the States it won a National Book Award and sold 1.5m copies, but by 1971 Brand was burned out. "I went into pretty severe depression and just kept working. Then I had the idea that we could just quit. Got a deal with Random House that they would distribute the last one and I stopped the catalogue, stopped being married, and moved to San Francisco."

The farewell party was a typical piece of theatre: he invited 1500 people and announced at 10:30pm that he had brought $20,000 to give away and it was up to the partygoers to decide who should have it. The discussion continued until dawn, when there were only about 20 people left, and they decided unanimously to give it to a computer hacker named Fred Moore. One report said: "Moore wandered around for a while, trying to get riders to accompany him back to Palo Alto and wondering aloud whether he should deposit the money in a bank account... then realised he had no bank account."

At this time, for most of Brand's bohemian contemporaries, computers meant large and faceless companies like IBM. But Brand himself had caught a glimpse of a different future at the beginning of the 60s, when a copy of the first computer game ever written, Space War, had escaped from MIT and found its way to Stanford. In about 1962, Brand had seen people playing the game, and been astonished by the effect it had: "What I saw was an interaction around computers that was as intense as anything I saw around drugs or anything else that I knew. People were absolutely out of their bodies playing. It seemed that computers were doing everything that drugs had promised. Drugs were much more self-limiting than computers: the hackers had found something better than drugs, but theirs was the same bohemian frame of reference."

Most of the profit from the last Whole Earth Catalogue went into a charitable foundation that gave away $1m in three years: the money was only given to individuals, not to groups or causes. This was one of the inspirations behind the later MacArthur "genius" awards, which are made to scientists to allow them to become more interesting by freeing them from financial worries. At times, Brand has been disappointed that he's never had a MacArthur award, but eventually he decided to live as if he had one anyway.

Brand does not just gesture with his hands. He is a man quite visibly animated by ideas: and when he gets onto a subject that inspires him, he is animated all through his spine, like a dancer. This is partly because he approaches conversations as something more than salesmanship. Kevin Kelly says, "I think he took a vow never to repeat himself. He's terrible at giving talks, and he knows this. But he's like a nova in conversation. The idea in his life is never to use the same description of anything twice." The flip-side is that when he has nothing to say, he says nothing. Howard Rheingold, who edited the Whole Earth Catalogue after Kelly went on to be one of the founders of Wired, says: "A lot of people find him somewhat aloof and cold. My office was about a dozen feet from his, and in the four years I worked there, we talked about 12 times.

"The only time I really saw him animated was when I noticed he had a new Swiss army knife on his belt and I asked him about it. He took it out and showed me every single blade and gadget. There was even a kind of saw on it - he said 'you could cut your way out of a car trunk with this'. He definitely has this nerdy side; and he really liked being in the army. That's a big part of the way he left his editors alone. His style is that you promote the guy or you sack him. You don't try to do his job for him."

At the age of 32, having made $1m for the charity that managed the Whole Earth profits, Brand was astonished to find he needed a job again. Instead, he did some journalism, and in 1974 published his first book, Two Cybernetic Frontiers. The book came out the year before Bill Gates and Paul Allen founded Microsoft, a time Brand now calls the computer renaissance. Many of the early Silicon Valley hackers were close to the Portola Institute, a California think-tank which had shared a building with the Whole Earth Catalogue. That was how he met Steve Wozniak and Steve Jobs, when they were building their first Apple computer in a garage.

Lee Felsenstein, who later designed the first portable computer, was a radical trying to co-opt mainframe computers to the revolution when he first met Brand in 1972. He says, "Stewart gave people permission to think about technology as something of which society is made rather than as something counterposed to society. Everyone wanted him to tell them what to do [instead] he empowered us by sticking to discussing principles and reporting on what others were doing and saying. We really needed to trust ourselves and he constantly passed back to us our attempts to give our power to him. This made him look stand-offish and disengaged. It was a price worth paying. He and Whole Earth had enough authority to convene the first Hacker's Conference as the launch party for Steven Levy's book Hackers, in 1984. Typically he left it to others to pick up the idea of an ongoing gathering."

In 1975 Brand started a new magazine, Co-Evolution Quarterly, which was to some extent a continuation of the catalogue through other means. He had a son, Noah, from a relationship that did not last. For the last 18 years he has been married to Ryan Phelan, a businesswoman 13 years his junior who he regards with delight. He and Phelan live on a small boat moored off an industrial estate in Sausalito, across the Bay from San Francisco. His main office is another boat, the Mary Heartline, which rests on trestles a couple of yards inland. He relishes the story of the Mary Heartline's progress from fishing boat to hideaway for a gay couple to a place where a pair of mob laywers could take their mistresses - they were the ones who moved it onto land - and finally to his own office. He once described it as "like working inside a Victorian roll-top desk".

The new magazine was much more concerned with computers than the old one had been: the idea that effective environmentalism doesn't mean rejecting technology but embracing the right ones had now become enthusiastically accepted. He worked for a while as an adviser to Jerry Brown, former governor of California, and ran courses with provocative titles such as "Creative Philanthropy", "Business as Service", "Street Saint

Skills". Then, in the early 80s, the personal computer, whose conception Brand had watched 10 years before, suddenly emerged into the wider world.

It was a vindication of all his predictions. It was also the occasion of his most catastrophic failure. In 1984, his agent, John Brockman, secured what was then the largest advance in paperback history, $1.3m, for the Whole Earth Software Catalogue. Brand dithered for 12 hours whether to accept the money, threw the I Ching and took the plunge.The timing couldn't have been worse. The new catalogue was the 257th computer magazine in the world rather than the first; it came out quarterly when the news was weekly, and it launched in the teeth of the first big recession in the industry, when more than half the software companies went bust. The venture collapsed as thoroughly as any dot.com. The British publisher paid £40,000 for the rights, and sold 220 copies. "It was probably about the last time I used the I Ching that way," Brand says. "The book should have told me 'Uh oh' and 'Too late'. But I still have my original 1957 edition with all the questions and answers pencilled in the end papers."

Yet in 1984, the same year as the software catalogue went bust, he managed two bits of social engineering that had a lasting impact. The first was the Hackers' Conference, which brought together for the first time all the different clans who had been involved in the genesis of the personal computer: the MIT hackers of the 60s who had produced Space War; the Silicon Valley types who had built the first desktop computers; and the 80s generation, who had first made money out of software, and in some cases lost it already too.

In 1984 he also co-founded the Well, a bulletin board which is something like an internet chatroom. It was where most of the discoveries of cyberspace were first made: the speed, intimacy and addictiveness of communication; the possibilities of fraud; the extraordinary way in which people find themselves "belonging" on a hard disk 1,000 miles from home. But it has never been very profitable. Financially, the Well was rescued by Deadheads (fans of the Grateful Dead) who found in it a place to discuss those obsessions which the outside world finds tedious.

"The Well proved early on what everyone else proved later, that it is almost impossible to make money online, unless you're Ebay," says Brand. Once the Well was running, Brand decamped to the east coast, where he spent a year at MIT exploring what computers could do for multimedia and ended up writing a book on the MIT media lab. Then he became involved in some of the first thinking about globalisation: setting up a consultancy called the Global Business Network, and consulting for a couple of years for Royal Dutch Shell. The lineage from outcast longhairs to the ponytails who were to inherit the 90s was complete.

His influence grew steadily. "People will always take a call from Stewart," says Kevin Kelly. "He's very good at making friends and networking. He has wonderful manners; part of his success is in always making allies, and he has always been quick to give credit

to other people, in private as well as in public. But he's not a partygoer. He's very shy, and he would just rather read a book."

In the 90s, just as everyone else was trying to rush into the future, Brand got interested in conservatism again. He spent six years working on How Buildings Learn, which was also made into a series for BBC2. The book brought together all his interests in the social uses of technology in an entirely original way. By studying buildings as four-dimensional artefacts, whose changes through time are as important as the way they stand when built, he was able to ask very clearly exactly what they did for people. It was a return, in a sense, to the aesthetic of the Whole Earth Catalogue and the early Native American phase: a belief in the wisdom of old things matured over centuries. James Runcie, who produced the series for the BBC, says: "He is basically a decent ex-hippie, very Californian, but who is still trying to make some lasting mark on the world."

All of Brand's career seems to oscillate between revolution and anachronism: but he sees it as a choice between two forms of revolution: "The contrast between the French revolution and its outcome, and the American revolution and its outcome is actually something that I care about. Much as we carried on Diderot's encyclopedia in the catalogue and carried on a French Salon approach in the Well, the conservatism of the American revolution is what made it so successful and meant that the original leaders carried it all the way through, and that they did not kill each other, unlike the French revolution, which aspired to a great deal more. The American founding fathers did not repudiate the past in the way the French did. They burned their bridges but kept the libraries. That conservatism of continuity is basically the same as the conservatism of How Buildings Learn."

As the dot.com bubble began to collapse, inflated in part by his proteges at Wired, Brand turned away and became involved with the Clock of the Long Now, a gigantic piece of retro technology that is planned to run for 10,000 years. There is a prototype in the Science Museum in London, but the real thing will be built in a national park in the Nevada desert. If built to plan, it will tick once a day and chime once a century, yet the mechanism, designed by Brand's friend Danny Hillis, who built one of the first parallel-processing supercomputers at MIT and then went on to become a senior executive at Walt Disney Imagineering, will be accurate to within one day in 20,000 years.

Along with the clock goes a library, which addresses the paradox of digital information - it is eternal but in practice lasts no more than 15 years, as the software and even the hardware with which it was recorded falls out of use. We can read Newton's research notes from 1690 more easily than the files of the first generation of computer researchers at MIT in the 60s. So the Long Now Foundation is working on making digital information as long-lived in practice as it is in theory. Among other things, it is planning to preserve 1000 human languages, their grammar, vocabulary, and history, all etched onto a single compact disc in letters that can be read by a human eye with a

magnifier, not by a silicon chip with a laser beam like normal CDs.

With this exercise under way, Brand is onto the next one. The All Species project is hugely ambitious, and characteristically original. It is a measure of its ambition that no one knows just how ambitious it will be. Are there 30m species of life on Earth, or 50m? The only way to find out is by counting. It is an idea which combines almost all his strengths: he knows how to network, to raise the money and to get the foundation set up; he is in touch with the kind of technological changes that will make it possible to sort through the DNA of innumerable bacteria; it is sufficiently grand and theatrical to stir imagination, but it is also participatory theatre, which will require masses of volunteer labour. And it is global, by definition.

For a man so American, he has a finely developed sense of the world outside his own continent. Britain, he says, could well be the first country to complete an inventory of all its species. He likes this country, obviously; and to some of his American friends, he appears rather British - he even says bloody, which is unusual in California. But looked at from here, his mixture of optimism, ambition, and pragmatism makes him a very American revolutionary.

Life at a glance: Stewart Brand **Born:** December 14 1938, Rockford, Illinois.

Education: 1954-56, Phillips Exeter Academy; Stanford University.

Married: v1966 Lois Jennings (marr. diss '72). Ryan Phelan 1983- . One son, Noah Johnson.

Career: 1960-62, US Army officer; '62-68 Created multi-media performances; '77-79; adviser to Jerry Brown; '88- co-founder and board member Global Business Network; '89 - Member board of trustees, Santa Fe Institute; '95 - co-founder, then president, The Long Now Foundation; 2000 co-Founder, All Species project. Publications: 1968-72, Founded, edited, and published Whole Earth Catalogue; '74 Two Cybernetic Frontiers; '87 The Media Lab; '94 How Buildings Learn; '99 The Clock Of The Long Now.