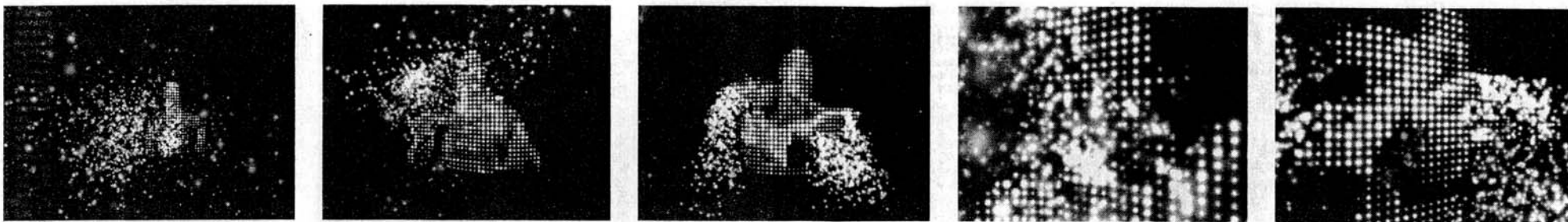


## ART



## What if Jackson Pollock Were a PC?

By SARAH BAYLISS

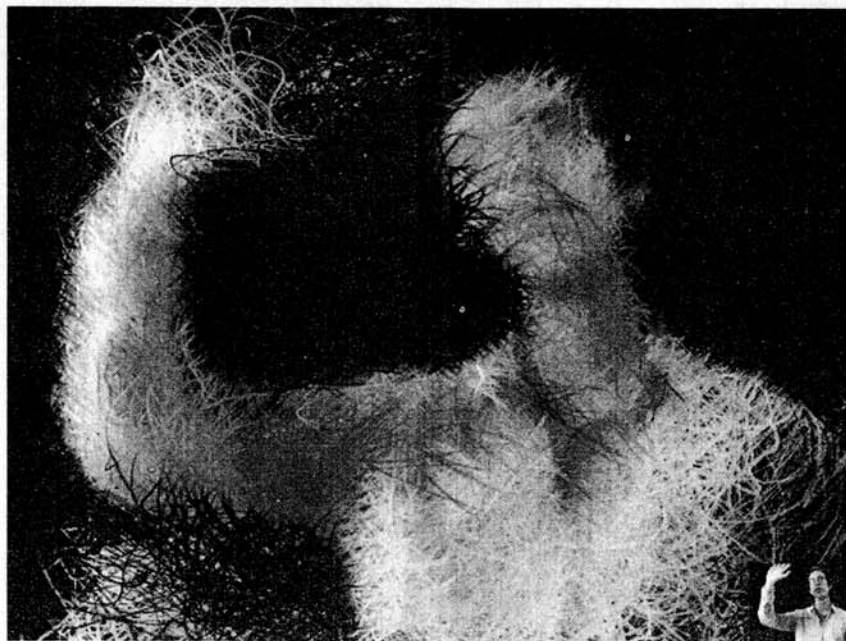
CREATING a computer program that mimics Jackson Pollock's painting technique may sound like a daunting task, but it is just the kind of challenge that Daniel Shiffman enjoys. Mr. Shiffman, 30, a media artist with a background in math and theater, wanted to develop a program that would "paint" an abstracted screen portrait of whoever was in front of the display, slowly repainting and revising the picture as the viewer moved.

He wasn't able to replicate Pollock's signature technique exactly, but the artwork that resulted from his experiment, "Swarm," is a dynamic and psychedelic experience nonetheless. Rather than a study in evolving splatters and drips, it looks something like a Technicolor finger painting, with tentacles of colors folding and swelling across the screen to form a likeness of the viewer. To make the piece, Mr. Shiffman adapted the animator Craig Reynolds's "Boids" program, a model of animal motion that mimics flocking patterns and is used for special effects in Hollywood films. He adjusted the program to create long streaks of color and synchronized it with a video camera that records the spectator's actions. As Mr. Shiffman says, "The organic quality of the flocking behavior seemed most reminiscent of Pollock."<sup>1</sup>

All of Mr. Shiffman's work is simultaneously organic and high tech, perhaps because his programmed pixels tend to take their cues from the viewer in front of them as they light up and sweep across the screen. Like "Swarm," they continually mirror movement in changing patterns of illumination, whether by exploding, blinking or gliding along. Many can be seen at Mr. Shiffman's Web site, [www.shiffman.net](http://www.shiffman.net), and some are also on display at New York University's Interactive Telecommunications Program at 721 Broadway, where he is now a postgraduate resident researcher. One piece, "Reactive," has just been on view at Galapagos Art Space in Williamsburg, Brooklyn. (The Web site isn't interactive; the exhibits are.)

Mr. Shiffman, however, only recently started considering himself an artist: in his other lives, he is a serious player in the online gaming world (his specialty

Sarah Bayliss is a contributing editor to *ArtNews* magazine and an arts correspondent for *The Boston Globe*.



Daniel Shiffman's computer-based "Swarm" creates an electronic-expressionist portrait of its viewer that changes as the person moves. At top, Mr. Shiffman's "Reactive" series.

is "Myth: The Fallen Lords") and is the producing director at P73 Productions Inc., a small New York theater company he started with some friends from Yale, where he graduated in 1995 with a major in math and philosophy. It was while he was attending graduate school at I.T.P., which specializes in the design of new and computational media, that Mr. Shiffman began drawing on his assorted skills to make interactive works like "Swarm." "I didn't think of them as art pieces, but when I started showing them to people, they described them as if they were art," he said. "So now that's what I am doing."

For gallery spectators and nightclubbers, part of the appeal of Mr. Shiffman's work is narcissistic: his images convey the special effects of a feature film, but you are the one being awesomely manipulated, blown apart and put back together. In "Reactive," the initial portrait resembles a cross between an L.E.D. board and a Lite-Brite set. When the spectator makes a quick motion — like raising a hand suddenly — that area of the body explodes and scatters: light particles fly off the grid, like a barrage of blurry snowflakes rushing toward a windshield. "I also call this 'Superman 3,'" Mr. Shiffman said, "because at the end of that movie, the

bad guys get stuck in this video plane that gets blown off into space."

The mathematician John Conway's "Game of Life" system was the taking-off point for another artwork, "Mosaic." Mr. Conway's program simulates the birth, death and mutation of organisms based on certain rules; in Mr. Shiffman's version, the screen portrait is composed of small, multicolored squares that blink on and off, creating an evolving picture. For a work in progress, "Yellow," Mr. Shiffman adapted his "Swarm" program to follow the color yellow and trained his video camera on Canal Street in lower Manhattan (he attached it to his studio fire escape, pointing straight down). In the resulting image, brilliant stripes of yellow emerge and shift in response to taxis navigating the choked traffic. "It's all the same idea, just tweaking different parameters," he said. "This is like Math or Computer Science 101 stuff. These are simple algorithms, and it's about figuring out ways to use them."

Mr. Shiffman's mix of technical experiment and art "goes back to the role of accident and chance in art, in this case, looking at the ways that pixels behave in reaction," said Anne Barlow, curator of education and media programs at the New Museum in SoHo. "Think about someone like Naum Gabo, who became a recognized visual artist but started with engineering." Ms. Barlow also cites as a predecessor Billy Klüver, an engineer at Bell Laboratories who founded EAT (Experiments in Art and Technology) in the 1960's, and contemporary artists like Christian Marclay and DJ Spooky, who integrate technology, music and art.

The success of Mr. Shiffman's work, like much computer-based art, hinges on the "balance of technology with aesthetics," Ms. Barlow said. "In some of the weaker projects you see, the technology takes over. The art content is a fine line. Others could move easily into the museum and gallery world."

Mr. Shiffman may choose to do so, though the distinction between the art world and his various other worlds is still one that he is trying to define. "I have this joke," he said, "where I went home and showed 'Swarm' to my brother and he said: 'Wow. That would make a really cool screensaver.' That's true, actually. But ultimately, what's the difference between a really cool screensaver and a really big projection in a gallery? I'm still figuring that out." □

## What if Jackson Pollock Were a PC?

By SARAH BAYLISS

Published: November 16, 2003

Creating a computer program that mimics Jackson Pollock's painting technique may sound like a daunting task, but it is just the kind of challenge that Daniel Shiffman enjoys. Mr. Shiffman, 30, a media artist with a background in math and theater, wanted to develop a program that would "paint" an abstracted screen portrait of whoever was in front of the display, slowly repainting and revising the picture as the viewer moved. He wasn't able to replicate Pollock's signature technique exactly, but the artwork that resulted from his experiment, "Swarm," is a dynamic and psychedelic experience nonetheless. Rather than a study in evolving splatters and drips, it looks something like a Technicolor finger painting, with tentacles of colors folding and swelling across the screen to form a likeness of the viewer. To make the piece, Mr. Shiffman adapted the animator Craig Reynolds's "Boids" program, a model of animal motion that mimics flocking patterns and is used for special effects in Hollywood films. He adjusted the program to create long streaks of color and synchronized it with a video camera that records the spectator's actions. As Mr. Shiffman says, "The organic quality of the flocking behavior seemed most reminiscent of Pollock."

All of Mr. Shiffman's work is simultaneously organic and high tech, perhaps because his programmed pixels tend to take their cues from the viewer in front of them as they light up and sweep across the screen. Like "Swarm," they continually mirror movement in changing patterns of illumination, whether by exploding, blinking or gliding along. Many can be seen at Mr. Shiffman's Web site, [www.shiffman.net](http://www.shiffman.net), and some are also on display at New York University's Interactive Telecommunications Program at 721 Broadway, where he is now a postgraduate resident researcher. One piece, "Reactive," has just been on view at Galapagos Art Space in Williamsburg, Brooklyn. (The Web site isn't interactive; the exhibits are.)

Mr. Shiffman, however, only recently started considering himself an artist: in his other lives, he is a serious player in the online gaming world (his specialty is "Myth: The Fallen Lords") and is the producing director at P73 Productions Inc., a small New York theater company he started with some friends from Yale, where he graduated in 1995 with a major in math and philosophy. It was while he was attending graduate school at I.T.P., which specializes in the design of new and computational media, that Mr. Shiffman began drawing on his assorted skills to make interactive works like "Swarm." "I didn't think of them as art pieces, but when I started showing them to people, they described them as if they were art," he said. "So now that's what I am doing."

For gallery spectators and nightclubbers, part of the appeal of Mr. Shiffman's work is narcissistic: his images convey the special effects of a feature film, but you are the one being awesomely manipulated, blown apart and put back together. In "Reactive," the initial portrait resembles a cross between an L.E.D. board and a Lite-Brite set. When the spectator makes a quick motion like raising a hand suddenly that area of the body explodes and scatters: light particles fly off the grid, like a barrage of blurry snowflakes rushing toward a windshield. "I also call this 'Superman 3,'" Mr. Shiffman said, "because at the end of that movie, the bad guys get stuck in this video plane that gets blown off into space."

The mathematician John Conway's "Game of Life" system was the taking-off point for another artwork, "Mosaic." Mr. Conway's program simulates the birth, death and mutation of organisms based on certain rules; in Mr. Shiffman's version, the screen portrait is composed of small, multicolored squares that blink on and off, creating an evolving picture. For a work in progress, "Yellow," Mr. Shiffman adapted his "Swarm" program to follow the color yellow and trained his video camera on Canal Street in lower Manhattan (he attached it to his studio fire escape, pointing straight down). In the resulting image, brilliant stripes of yellow emerge and shift in response to taxis navigating the choked traffic. "It's all the same idea, just tweaking different parameters," he said. "This is like Math or Computer Science 101 stuff. These are simple algorithms, and it's about figuring out ways to use them."

Mr. Shiffman's mix of technical experiment and art "goes back to the role of accident and chance in art, in this case, looking at the ways that pixels behave in reaction," said Anne Barlow, curator of education and media programs at the New Museum in SoHo. "Think about someone like Naum Gabo, who became a recognized visual artist but started with engineering." Ms. Barlow also cites as a predecessor Billy Klier, an engineer at Bell Laboratories who founded EAT (Experiments in Art and Technology) in the 1960's, and contemporary artists like Christian Marclay and DJ Spooky, who integrate technology, music and art.

The success of Mr. Shiffman's work, like much computer-based art, hinges on the "balance of technology with aesthetics," Ms. Barlow said. "In some of the weaker projects you see, the technology takes over. The art content is a fine line. Others could move easily into the museum and gallery world."

Mr. Shiffman may choose to do so, though the distinction between the art world and his various other worlds is still one that he is trying to define. "I have this joke," he said, "where I went home and showed 'Swarm' to my brother and he said: 'Wow. That would make a really cool screensaver.' That's true, actually. But ultimately, what's the difference between a really cool screensaver and a really big projection in a gallery? I'm still figuring that out."°

*Sarah Bayliss is a contributing editor to ArtNews magazine and an arts correspondent for The Boston Globe.*



Daniel Shiffman's computer-based "Swarm" creates an electronic-expressionist portrait of its viewer that changes as the person moves.

## ARTICLE TOOLS

-  [E-Mail This Article](#)
-  [Printer-Friendly Format](#)
-  [Most E-Mailed Articles](#)
-  [Reprints & Permissions](#)

## ALL ARTICLES

[Arts & Leisure](#) (Nov. 16, 2003)

## READERS' OPINIONS

- [Forum: Join a Discussion on Artists and Exhibitions](#)

## TIMES NEWS TRACKER

Topics	Alerts
<a href="#">Art</a>	<input type="button" value="Create"/>
<a href="#">Computer Software</a>	<input type="button" value="Create"/>
<a href="#">New York University</a>	<input type="button" value="Create"/>
<a href="#">Create Your Own</a> <a href="#">Manage</a>	
<a href="#">Most Popular Alerts</a> <a href="#">Take a Tour</a>	
<input type="button" value="CLICK HERE TO SUBSCRIBE"/>	

[Enlarge This Image](#)



Part of Mr. Shiffman's "Reactive" series.