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# Remixing on the shoulders of giants: To DJ Spooky, everything's connected

By **Todd Leopold**, CNN

January 28, 2012 -- Updated 1501 GMT (2301 HKT)

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Paul D. Miller -- DJ Spooky aka That Subliminal Kid -- bridges diverse genres and subjects, creating something new.

## STORY HIGHLIGHTS

Paul D. Miller, known as DJ Spooky, mixes genres, styles to create something new

Spooky's creativity establishes links between seemingly unrelated things

Ideas are built on the work of predecessors -- "standing on the shoulders of giants"

Good ideas are communicated between networks, creating more ideas and discoveries

**Editor's note:** This is the third in a weekly series on characteristics of creativity. Part 1 looks at [Brian Wilson and passion](#); part 2 is on [Jennifer Egan and the success of failure](#). Next Saturday's piece will focus on roboticist [Heather Knight](#), intelligence and improvisation.

**(CNN)** -- As a living space, Paul D. Miller's Lower Manhattan studio apartment is fairly sparse: futon on the floor, tiny kitchen, couch and a couple chairs, all crammed into a single elongated room overlooking the street.

As a repository of information, however, it's something else again.

Along the walls there are shelves and shelves of CDs and DVDs and books, a laptop, audiovisual equipment. Media dominates every free space, whether old-school rap CDs or 1970s foreign films or books about art and philosophy. It is the living space as laboratory, the lair of a multimedia scientist, a place for cutting and shaping and retooling bits and bytes and ideas in an effort to bring forth something new.

Miller goes by the *nom de technologie* DJ Spooky, aka [That Subliminal Kid](#) -- the latter a moniker borrowed from a William S. Burroughs character. When he isn't in his apartment, he's traveling -- performing in [far-flung locales](#) such as [Beijing](#) or [Ottawa](#) or [Weimar](#) (and, sometimes, the East Village or Brooklyn). On a recent autumn evening, he was across town doing a "beta-test party" in [The Stone](#), a bare-bones room just off Houston Street on Manhattan's Lower East Side.

Armed with a pair of iPads and a mixing board, accompanied by a

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## The creative struggle of Brian Wilson

January 17, 2012 -- Updated 2220 GMT (0620 HKT)



Brian Wilson has long been labeled "the troubled musical genius" of the Beach Boys. You can try to put him in a box. But he won't stay there.

## The success of failure

January 28, 2012 -- Updated 1513 GMT (2313 HKT)



Few would consider Pulitzer winner Jennifer Egan a failure. But she once did, oddly enough after getting her first story published in The New Yorker.

cellist and a fellow composer, Miller was offering an informal class in how to merge art and technology. He ran John Coltrane's "Naima" through his own iPad DJ app, adding echo, bells and percussion until the composition took on a tone of dreaminess and flight; he displayed images from "The Book of Ice," his recent chronicle of a trip to Antarctica and the ideas it inspired; and sampled reggae, rap and Led Zeppelin's "Good Times, Bad Times." What emerged was a musical conversation between eras and genres.

Technology was not always Miller's friend on this informal evening. There sometimes didn't seem to be enough connections between the iPads, mixer and A/V equipment, leaving a projector screen displaying "no signal" warnings while Miller groped with the machines. Other times the electronics needed to be recalibrated so as to prevent feedback or, worse, silence.

But when it worked -- when he played the iPad like Paganini, or when the cello blended with a Moog synthesizer app just so -- the result was otherworldly, awakening not just connections between sounds, but connections in the minds of the audience members.

Which, Miller says, is precisely the point.



"I'm seeing a lot of selective amnesia," Miller says. "And it's crucial right now to think of the long term."

about our era is we live in the Information Age. crucial component if you think about culture as s. "The good news ... is that everyone has ame time it doesn't mean they're actually going to access and use it."

In such an instant epoch, he points out, it's easy to forget about connections to other arts, other disciplines, other histories.

"I'm seeing a lot of selective amnesia, where people are unaware of basic currents of

history and how culture evolves, because they're caught up in the moment."

"That can be an issue if you're thinking about how people think about the long term -- and it's crucial right now to think of the long term."

### 'I really don't think of music, film and art as separate'

Establishing those links -- and building on them -- is an inescapable part of the creative process. Even people who seem to come up with new ideas out of thin air are building on the discoveries and advances of others -- whether they're aware of the influences or not. Isaac Newton probably put it best in his much-repeated quotation, from a 1676 letter to fellow scientist Robert Hooke: "If I have seen farther it is by standing on the shoulders of giants." (Newton also quoted from giants: similar expressions of thought [have been traced back at least as far as the 12th-century philosopher Bernard of Chartres](#), reaching back to the story of the blind, mythological Greek figure Orion carrying his servant on his shoulders.)

"Creativity isn't magic," says Kirby Ferguson, a New York-based filmmaker who's produced a series of videos called "Everything is a Remix."

"It starts out simply enough -- you're copying and then you're fiddling with whatever you've copied, and then you're merging whatever you copied with something else."

"It's only over time, with years of practice, that you start to get results that are breakthrough."

## The beautiful thing about our

Miller, 41, grew up in Washington. His father was the dean of Howard University Law School and his mother owned a popular boutique, [Toast and Strawberries](#). He remembers

## Remixing on the shoulders of giants

January 28, 2012 -- Updated 1501 GMT (2301 HKT)



Paul D. Miller, aka DJ Spooky, combines genres and styles to create something new. It's a characteristic key to spreading ideas -- and innovations.

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## era is we live in the Information Age.

Paul D. Miller

being surrounded by a rich record collection, one that included The Police and Prince as well as jazz, hip-hop and reggae. (He shunned that classic mix of yesterday and today, commercial radio: "I couldn't stand normal radio," he says.)

He began his career as a writer and artist -- he got his degrees from Bowdoin College in Maine in both photography and French literature -- and primarily spent the '90s exploring visual styles such as collage.

Eventually, his focus turned to music -- but it wasn't just about the lyrics and melody.

"Music wasn't music -- it was information," he says. "It was about sampling, about a kind of tool to pull information into different perspectives."

In recent years, his focus has shifted to environmental issues, with "environment" defined broadly -- including the way we live and interact with the planet and each other. His most recent work, "The Book of Ice" -- along with his multimedia work "[Terra Nova](#)" (which draws on composer Ralph Vaughn Williams' "Sinfonia Antarctica") and his graphic art project "Manifesto for a People's Republic of Antarctica" -- observes that both the word and concept of "ice" have powerful overtones: water, hardness, cold, riffs on black culture (Ice-T, Ice Cube) -- even age.

The ice in Earth's polar regions can be drilled to determine changes in the planet's climate over millennia -- and the graphical patterns found in those ice samples can be used as "data landscapes" that Miller expresses in other forms. He traveled to the lonely continent to research the works, recording sounds, taking pictures and seeking out connections between it all.

"You have to think of Antarctica as a terrain of possibility," he says in an interview included in "The Book of Ice." We see what we want to see: "It's a surface we project onto, but it doesn't reflect back." The cold, icy mirror of the continent lends itself to a host of possibilities, including the posters from "Manifesto," which owe a design debt to the commanding, brusque [propaganda art of 1930s Russia](#).

"I really don't think of music, film and art as separate," he says. "There's a seamless connection -- it's the creative mind at work."

### The movement of ideas

What Miller is doing is nothing new. Sometimes the idea can be conceptual, as with novelist John Dos Passos' use of newsreels, journalism and stream-of-consciousness to capture the hurly-burly of early-20th century America for his "U.S.A." trilogy, published in the 1930s. Other times -- particularly in recent years -- the cycle is commercial: the sampling of a familiar riff in hip-hop songs, the churn of cultural references in the TV show "[Community](#)," the making of bestselling books into movies into musicals and back around again, all a way of squeezing golden eggs out of the same goose. (Consider, for example, John Waters' "Hairspray": Originally a movie focusing on the fans of a TV music dance show, it then became a Broadway musical, which was in turn brought back to the screen.)

Miller himself talks about such forbears as James Joyce, whose layered, punning "Ulysses" and "Finnegans Wake" densely pack references to countless other works within their pages; Jack Kerouac, who wrote "On the Road" as a single paragraph on a taped-together 120-foot scroll, evoking the open highway he traveled; and Public Enemy's Chuck D, who once called rap "black America's CNN."

Good ideas don't stay in their place, either. In the 1970s and '80s, the



The 2007 film "Hairspray" was based on a 2002 Broadway musical, which in turn was based on a 1988 film.

personality James Burke created the shows "Connections" and "The Day the Universe Changed," showing how one person's innovation or fresh take percolated through the ages, with math influencing the visual arts, the visual arts affecting music, music touching social movements, social movements providing fodder for science, up and down and around and around.

Connections don't always follow one after another in orderly fashion. In his 2010 book, "Where Good Ideas Come From," author Steven Johnson shows that some concepts are fostered by tightly webbed environments that allow for speedy exchange, alteration and expansion of thought. Think of a densely packed city, or even the Internet.

#### Fareed Zakaria GPS: Steven Johnson on the history of innovation

Other times it's a critical mass of developments coming together, often by contemporaries working independently, that makes innovation seem inevitable: Among Johnson's examples are the discovery of sunspots (by four scientists in different countries in 1611) and oxygen (by Joseph Priestley and Carl Wilhelm Scheele in the 1770s).

And then there are ideas that take years, even decades, to come to fruition, built by painstaking accumulation of research and study, a process Johnson calls "the slow hunch." It's more often the norm, not the exception. "The Vaseline-daubed lens of hindsight tends to blur slow hunches into eureka moments," he writes. Charles Darwin, he points out, may have painted his realization about evolution as an epiphany, but the idea had been brewing for months in his notebook.

"It is not merely that Darwin possesses the puzzle pieces but fails to put them together in the right configuration," Johnson writes. Even after a key insight, the great naturalist took another several weeks before he finally wrote down the rules of natural selection in November 1838 -- which was, it should be noted, 21 years before he published "On the Origin of Species" in 1859. (And -- in another example of contemporaries arriving at the same point -- Alfred Russel Wallace was conceiving of similar ideas at the same time. Today, the Linnean Society, an organization that promotes the study of the biological sciences, honors advances with the Darwin-Wallace Medal.)

#### 'There's no end to it'

Filmmaker Ferguson, who is in postproduction on his fourth "Everything Is a Remix" (the first three parts focused on [music](#), [movies](#) and [the elements of creativity](#); part four, due out soon, will concern legal and ownership issues), finds that nuggets that trace influences backwards and forwards are a continuing source of inspiration. "There's no end to it," he says.



"I'm an artist, but art can teach and music can educate," Miller says.

And by being able to show such cross-pollination through his *own* remixing -- clever editing, informative graphics (Ferguson trained as a graphic designer) and dissemination on the Web -- he hopes he's enlightened a few viewers who believe the world began with the invention of the personal computer.

"Seeing the examples make it hit home for people," he says. Take "Star Wars": Many people may realize George Lucas was inspired by Akira Kurosawa's films, World War II dogfight footage and Joseph Campbell's "The Hero with a Thousand Faces." But actually

seeing clips from Lucas' film mixed in with 1954's "The Bridges at Toko-Ri" and Kurosawa's "Hidden Fortress" bring Ferguson's point home in a way that a textbook never could.

For Miller, it's all part of a package. He's already put D.W. Griffith's 1915 classic "The Birth of a Nation" through the remixing wringer, adding a new, pointed film score -- among other concepts -- and retitling it "Rebirth of a Nation." Griffith's film, he observes, still influences culture today, its then-innovative cuts and composition now mainstays of cinematic language, its sympathetic view of the Confederacy (and coarse portrayals of African-Americans) reverberating in our politics.

With everything he does, he recombines information so that he can make new points, get across new ideas. He hopes his work entertains -- and instructs.

"I'm an artist, but art can teach and music can educate. It's not like one is separate from the other.

"There's a connection to everything," he says. "The world is my archive."

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eb79

Really, there's not much that hasn't been done already. Remixing classics is harmless. It's actually more helpful than anything. A lot of old music would be long forgotten if not for remixes. And ever hear the saying, "imitation is a form of flattery"?

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ripvanwillie

when he gets older and someone mixes his favorite songs into something he doesn't like, maybe he'll finally understand. Create your own music, don't steal it from others. Nothing worse than hearing a riff from one of your favorites only to have it morph into a piece of crap. Totally disrespectful to... [more](#)

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*madamex*

Everything IS a remix.

Nothing is new in the world of fashion, or art, or music. It's all borrowed and rebooted from distant centuries and very past decades.

18 hours ago | [Like \(1\)](#) | [Report abuse](#)



*DcUbd*

I challenge anyone to listen to his CD 'the Secret Song' in its entirety and not be moved by the interconnections and flat out beautiful soundscapes this man constructs...bringin up fistfulls of gemstones and fusing nuclei to birth new elements...the cultural spelunker extraordinaire...Mr. Miller cre... [more](#)

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*M40cheese*

who cares

22 hours ago | [Like \(2\)](#) | [Report abuse](#)



*malibu66*

Anyone who mixes on an iPad is a total hack.

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*MarbergKiss*

Ha! Don't be mad that you do not have his talent and need to spend hundreds perhaps thousands of dollars in software and computers to accomplish what this man does. Hell, even with an investment like that you can't even come close.

Anyone ever hear of DJ Malibu66? Me either.

22 hours ago | [Like \(6\)](#) | [Report abuse](#)



*DJKAHN*

You can't be serious. Anyone who knows anything about DJ culture is aware of DJ Spooky, his work, and his thorough, completely unique dedication to the more cerebral aspects of what are essentially the raw materials a DJ works with: music, technology, and culture. I have to believe that you are trol... [more](#)

22 hours ago | [Like \(3\)](#) | [Report abuse](#)



*BlackBeautyO*

who died and made you king of the mixers??

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*Noblin*

As an artist myself I'm going to chime in on the whole "creativity" thing. Most of what most artists do can be taught, without a doubt. Most of the things that most artists do can be done by most anyone who would do it. The issue is most DON'T.

Simply saying, "I could do that" is a dumb excuse as w... [more](#)

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*ripvanwillie*

I understand your point and to a certain extent you are correct. But mixing is plagiarism if they use the prerecorded music of others. The greats never did that, they imitated but did not steal, there is a huge difference. If he wants to use those old songs, hire musicians to recreate them, don't ju... [more](#)

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*GeneralDavis*

Remixing is a synonym for theft. Spooky even rips off a moniker from William S. Burroughs, who was the first remixer. But Burroughs remixed his own stuff, while there's nothing admirable in what Spooky is doing.

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*kme*

"William S. Burroughs, who was the first remixer..." Oh jeez, you don't know about Medieval music, Renaissance Motets, Bach Chorales and Cantatas, Beethoven Symphonies, Tchaikovsky ballet's, Stravinsky's song and orchestra works, the Charles Ives (everything), the Beatles and Led Zeppelin. The "first... [more](#)

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*Sparky444*

GeneralDavis - has DJ Spooky had any of his CDs pulled from the shelves for misappropriation of others' creative works ?

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*MarbergKiss*

Good Art always has some theft involved.

If you want something pure and 100% original you can go buy one of Andy Warhols copper plates he peed on and let the urine stain and called them works of Art. I have never see anyone do that.

Enjoy.

22 hours ago | [Like \(2\)](#) | [Report abuse](#)



*DJKAHN*

Wow you must not have stepped outside for the past 30 years. Also, some of Spooky's shows in particular feature lectures on french history and philosophy delivered by, you guessed it, the man who's work you are denigrating likely without knowing anything about it or the greater context from which it... [more](#)

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*MorrisSL*

" All musical performances are "remixes"."

Only to an imbecile.

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*GeneralDavis*

By the laws of this country, Sparky, ideas can't be patented or copyrighted. But when a writer takes the actual constructions from other writers--the sentences and paragraphs--he is subject to suit, and his publisher will pull his book when this is discovered. This is especially true for songs. But ... [more](#)

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*Sparky444*

All musical performances are "remixes".

Even in literature there is extensive "appropriation". Shakespeare did that numerous times throughout his works. Creative works borrow from, are inspired by and build upon other (earlier) work. Just as science and philosophy do. Ideas aren't objects.

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*BiasObserver*

it would be nice if the entertainment could be separated from the news.

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*BlackBeautyO*

you dont have to read the entertainment section.

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*norcalmojo*

Time/Warner signed up some new talent, I see.

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*gumby777*

If you have haters, your'e doing something right...

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*Sparky444*

Gilasevi - being anti something proves that you're correct ? Your logic is empty.

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*deepclouder*

So what instrument does he play ?

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