



How Was Steve Jobs Unlike Mark Twain? A Conversation with Economist David Galenson

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In two decades of research, the economist David Galenson has demonstrated that there are two fundamentally different approaches to innovation. Experimental innovators work by trial and error and generally make their major contributions late in life, Galenson writes in *Old Masters and Young Geniuses*, a book published in 2007. Conceptual innovators, by contrast, make sudden breakthroughs, often when they're young.

Among the experimental geniuses, or "old masters," Galenson profiles: Michelangelo, Rembrandt, Cezanne, Virginia Woolf, and Albert Hitchcock. Conceptual young geniuses he describes include van Gogh, Picasso, Herman Melville, and Orson Welles.

Galenson, a professor of economics at the University of Chicago, was at the Atlanta Fed headquarters last summer to discuss his work on creativity and how economics has shaped art markets and movements. He has written numerous publications about creativity and art. Galenson earned undergraduate and graduate degrees at Harvard University, completing his PhD in 1979.

He sat down with *Economy Matters* staff writer Charles Davidson for a chat during his visit.



David Galenson
Source: Kendrick Disch, *Economy Matters*
staff photographer

CD: You discuss the economics of art. Is there an economics of creativity?

DG: Economists are unanimous that technological change is the major cause of economic growth. How do people make innovations? (Creativity.) But there is no economics of creativity. Economists don't study that. That's crazy.

CD: Do you study the economics of creativity?

DG: I got into it by studying how painters make paintings, and what's a great painting. But then I discovered that what's true for artists is true for all intellectual activities—there are two different kinds of creativity.

Economists don't study individual creative people. Psychologists do. They say young people are creative; old people aren't. OK. Now, 100 years ago, if you had gotten the major academic experts on creativity, they would've told you women are less creative than men, blacks are less creative than whites, old people are less creative than young people. Today either of those first two statements could get you fired on a college campus. They're not true. The third one is also false, but nobody cares.

CD: Why do you think nobody cares?

DG: I can't tell you. But I couldn't have told you why racism exists or sexism. I'm not sure.

To me, it's not a question of why does nobody care; it's why is nobody doing anything about it? It's costly for society in a lot of ways. It's not just unfair. We're actually losing creativity because we're not, for example, funding old people (in creative pursuits).

CD: Seems nowadays everything is geared toward millennials. There are millions and millions of people who are older.

DG: Silicon Valley is dominated by the young guys, and that's glamorous. But there are the Warren Buffets of the world. We neglect that (fact) for a bunch of reasons. One is the conceptual people do dramatic things. Experimental people just work away gradually, and it looks like there's nothing new there. But the first person who discovered that cancer was a genetic illness was a housewife working part-time while she raised her kids. She was in her 50s. That resulted in the first successful treatment for cancer. That's all she did. Cezanne *just* made pretty pictures. Robert Frost *just* wrote poetry.

Experimental creativity looks like it's not that big a deal. Conceptual people will tell you they're a genius, where the experimental people just do their work.

CD: Are there people at work right now you'd call experimental and conceptual innovators?

DG: Muhammad Yunus (pioneer of micro lending) is an experimental innovator. He was an economist from Bangladesh. Actually it was before it was Bangladesh; it was Pakistan. He came to the United States, got a PhD from Vanderbilt and got a job teaching at (Middle Tennessee State University). Perfectly happy. Bangladesh became independent. He went home for nation building, got a government job. He didn't like the bureaucracy. They made him chairman of the economics department at his old university. He was the only PhD. And there's a famine. People are dying in the streets. So he said going to the lecture hall and telling these stories about economic theory—everything's perfect—was like watching a beautiful Hollywood movie, at the end everything's beautiful, and then turn the lights on and there's this horror story. Economic theory couldn't explain what the problem was.

So he said, I went into the villages, I listened to the villagers, and the villagers taught me an entirely new economics. He discovered that women in the villages were (making) baskets, and it cost 3 or 4 cents a day for the reed to make the baskets. At the end of the day all of the money was being taken back by the money lenders. They were charging extortionary interest rates. So as an experiment, he started making loans to these women—\$25 to 75 women. And they started saving money. So he goes to bankers, (and they weren't interested). So willy-nilly, he set up a bank, and it grew and grew. He makes loans without collateral, without paperwork. The Grameen Bank became the largest bank in Southeast Asia. He won the Nobel Peace Prize. This is purely experimental. He's one of the most important entrepreneurs in the history of Asia.

CD: What about a conceptual genius?

DG: Steve Jobs. Steve Jobs was a salesman. He didn't invent anything. Steve Wozniak invented the Apple I and the Apple II. Scully, the guy they hired from Pepsi, said Steve didn't invent anything because he couldn't wire circuits. But in a sense, he invented everything. That's conceptual innovation. Conceptual innovation could be an idea. You don't have to invent anything. Jobs is a good example. We're not even sure what he is, but he created the company that's now the most valuable company in the world.

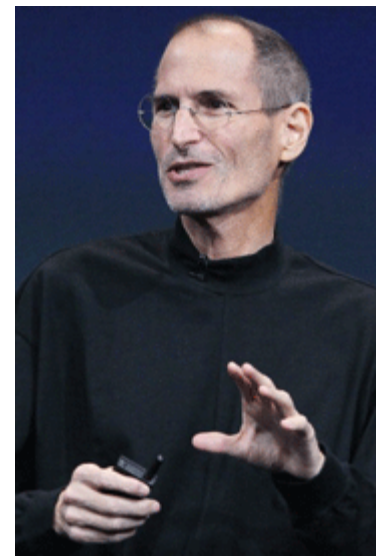
CD: Is there a way to encourage this kind of creativity?

DG: There is, but you have to recognize the difference: the problem is psychologists say young people are conceptual. We know how to encourage that in schools. We don't do that for the other guys.

CD: So we try to encourage conceptual genius. Are there any efforts made to encourage experimental genius?

DG: That's the problem. We don't know it exists. I know it exists. You now know it exists. Nobody else knows it exists.

I gave a speech to 2,000 people at the American Gerontological Society. Nobody there gave a (damn). It goes back to your question. If we were talking about racism in the South in the '50s, what do we have to do? I don't know. Somebody's got to get excited about it. How do you create movements? I don't know. The greatest academic experts make ageist statements in the *New York Times* and nobody says, "Boo." Shame on you.



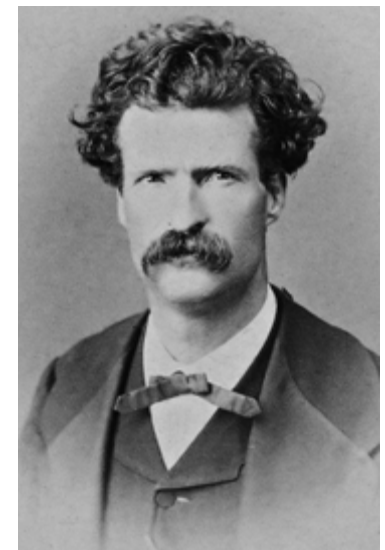
Steve Jobs
Source: Justin Sullivan

CD: Do you consider what you're doing an innovation?

DG: I think that I've discovered that there are two different kinds of creativity, and the psychologists tell you there's one. An invention is something new. This is new. The problem is inventions are a dime a dozen. They become innovations when people use them. Nobody's using this.

CD: Are demographics in your favor on this?

DG: They should be because we're just (frittering) away an opportunity to create programs to try to increase experimental creativity. For example, (Paul) Cezanne was a bad painter when he was young. Cezanne's father was a banker. He wanted Paul to be a banker or an accountant. But Paul was bad at those things. If Paul had worked for a living, he never would have made the great paintings. He was able to make them because his father finally just gave up and said, I'll fund you because you're useless.



Mark Twain
Source: Library of Congress (public domain)

How much are we losing? There's no way to know. But Cezanne wouldn't have become Cezanne if he'd had to have a day job. Virginia Woolf wouldn't have become Virginia Woolf if she'd had to work at a bank. Mark Twain's first novel was written at 37. Huck Finn was published when he was 50.



Charles Davidson

Staff writer for *Economy Matters*

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