



John Brockman with Andy Warhol and Bob Dylan in the Factory, 1966. Below, four of the Edge members whose thoughts on the internet are included in Brockman's new book (from left): Brian Eno, Freeman Dyson, Steven Pinker, Marina Abramovic, Nat Finkelstein



this crowd and to the book. This is interesting because for more than a decade his name was barely mentioned. He certainly was an influence on me in terms of my intellectual development and career. In one typical conversation, he recounted his ideas on how psychoanalysis 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

met him during the 60s, his manner and the way in which he presented himself were remarkable 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,

competes for it with everything else we do. A lot of what 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.

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 junkies.

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.

In between, there was a halcyon interval of just-enoughness. For me, it lasted about 10 years.

They were the best years of my life.

So for me, the internet has only magnified — on a grand scale — what I already knew about human nature.

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

The internet is stealing our attention. It

McLuhan was hospitalised after being operated on for the removal of a brain tumour. "And all those years we thought about the brilliance and we thought it was just Marshall," Ted said. "But it was the pills he was taking for symptoms of what turned out to be the tumour."

JN I noticed that Martin Rees and Richard Dawkins avoided talking about themselves and wondered if there might be something cultural — ie British — at work here? I'm an Irishman and so can say this!

'Edge is not for everybody. It helps to know some stuff. But you won't find arrogance in the responses'

JB 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.

JN 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, I think, Doug Engelbart, who invented the mouse, windowing interfaces and a lot of other seminal computing technology: "Power steering for the mind".

JB 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, or actually something that was probably never even considered, until the first human rendered it visible 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 externalised mind. I think of it in terms of the concept of feedback: the infinite oscillation of our collective conscious interacting with itself, adding a fuller, richer 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 6847 or go to guardianbookshop.co.uk

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