Since the mid-1960s, John Brockman has been at the cutting edge of ideas. Here, John Naughton introduces a passionate advocate of both science and the arts, whose website, Edge, is a salon for the world's finest minds. On the facing page they discuss Marshall McLuhan, elitism and the future of the internet.

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to say that John Brockman, literary agent is like saying that David Hockney is a photographer. For while it's true that Hockney has indeed made astonishingly creative use of photography, and Brockman is indeed a successful literary agent who represents and publishes many of high-profile scientists and communicators, in both cases the degree to which he undertakes the reality. More accurately, you could say that both are very good at something.

It was an idea that Hockney and Andy Warhol, several other artists, several poets, dramatists and musicians. The result was a series of "intermedia" shows, which included visual art, dance, poets, dramatists and musicians. The result was a "Theater of the image" and "Theater of the idea." Brockman coined the term to describe a group of people who performed in conjunction with Marshall McLuhan, introduced Brockman to several scientists and eventually arranged for him to meet McLuhan and his colleagues. The outcome was "Theater of the image" and "Theater of the idea." Brockman is best known for Edge.org, a site he founded as a continuation of what he describes as "a failed art experiment" his friend, avant-garde artist, and "an intellectual enzyme". The first thing you notice about Brockman, though, is the interesting way he bridges CP Snow's "The Two Cultures" divide between the natural sciences and the humanities. He is fascinated, he told Wired magazine, "by people who can take the chance to bridge the cultures in the arts, literature and science and put them together in their work." He is passionate about big ideas. He is interested in science, but there's more to science and technology. Many of the people who are doing it." He is interested in science, but there's more to science and technology. Many of the people who are doing it.

Brockman is a literary agent by vocation. He is a kind of "intellectual enzyme" and a "theater of the idea". Brockman's immersion in both sides of the Two Cultures runs deep. He did an MBA at Columbia in the early 1960s and started his own financial advising company on Park Avenue. But a friend of his, a writer named Lee Byars, did identify his 100 most brilliant minds and phoned each of them. The result: 70 hung up on him! Byars died in 1967, but Brockman persisted with his idea, or at any rate with the notion that it might be possible to do something analogous using the internet. And so Edge.org was born as a kind of high-impact online salon with Brockman as its editor and host. He describes it as "a conversation. We look for people whose creative work has expanded our notion of who we are. We encourage work on the cutting edge of the culture and in innovative, innovative species. But social learning means that most of us can make use of what other people do and not have to invest the time and energy in innovation ourselves." This essay is a perfect illustration of Brockman's idea of what Edge.org should do: to serve as a forum for big, intriguing, and/or disturbing ideas advanced by intellectuals who have a track record of major achievements in their fields. He doesn't seem to have much time for the scholar who crafts along the frontiers of knowledge with a magnifying glass. This philosophy also gives itself over to the annual meeting of the launch of the site, he poses a question and invites Edge participants to answer it.

What kinds of question? "Questions that inspire answers we can't possibly predict. My goal is to provoke people into thinking they normally might not have." In previous years, the questions have included: What do you believe even though you cannot prove it? (2005) What is your dangerous idea? (2000) What are you optimistic about? (2007) What will change everything? (2004)

In 2010, Brockman's question was: "How is the internet changing the way you think?" He received 122 replies in the form of mini-essays of varying lengths. These were published on the Edge site in the usual way, but 120 of them have now been collected between the pages of "The Man Who Runs the Web". Read it over Christmas. I was intrigued by the book and emailed John Brockman to discuss some of the thoughts he evoked. What follows is an edited transcript of our exchanges.

Brockman can phone Nobel laureates with a good chance that they will take the call. To Brockman this is extraordinary, "It's all based on word of mouth and reputation. Edge, contrary to how it may appear, is not exclusive. troll you, but in this sense of an open elite, based on meritocracy. The way someone is added to the Edge list is when I receive a word from a Steven Pinker, a Brian Ennix, a Martin Rees or a Richard Dawkins, telling me to do so. It's as simple as that and I don't recall ever saying no in such circumstances. Besides it appeared online, Edge.org has consistently been one of the most thought-provoking and interesting sites on the web. As I write, the front-page leads an extraordinary case by the evolutionary biologist Mark Pocel in which he argues that humans' capacity for social learning has made us less intelligent than we like to think we are. "If I'm living in a population of people, he writes, 'I can observe those people, and see what they're doing, seeing what innovations they're coming up with, I can choose among the best of these ideas, without having to go through the process of innovation myself. So, for example, if I'm trying to make a better spear I really have no idea how to make that better spear. But if I notice that somebody else in my society has made a very good spear, I can simply copy him without having to understand why. "What this means is that social learning may have set up a situation in human society... we have been selected to be very, very good at copying other people, rather than innovating on our own. We like to think we're a highly inventive, innovative species. But social learning means that most of us can make use of what other people do and not have to invest the time and energy in innovation ourselves." This essay is a perfect illustration of Brockman's idea of what Edge.org should do: to serve as a forum for big, intriguing, and/or disturbing ideas advanced by intellectuals who have a track record of major achievements in their fields. He doesn't seem to have much time for the scholar who crafts along the frontiers of knowledge with a magnifying glass. This philosophy also gives itself over to the annual meeting of the launch of the site, he poses a question and invites Edge participants to answer it.

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John Naughton

I saw you’ve been variously described as a “cultural impresario” and an “intellectual oscillator.” How would you describe yourself?

John Brockman

Wallace Stevens wrote in his poem “Man With the Blue Guitar”: “Throw away the lights, the definitions. And see, if in this world we’re to die. That it is this or that it is that.” But do you like the sound names?

Any attempt to describe myself would end in awkwardness, confusion and contradiction. Also, I like to keep changing the subject, to surprise myself.

What’s your intellectual background? From which of the original “Two Cultures” do you come? I’m an engineer, so this too; these cultures stuff really resonates with me.

In 1944, at three and a half years old, I was stricken with spinal meningitis and was in a coma for six weeks at Boston’s children’s hospital. The doctors had given up on me when, unexpectedly, I opened my eyes. I am told the first thing I said was: “I want to go to New York.”

I arrived there at age 20 in 1961 for graduate school at Columbia. I was immediately struck by, and impressed with, the argumentative and exciting culture in which conversations were being carried out month after month in the pages of literary magazines such as Commentary, Partisan Review and the UK’s Encounter.

For a dollar or two, I was privileged to look over the shoulders of the intelligentsia of the day—Lionel Trilling, Stephen Spender, Hannah Arendt, Alfred Kazin et al—as they went at one another on important issues such as the Eichmann trial and/or more trivial pursuits as to who slept with whom on a particular Bloomsbury weekend or who was still a Stalinist after the purge trials of 1937.

It’s interesting to note that while I was ostensibly at Columbia to study economics and finance, my interests and instincts were strictly cultural and I made the most of the resources of a great university and New York City to educate myself in the areas that interested me and also to situate myself in the milieu where the action was taking place.

How did you get involved in the arts?

I quickly realised, but did not articulate, something the anthropologist Edmund Carpenter, McLuhan’s collaborator, who in turn invited me to Fordham University in 1967 to meet McLuhan, Father John Culkin and other members of that charmed circle of communications theorists. The discussion centred on the idea that we had gone beyond Freud’s invention of the unconscious and, for the first time, had rendered visible the conscious.

OK, so you’re deeply immersed in the avant-garde scene and entranced by McLuhan. But how did you get from there to an involvement with science and technology?

It was McLuhan who turned me on to The Mathematical Theory of Communication, the book by Bell Labs scientists Claude Shannon and Warren Weaver that began: “The word ‘communication’ will be used here in a very broad sense to include all of the procedures by which one mind may affect another: This, of course, involves not only written and oral speech, but also music, the pictorial arts, the theatre, the ballet and in fact all human behaviour.”

He also pointed me to Oxford logarithm ZZ Young’s 1950 BBC Reith Lectures entitled “Doubt and Certainty in Science.” And I read his quoting one memorable line that has stuck with me and informed my thinking since that day: “We create tools and mould ourselves through our use of them.”

Any attempt to describe myself would end in awkwardness, confusion and contradiction

John Cage had also picked up on all these ideas. He convened weekly dinners during which he tried them out, as well as his mushroom recipe, on a group of young artists, poets and writers. I was fortunate to have been included at these dinners where we talked about media, communications, art, music, philosophy, the ideas of McLuhan and Norbert Wiener.

McLuhan had pointed out that by inventing electric technology, we had externalised our central nervous systems; that is, our minds.

Cage went further to say that we now had to presume that “there’s only one mind, the one we all share.” He pointed out that we had to go beyond private and personal minds and understand how radically things had changed. Mind had become socialised.

“We can’t change our minds without changing the world,” he said. Mind as a mammoth extension became our environment, which he characterised as “the collective consciousness,” which we could tap into by creating “a global utilities network.” In some ways in 1964 and 1965 he was envisioning what would become the internet, long before the tools became available for its implementation.

Inspired also by Buckminster Fuller and others, I began to read avidly in the field of information theory, cybernetics and systems theory. I also seized the opportunity to become the first “McLuhanesque” consultant and producer and soon had a thriving business working with clients that included General Electric, Metromedia, Columbia Pictures, Scott Paper and the US Treasury.

I wrote a synthesis of these ideas in my first book, By the Light John Brockman, New York, 2001. Photography by Peter Yang/August Image
Not only are they focused on science—contributors to Edge are what I call “you think?” — the quality of the questions it asks. The site stands or falls on you won’t know some students learn.

Inside Track

MARTIN REES
Ex-president of the Royal Society, professor of cosmology and astrophysics, University of Cambridge

The internet enables far wider participation interaction science it treats the playing field between researchers in major centres and those in remote isolation. With a handicap of inefficient communication, it has transformed the way science is communicated and debated. More fundamentally, it changes how research is done, what might be discovered and how students learn.

JON KLINERBERG
Professor of Computer Science, Cornell University

When I first used an internet search engine in the early 1990s, I imagined myself dipping into a vast, universal library. A museum vault filled with accumulated knowledge. The fact that I shared this museum vault with other visitors was something that I knew in principle, but could not directly perceive. When I go online today, all those rooms and hallways are beginnig. What strikes me is the human texture of this medium. I can appreciate the way the event and the crowd reflect it in synthesis, each dependent on the other — people all talking, at once, about the event, but the event only fully comprehensible as the sum total of the human reactions to it. The cacophony might make sense, and might not.

HELEN FISHER
Research professor, Department of Anthropology, Rutgers University

The internet is a return to yesteryear: it simply allows me (and the rest of us) to think, and base research for which we were built long, long ago. Take love. We think it’s unnatural, our earliest ancestors were people in a bar or club. But it’s far more natural to...
edge is not for everybody. It helps to know some stuff. But you won’t find arrogance in the responses.”

...Actually not. In this regard, the major challenge is to get 150 to 200 of the most brilliant people in the world to follow a simple set of guidelines and one of the pronouncements this year is: “No anecdotes about spouses, significant others, kids, family pets.”

The reason for this prohibition is that Edge is a conversation – it’s not a magazine written for the public. The audience for the contributors to Edge is the other contributors. The readers have the opportunity to look over the shoulders of some extraordinarily gifted individuals as they go back and forth in the battle of ideas. And since the scientific method is central to our activities, I want to avoid the personal and focus on evidence.

I was pleased to see quite a lot about the “collective IQ” of the net – which is something that the mainstream media don’t seem to understand at all. A passage in William Calvin’s essay where he talks about the net enabling us to “stand on the shoulders of a lot more giants at the same time” reminded me of an older metaphor coined by Dr. Doug Engelbart, who invented the mouse, windowing interfaces and a lot of other seminal computing technology: “Power steering for the mind.”

One of the concepts that people were talking about in the late 60s was “the collective conscious.” McLuhan made specific reference to it on many occasions. Cage used to talk about “the mind we all share”. The cultural anthropologist Edward T Hall, who was in that circle, and studied what he called the silent languages of time and space, once pointed out to me that our most significant, most critical inventions were not those ever considered to be inventions, but those that appeared to be innate and natural.

His candidate for the most important invention was not the capture of fire, not the printing press, not the discovery of electricity, not the discovery of the structure of DNA. Our most important invention was...talking. This was something considered innate and natural, so actually something that was probably never even considered, until the first human rendered it visibly by saying: “We’re talking” – probably an important moment in our evolutionary past.

The internet is such a new invention, a code for the collective conscious or “distributed networked intelligence”. The internet is our collective externalized mind. I think it is in terms of the concept of feedback, the infinite oscillation of our collective consciousness interacting with itself, adding a richer, deeper dimension to what it means to be human.

It’s not about computers. It’s not about what music your friends are listening to. It’s about human communication. “We’re talking.”

How is the Internet Changing the Way You Think?”, edited by John Brockman, is published by Atlantic Books. John Naughton’s From Gutenberg to Zuckerberg: What You Really Need to Know About the Internet is published by Quercus Books. To buy either title for a special price with free UK p+p, call 0330 333 8047 or go to justlinkashopping.co.uk

The internet, from John Brockman’s new book

know a few basic things about an individual before meeting him or her. Internet dating sites, chatrooms, social networking sites provide these details, enabling the modern human brain to pursue more comfortably its ancestral mating dance.

We, or at least I, need tools that will provide us with the Diet. Internet, the version that gives us the intellectual caffeine that lets us achieve what we aspire to, but which doesn’t turn us into hyperactive intellectual jerks.

JUDITH RICH HARRIS
Independent investigator and theoretician

The internet dispenses information the way a ketchup bottle dispenses ketchup. At first, there was too little; now, there is too much.

At first, there was no hyperinflation of just-enoughness. For me, it lasted about 10 years. They were the best years of my life, but they were the death of the 60s, his manner and the way in which he presented himself was rather kooky and never to be forgotten. Sitting down at lunch, you would be faced with machine gun-like expositions of facts and ideas ranging from medieval classical literature to arcane scientific matters concerning the aural space of the native North American Eskimos, the focus of the work of his collaborator Edmund Carpenter.

It was Carpenter who explained to me what he thought was the secret behind Marshall’s brilliance. At the time, I was from Marshall. For anyone who

RODNEY BROOKS
Panasonic professor of robotics, MIT Computer Science and Artificial Intelligence Lab

The internet is stealing our attention. It

comparisons for it with everything else we do. A lot of it offers is high-quality competition. But unfortunately a lot of what it offers is merely good at capturing our attention and provides us with little of long-term import – sugar-filled carbonated sodas for our mind.

it was just Marshall.” Ted said. “But it was the pills he was taking for symptoms of what turned to be the tumour.”

I noticed that Martin Ross and Richard Dawkins avoided talking about themselves and wondered if there might be something cultural – is Britain, at work here? I’m an Irishman and so can say this:

McLuhan was hospitalised after being special on for the tumour’s brain tumour. “And all those years we thought about the one who thought it was just Marshall.” Ted said. “But it was the pills he was taking for symptoms of what turned to be the tumour.”

This crowd and to the book. This is interesting because for more than a decade his name was hardly mentioned. He certainly was an influence on me in terms of my intellectual development and cancer. In one typical conversation, he recounted his ideas on how psychosomatics had gone the way of the gods and we were in a new realm where we were looking at the evolution of patterns and information. A lot has been written about the differences between atoms and bits, but the first time I heard it was from Marshall. For anyone who