

# AMIGA

W O P

January/  
February  
U.S.A. \$3.95  
Canada \$4.50  
A CWCI  
Publication

**The  
Creative  
Issue**

Also: Lisp to Logo, Business BBSs, and Amiga Adventures



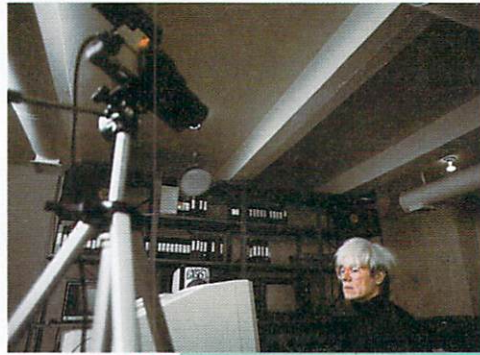


# AMIGA

## WORLD

Volume 2, Number 1, January/February 1986

### ■ Features



#### 16 **Andy Warhol: An Artist and His Amiga**

By *Guy Wright and Glenn Suokko*

Andy Warhol has been into everything from soup cans to MTV, and now he's using the Amiga computer. *AmigaWorld* had the chance to interview him at his New York studio and get his feelings about this newest creative tool.

#### 24 **Computer Art: Is It Really Art?**

By *Vinoy Laughner*

We tackle what may be the biggest question confronting artists in the computer age.

#### 28 **Artists and the Amiga**

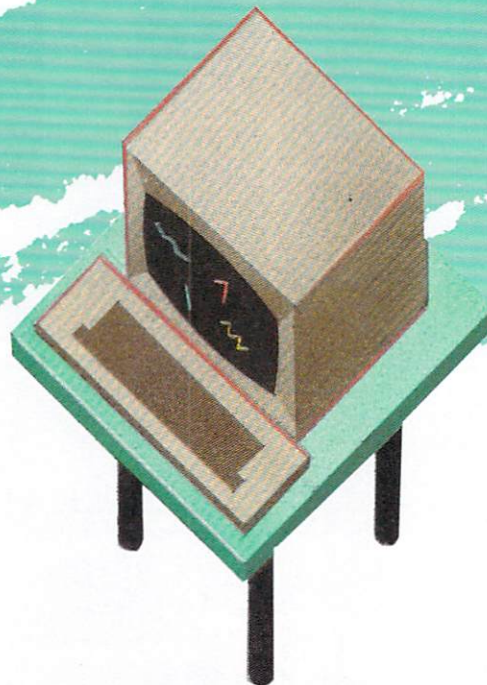
By *Abigail Reifsnyder*

Four artists get their first look at the Amiga computer and we get their reactions.

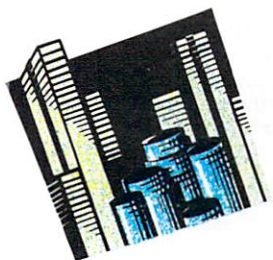
#### 36 **The Personal Art of a Personal Computer**

By *Scott Wright*

Professionals won't be the only ones using the Amiga's graphics potential. The Amiga brings art (small "a") to the rest of us.







## Articles

### 66 **Adventurous Journey**

By *Bob Liddil*

Sharpen your broad sword and polish your magic crystal—you are about to enter into the battle of your life!

### 70 **The Wizard of Wishbringer**

By *Brian Moriarty*

Adventure game author Brian Moriarty of Infocom agreed to be interviewed, provided that he ask the questions.

### 74 **Programming on the Amiga: Cambridge Lisp 68000**

By *Daniel Zigmund*

For serious software developers, the computer language Lisp is much more than just artificial intelligence.

### 81 **TLC-Logo for the Amiga**

By *Peggy Herrington*

While the hare slept, the Logo turtle came a long, long way.

### 84 **Challenging the Mind: Mindscape's Commitment to the Amiga**

By *Shawn Laflamme*

Mindscape's top priority is creativity, in everything from software design to office design.

## Columns

### 8 **Avision**

The growing excitement from developers.

### 12 **Zeitgeist**

Balance on the creative edge.

### 56 **Protocol**

The Amiga and a modem can instantly put your business in touch with on-line financial services.

### 90 **Amiga Solutions**

Reflections of a Mac user.

## Departments

### 14 **Repartee**

Letters from readers

### 44 **A List of Amiga's Regional Representatives**

Where to find out about Amiga dealers in your area.

### 46 **Digital Canvas**

This issue features the work of freelance artist Roger Goode.

### 88 **What's New?**

Quick sketches of products from Activision, Kurta, Synapse and Tecmar.

### 94 **Help Key**

Questions about the Amiga, answered by the experts.

### 96 **Coming Next Issue**



# AMIGA

## WORLD

Volume 2, Number 1, January/February 1986

### **Publisher**

Stephen Twombly

### **Editor-In-Chief**

Guy Wright

### **Managing Editor**

Shawn Laflamme

### **Assistant Editor**

Vinoy Laughner

### **Associate Editor**

Swain Pratt

### **Contributing Editors**

Marilyn Annucci, Harold Bjornsen,  
Dennis Brisson, Margaret Morabito,  
Susan Tanona

### **Advertising Sales Manager**

Stephen Robbins

### **Sales Representative**

Ken Blakeman

### **Ad Coordinator**

Heather Paquette

1-800-441-4403

### **Marketing Coordinator**

Wendie Haines

### **West Coast Sales**

Giorgio Saluti, manager

1-415-328-3470

1060 Marsh Road

Menlo Park, CA 94025

### **Cover**

#### **Andy Warhol**

Design: Glenn A. Suokko, using A-Squared  
Systems' Amiga-Live! digitizer

Separations: ImageSet and Ultra Scan

Printing: Brown Printing

### **President/CEO**

James S. Povec

### **Vice-President/Finance**

Roger Murphy

### **Vice-President/Planning and Circulation**

William P. Howard

### **Assistant General Manager**

Matt Smith

### **Executive Creative Director**

Christine Destrempe

### **Circulation Manager**

Frank S. Smith

### **Direct & Newsstand Sales Manager**

Raino Wirein

800-343-0728

### **Director of Credit Sales & Collections**

William M. Boyer

### **Art Director**

Glenn A. Suokko

### **Editorial Design**

Glenn A. Suokko

### **Production/Advertising Supervisor**

Rosalyn Scribner

### **Graphic Design Assistants**

Anne Dillon, Karla Whitney

### **Graphic Services Manager**

Dennis Christensen

### **Film Preparation Supervisor**

Robert M. Villeneuve

### **Typesetting Supervisor**

Linda P. Canale

### **Manufacturing Manager**

Susan Gross

*AmigaWorld* (ISSN 0883-2390) is an independent journal not connected with Commodore Business Machines, Inc. *AmigaWorld* is published bimonthly by CW Communications/Peterborough, Inc., 80 Pine St., Peterborough, NH 03458. U.S. subscription rate is \$19.97, one year. Canada and Mexico \$22.97, one year, U.S. funds drawn on U.S. bank only. Foreign Surface \$39.97. Foreign Air Mail \$74.97, U.S. funds drawn on U.S. bank. Second class postage pending at Peterborough, NH, and at additional mailing offices. Phone: 603-924-9471. Entire contents copyright 1985 by CW Communications/Peterborough, Inc. No part of this publication may be printed or otherwise reproduced without written permission from the publisher. Postmaster: Send address changes to *AmigaWorld*, Subscription Services, PO Box 954, Farmingdale, NY 11735. Nationally distributed by International Circulation Distributors. *AmigaWorld* makes every effort to assure the accuracy of articles, listings and circuits published in the magazine. *AmigaWorld* assumes no responsibility for damages due to errors or omissions.

*AmigaWorld* is a member of the CW Communications/Inc. group, the world's largest publisher of computer-related information. The group publishes 57 computer publications in more than 20 major countries. Nine million people read one or more of the group's publications each month. Members of the group include: Argentina's *Computerworld/Argentina*; Asia's *The Asian Computerworld*; Australia's *Computerworld Australia*, *Australian PC World*, *Macworld* and *Directories*; Brazil's *DataNews* and *MicroMundo*; China's *China Computerworld*; Denmark's *Computerworld/Danmark*, *PC World* and *RUN* (Commodore); Finland's *Mikro*; France's *Le Monde Informatique*, *Golden* (Apple), *OPC* (IBM) and *Distributique*; Germany's *Computerwoche*, *Microcomputerwelt*, *PC Welt*, *SoftwareMarkt*, *CW Edition/Seminar*, *Computer Business*, *RUN* and *Apple's*; Italy's *Computerworld Italia* and *PC Magazine*; Japan's *Computerworld Japan*; Mexico's *Computerworld/Mexico* and *CompuMundo*; The Netherlands' *ComputerWorld Benelux* and *PC World Benelux*; Norway's *Computerworld Norge*, *PC World* and *RUN* (Commodore); Saudi Arabia's *Saudi Computerworld*; Spain's *Computerworld/España*, *Microsistemas/PC World* and *Commodore World*; Sweden's *ComputerSweden*, *Mikrodatorn*, and *Svenska PC*; the UK's *Computer Management*, *Computer News*, *PC Business World* and *Computer Business Europe*; the U.S.: *AmigaWorld*, *Computerworld*, *Focus Publications*, *HOT CoCo*, *inCider*, *InfoWorld*, *MacWorld*, *Micro Marketworld*, *On Communications*, *PC World*, *RUN*, *73 Magazine*, *80 Micro*; Venezuela's *Computerworld Venezuela*.

**Manuscripts:** Contributions in the form of manuscripts with drawings and/or photographs are welcome and will be considered for possible publication. *AmigaWorld* assumes no responsibility for loss or damage to any material. Please enclose a self-addressed, stamped envelope with each submission. Payment for the use of any unsolicited material will be made upon acceptance. All contributions and editorial correspondence (typed and double-spaced, please) should be directed to *AmigaWorld* Editorial Offices, 80 Pine Street, Peterborough, NH 03458; telephone: 603-924-9471. **Advertising Inquiries** should be directed to Advertising Offices, CW Communications/Peterborough, Inc., Elm Street, Peterborough, NH 03458; telephone: 800-441-4403. **Subscription problems or address changes:** Call 1-800-227-5782 or write to *AmigaWorld*, Subscription Department, PO Box 868, Farmingdale, NY 11737. **Problems with advertisers:** Send a description of the problem and your current address to: *AmigaWorld*, Elm Street, Peterborough, NH 03458, ATTN.: Barbara Harris, Customer Service Manager, or call 1-800-441-4403.



You communicate—and the story responds—in full sentences. Which means that at every turn, you have literally thousands of alternatives. So if you decide it might be wise, for instance, to wrap a towel around your head, you just say so:

>WRAP THE TOWEL AROUND MY HEAD

And the story responds:

THE RAVENOUS BUGBLATTER BEAST OF TRAL IS COMPLETELY BEWILDERED. IT IS SO DIM IT THINKS IF YOU CAN'T SEE IT, IT CAN'T SEE YOU.

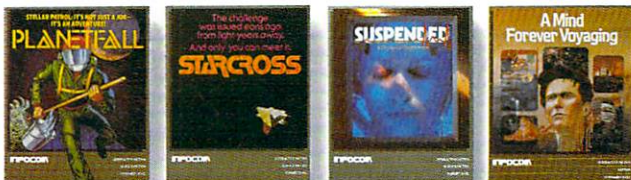
But be careful about what you say. Or one moment you might be strapped down, forced to endure a reading of the third worst poetry in the galaxy; the next you could be hurtling through space with Marvin the Paranoid Android aboard a stolen spaceship.

And simply staying alive from one zany situation to the next will require every proton of puzzle solving prowess your mere mortal mind can muster. Even simple tasks can put you at wit's end:

>OPEN THE DOOR

And the story responds:

THE DOOR EXPLAINS, IN A HAUGHTY TONE, THAT THE ROOM IS OCCUPIED BY A SUPER-INTELLIGENT ROBOT AND THAT LESSER BEINGS (BY WHICH IT MEANS YOU) ARE NOT TO BE ADMITTED. "SHOW ME SOME TINY EXAMPLE OF YOUR INTELLIGENCE," IT SAYS, "AND MAYBE, JUST MAYBE I MIGHT RECONSIDER."



Other interactive science fiction stories from Infocom include PLANETFALL,™ in which you're stranded on a mysterious deserted world. STARCROSS,™ a puzzling challenge issued eons ago and light-years away. SUSPENDED,™ the race to stabilize an entire planet's life support systems. And A MIND FOREVER VOYAGING,™ a radically new work of serious science fiction in which you explore the future of mankind.



But don't panic. You'll be accompanied every light-year of the way by your trusty Hitchhiker's Guide, which you can always depend on for up-to-the-nanosecond information. Well, almost always:

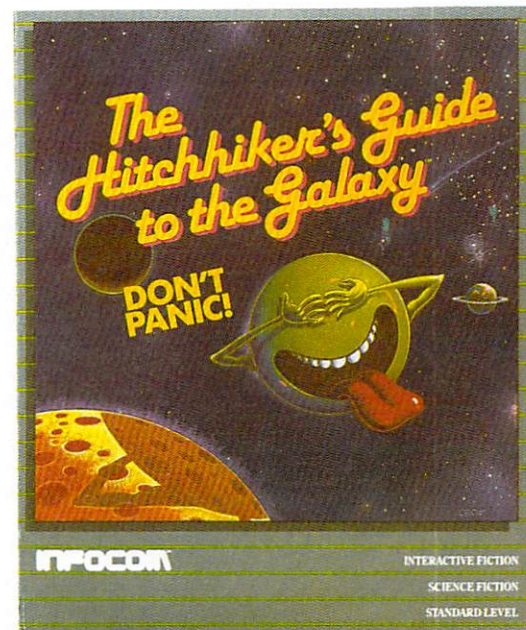
>CONSULT THE HITCHHIKER'S GUIDE ABOUT THE MOLECULAR HYPERWAVE PINCER

And the story responds:

SORRY, THAT PORTION OF OUR SUB-ETHA DATABASE WAS ACCIDENTALLY DELETED LAST NIGHT DURING A WILD OFFICE PARTY.

So put down that beer, take that towel off your head, open the door, hitchhike down to your local software store today and pick up THE HITCHHIKER'S GUIDE TO THE GALAXY. Before they put that bypass in.

Still not convinced? Try our Sampler Disk which includes portions of four different types of stories for a paltry \$7.95. If it doesn't get you hooked on the addictive pleasures of Infocom, return it for a full refund. If it does, you can apply the price toward any Infocom story. You can't lose!



# INFOCOM

For more information call 1-800-262-6868.  
Or write to us at 125 CambridgePark Dr.,  
Cambridge, MA 02140.





# Avision

By Steve Twombly

## Excitement

At the time of this writing, Amiga computers are shipping to dealers throughout the country and being purchased by inspired computerists, both novices and advanced users. Many of the products that you will soon be able to purchase are in the development stages at this time, all in varying degrees of readiness. The introduction of the Amiga has initiated a flurry of excitement and activity among hardware and software developers.

The first Amiga development systems arrived with the most complete set of software development tools of any new microcomputer to come to market. Several programming languages and utilities were made available early on to a wide range of enthused companies with new ideas about software applications and microcomputer usage. These companies range from small to large, from undiscovered to well-established. Many of these developers will sell their products to larger firms for marketing and distribution, and many will start their own new companies to produce and market their products.

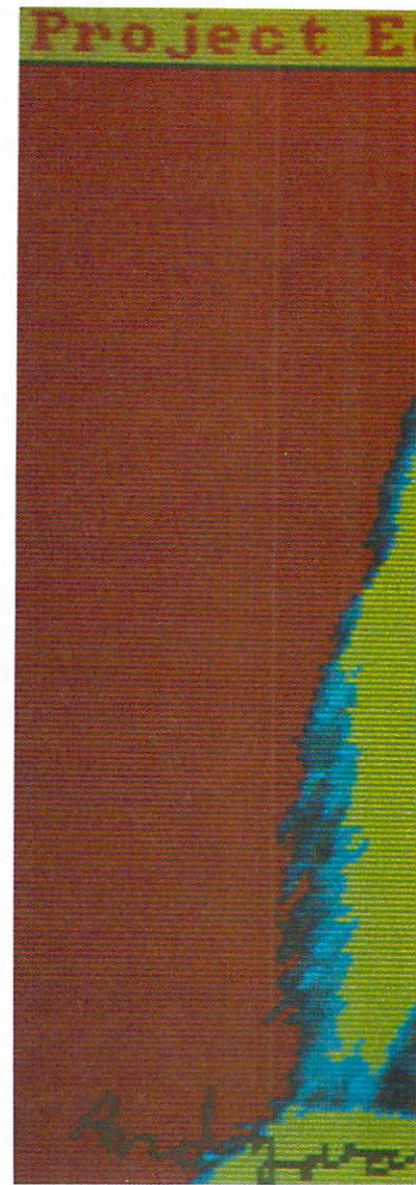
One primary source of energy is motivating these enthusiastic new visionaries. That energy is excitement! Excitement is a strong motivating force that can propel its possessor to accomplish a great deal very quickly. It can be responsible for the actualization of ideas that, in the conceptual stages, appear almost impossible. When one is truly excited about an idea, everything else (including sleeping and eating) takes a back seat; anyone involved in computer programming knows what I mean. Many of the products either now completed or in the development stages have been labored over round-the-clock for months.

Some companies see in the Amiga a very strong mainstream computer with the potential to run high-powered business applications very quickly, process large volumes of data and carry on a variety of critical tasks simultaneously. These developers will advance the quality and performance of business software in such traditional disciplines as word processing, spreadsheets, database management, presentation graphics and telecommunications. Some companies are at work developing educational software, recognizing the opportunity to enhance

the learning process and pioneer new teaching techniques through interactive video, artificial intelligence and audio/visual juxtapositions.

Some companies I've talked to are interested in the digitizing capabilities of the Amiga. Their vision encompasses a wide variety of fields, from industry and the military to video and art. I am aware of several projects in the works using the concept of artificial intelligence on the Amiga to drive expert systems dedicated to very specific tasks, using the Amiga as either a single workstation or as part of a large network. Unique forms of entertainment software are being developed for you and your Amiga, incorporating sophisticated sound and animation, unbelievably realistic simulations and adventures and intriguing interactive fiction, just to name a few.

Since we at *AmigaWorld* are able to contact and work with these developers early, in some cases during the conceptual stages of their ideas, we are able to foresee what is in store for you as these ideas are developed and brought to the marketplace as products. The world of Amiga at this point in time is infused with a flurry of activity, where ideas are hatched and exchanged, scrapped and reborn, finally shaped and then painstakingly refined into finished products. Many of these ideas are now ready for you to share



and put to use on your Amiga, but many more are yet to come. *AmigaWorld* will be bringing you up to date on these new products and developments throughout each issue, sometimes bringing you right into the development process as well. When we think it's important, we'll give you an opportunity to





meet the developers and share in their excitement and motivation.

Excitement and enthusiasm are contagious among those who are working with the Amiga. I have read the charters of many new Amiga users groups that have been forming across the country. We have re-

ceived telephone calls and letters from many enthusiastic groups in North America and in Europe as well. Several on-line services have already introduced Amiga special interest groups. College professors are recommending Amigas to their students, and many people who have never owned or used a computer before are planning to make the commitment and purchase an Amiga. One young

musician wrote to us of his plans to computerize his local recording studio with the Amiga. He has convinced the studio's owner to invest in Amigas, and both individuals are excited about the new and advanced recording environment they're creating. We all know that the Amiga is a very strong persuader.

*AmigaWorld* will serve as a focal point for this enthusiasm and creative energy, channeling the many diverse streams into a central forum and serving as a source of valuable information to you. No matter what your interest, if it has to do with the Amiga, we are interested. We're interested in your excitement and sense of discovery as you explore the features and capabilities of your new Amiga. We'll bring you stories about unique uses of the Amiga and let you share in the discoveries of those who have brought new meaning to the practice of computing by using their Amigas creatively, and in many cases, competitively.

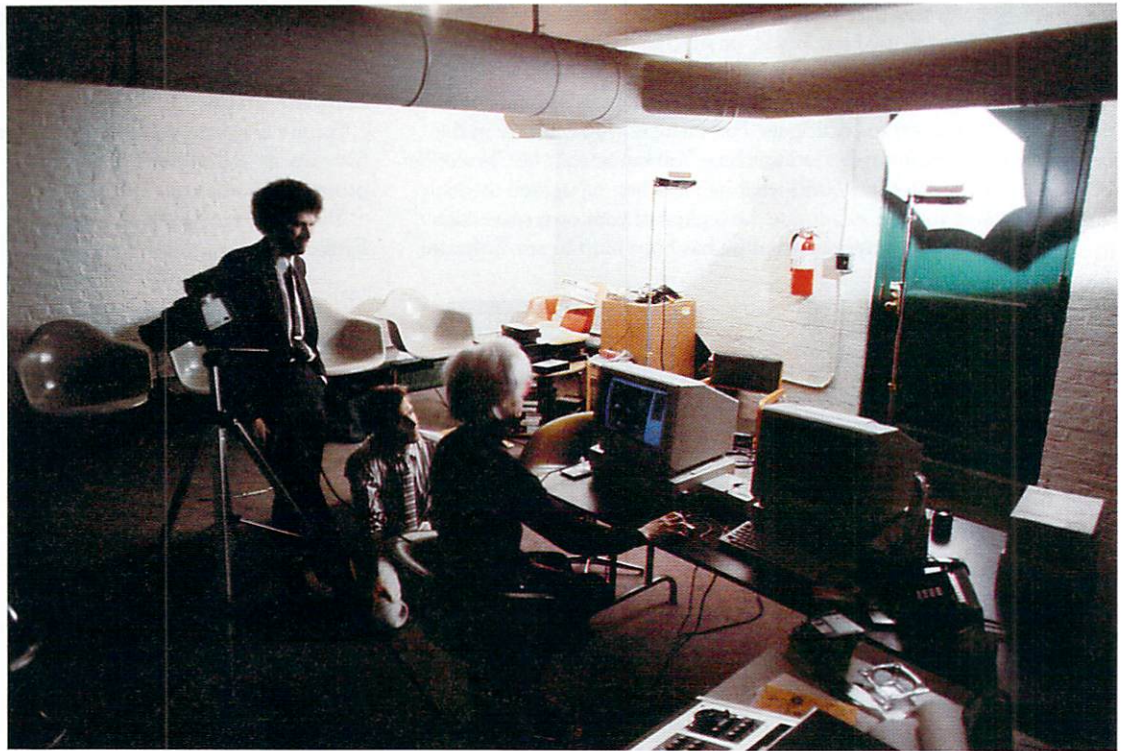
*AmigaWorld* will continually strive to provide you with more information and ideas relevant to your new computer. We'll bring you articles that will help you use your Amiga and get more performance out of it than any manual or documentation can provide. *AmigaWorld* will be as exciting as the market that it covers, and if you keep the feedback coming our way, we'll be able to respond better to your needs. So, enjoy this issue on Amiga creativity and share the excitement of *AmigaWorld*. ■

*Image of Deborah Harry digitized with A-Squared's Amiga-Live!, colored by Andy Warhol.*



# Zeitgeist

By Guy Wright



So what is the spirit of the times, this time? Creativity, art, design, personal art, professional art, business telecommunications, interactive fiction and a screen or two of video.

If *AmigaWorld* were just another computer magazine and the Amiga were just another computer, then we would call

this, our third issue, a graphics issue. There would be articles on screen dumps and algorithms for drawing shapes. Perhaps a short program that displays a Christmas tree while playing *Silent Night*. Graphics issues are popular in the computer magazine field. But *AmigaWorld* is, as you have already guessed, not your standard computer magazine. That is why, if we had to put a name

on it, we would call this an art or creativity issue.

As the software is developed, we will follow it, doing reviews, offering suggestions, evaluating products, even publishing tips and techniques for getting the kinds of graphics results you



need out of the Amiga. In this issue, however, we have tried to address larger questions like, what is art? What are the professionals, like Andy Warhol, doing with the Amiga? What will the people who own the Amiga be doing with the graphics? How do "traditional" artists feel about computer art?

Is *AmigaWorld* trying to be an art magazine? In this issue we are. We had artists and illustrators working with the Amiga and writing about it. We interviewed designers, printmakers, papermakers, painters, professors, video engineers and others. Some of them were enthusiastic about the Amiga. Some were lukewarm. Some didn't like the computer at all. In some cases, we asked more questions than we answered, and perhaps we bit off more than we could chew. Who in their right mind would try to define art in the first place? Is it a reflection? A hobby? An amorphous manifestation of the times? A journeyman's skill that can be learned by almost anyone with desire and a steady hand? A window on the soul?

And then there are the people, the artists. Inspired by the possibilities or threatened by the technology. A careful read

will show a number of portraits. World-famous Warhol using the Amiga for (is it even proper to give a name to a kind of art? Pop art? Computer art? Personal art? Professional art for hire?) Dolly Parton portraits and MTV videos, illustrators who sell commissioned drawings for \$175 a shot, and children adding more love to birthday cards.

The reason that we took such a long step in this direction was that the Amiga is advanced enough to warrant a serious look into the nature of creativity. Before the Amiga, the only computer-generated art was either done on very, very expensive equipment (more expensive than your average "starving artist" could ever hope to afford) or of a quality that could be reproduced with a sheet of graph paper and four different colored magic markers—etch-a-sketch art. When computer music came along, it was used as a gimmick, a strange noise glued onto the side of a song. Only recently have musicians begun to integrate computer music into their works. The same will be true of the Amiga in visual art. It will, at first, be used as a gimmick and later as an integral part of the artist's work, another type of brush, another color on the palette.

So, where is the bottom line? How is this issue of *AmigaWorld* going to improve profits in your business? We have a few things here and there that might be worth your while. Some on-line business services are explored, which might just influence your telecommunications decisions. Some hard-core hardware from Tecmar is discussed. The Software Group, developers of the Enable integrated package, talk about their product line.

We also venture into the fantasy worlds of interactive fiction. And the video-interfacing wizards at A-Squared cast a few digitizing spells. We talked to the people at Mindscape, producers of the Amiga Tutor program, about creativity in software design. There are articles about Lisp and Logo, from turtles to artificial intelligence. Sign on QuantumLink, a new Commodore network. Confessions of a Mac user, letters from readers and Digital Canvas.

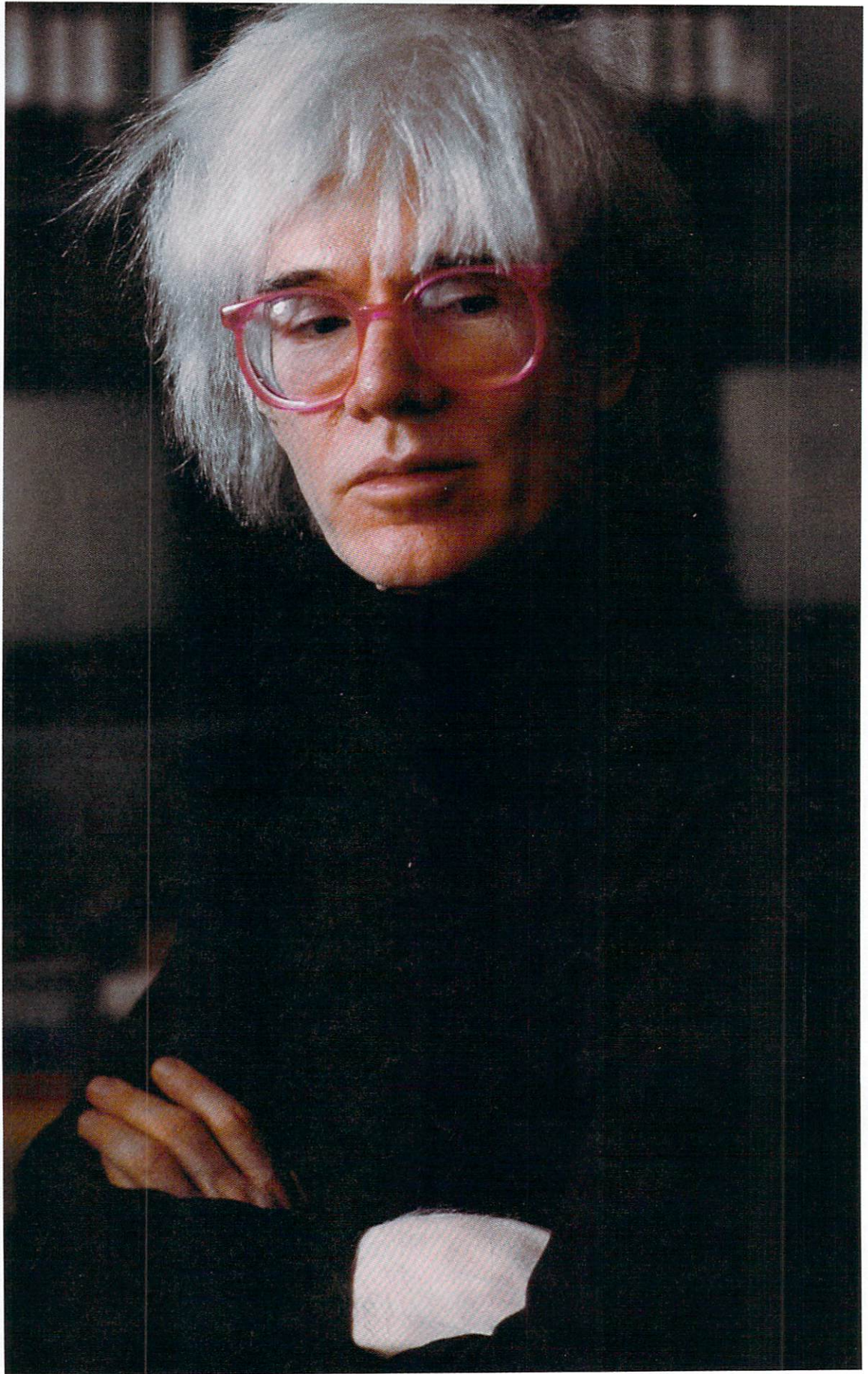
If you are looking for the Wall Street outlook or how to design your own analog-to-digital converter circuits, then you will have to stretch your imagination quite a bit (perhaps all the way to schizophrenia), because we just didn't cover those topics. And if you think that art isn't a business, just like widget manufacturing and networking, then perhaps your imagination could stand a little stretching, because Dolly Parton, MTV, Andy Warhol, video digitizing and illustration may not be traditional 9-to-5 business, but they certainly put food on someone's table.

If this issue doesn't help you design a more efficient spreadsheet, at least it will make you think about the Amiga as another kind of productivity tool for those people whose business is creativity. ■



---

*“The thing that I  
like most about  
doing this kind of  
art on the Amiga is  
that it looks like my  
work.”*





# Andy Warhol: An Artist and His Amiga

## *A conversation about art and the Amiga with artist Andy Warhol*

*By Guy Wright and Glenn Suokko*

*Warhol Studios. New York City. Into the front to shake hands all around. Managers, producers, art dealers, and, in the back of the crowd, Andy Warhol. Small, black jeans, sneakers, bright pink glasses, white hair. He shakes hands with a quiet "Hi," then disappears somewhere into the large building while the rest of us are taken up, two at a time, in a very small Otis elevator to a second or third floor dining room for lunch.*

*The cozy affair is filled with editors from Interview magazine, art critics, friends, managers, us (Glenn Suokko, AmigaWorld's Art Director, and myself), and others all talking, drinking wine, sitting at some unheard command and eating. Andy drifts in quietly, sits and eats at the far end of the table. Monosyllabic answers to questions asked by others at the table.*

*I ask an editor of Interview what questions I should ask Andy. "Is there anything he likes to talk about?"*

*"That's a hard one," he says. "Andy doesn't do interviews. I'm just glad that because he is the publisher [of Interview] I will never have to interview him. I don't know what I would ask. You should ask his manager."*

*Earlier, I asked Jeff, an engineer from Commodore who has been working with Andy for weeks on his new video for MTV, the same question. "I don't know," Jeff said. "He doesn't talk much. He doesn't talk at all. He doesn't do interviews, as far as I know. You guys are really lucky to get an interview with him."*

*Finally, I ask the Commodore exec who set up the interview in the first place. "Maybe I should ask the questions," he says. "Andy doesn't talk much, and I have no idea how it will go."*

*Our photographer arrives and Glenn goes up to the video studio to help set up lights. Lunch ends and I follow Andy upstairs to the studio.*

*"So, you don't do interviews?"*

*"No," Andy says abruptly. He disappears again. Great.*

*The video studio, where the MTV video was put together, has chairs, equipment racks, monitors, video editing decks, cameras, lights and two Amigas. Some paintings are brought in. Four by four foot Dolly Parton. Punching bags. Things. Vince Freemont, Producer for Andy Warhol's T.V., has everyone sit and we preview Andy Warhol's Fifteen Minutes (More or Less) video for MTV. The portions done on the Amiga are pointed out. Titles and special effects. Andy has drifted in to watch.*

*When it is over, most of the people in the room either leave or move or remain seated. A video camera is connected to a digitizer connected to one of the Amigas, and Andy sits before it. Lights are adjusted. The camera is turned on. The software is loaded.*

*Our photographer begins shooting almost non-stop. He uses a camera with an auto-winder so he can click-zhhh, click-zhhh, click-zhhh as fast as he can point and focus. He moves around the room quickly using up roll after roll of film.*

*No one is sure who is supposed to be there and who isn't. People wander, people sit, people talk. The engineer plugs in cables, types on the keyboard, moves and clicks the mouse, changes settings.*

*And Andy Warhol sits before an Amiga that is soon alive.*

*Images of what the video camera sees are fed into the Amiga and onto the screen. At first there are flickers of color and interference. The camera is pointed at nothing, and then (more for something to focus on than anything else), the engineer points the camera at the painting of Dolly Parton leaning against a rack filled with video tapes.*



*It doesn't really start anywhere. At some point tape recorders are turned on. At another point the software is working. Throughout there is the click-zhhh, click-zhhh, click-zhhh of the photographer's 35mm camera. Andy begins playing with the mouse, and the colors on the screen change with each move and click. He is intrigued with the changing colors and weird effects caused by the camera-light-software-mouse-people combination. ▶*



◀ While waiting for the interview to begin, the interview began. More as a conversation than an interview. Andy playing with the computer image, people coming in and going out. Many people asking questions, even Andy asking questions. The photographer shooting from every possible angle in the room. The engineer constantly adjusting equipment. People doing nothing but watching the screen as the colors change or the video camera is moved or the lights are moved or as Andy tries something else.

A color painting of Dolly Parton is, at first, shades of black, white and gray, but soon is illuminated, replacing the original colors with electronic Amiga colors.

An interview with Andy Warhol, who doesn't do interviews—an artist at the Amiga launch, an artist long before Amigas. Publisher of Interview magazine. Involved with video, MTV, rock, films, people and things like Amiga computers.

**Glenn:** When did you do this portrait of Dolly?

**Andy:** Last week.

**Glenn:** Hmmm. Look at that color.

**Andy:** It would be great to just drop this color in. Oh yeah. So, do you want to ask me any questions?

**GSW (Guy Wright):** What do you want to talk about?

**Andy:** Oh, I don't know.



**Glenn:** Is this the greatest thing since sliced bread?

**Andy:** Oh yeah, it is.

**Glenn:** How do you see this work being displayed? How would you show something that you create on an Amiga to the general public?

**Andy:** Well, we could get a printout. I could just print this out if we had the printer.

**GSW:** Would you sell the prints or distribute the disk itself?

**Andy:** Well, this friend of mine, named Jean-Michel Basquiat, goes to the xerox machine and puts xerox all over his paintings. So, if we had a printer right here I could do it this way and just sign it as a print. But, I guess if printers ever get really big, like a twenty by thirty or thirty by forty, then it would really be great.

**GSW:** So you don't see any problem? Something you do on the computer can be recreated pixel for pixel, an exact duplicate?

**Andy:** Well, in prints they are supposed to be exact duplicates. So...

**GSW:** But there is a finite number, like print number fifty-six of one hundred.

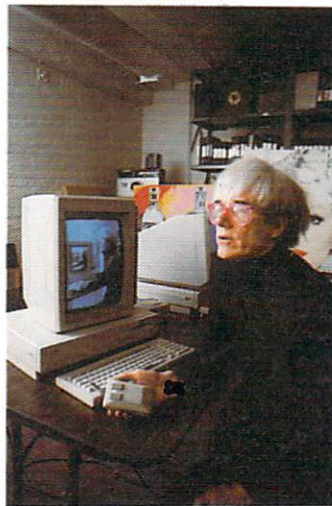
**Andy:** Well, you can stop at whatever number you want. Etchings usually stop at a certain number.

[The motorized film advancer on the photographer's camera is furiously click-zhthing, click-zhthing, click-zhthing while people move around the room and Andy taps the buttons on the mouse.]

**Glenn:** Could you ever imagine monitors sunk into walls in museums or galleries?

**Andy:** Kids have been doing it already. The Paladium has two big square TV sets going all the time, with about 25 to 50 sets on each side. They haven't done any art yet, but it would be great to do that.

**GSW:** Like the Limelight with their bank of



TV sets along one wall.

**Andy:** Yeah, but actually Private Eyes is a video bar. [To Glenn] Have you been there?

**Glenn:** No.

**Andy:** It used to be right around here. So if you have a video you want to screen down there for a party, you can. It's not a dancing place. It's just a video bar.

**GSW:** Do you think that might be the new wave museums?

**Andy:** Well yeah, actually, when I worked on this at Lincoln Center [the Amiga launch], it was like a museum, because we had a couple thousand people and I was working with it on the stage. It was like a museum because you could show your work.

**GSW:** Instant museum in a finite time period.

**Andy:** Yes.

**GSW:** So it's not a static art?

**Andy:** Jack [Haeger, Art and Graphics Director at Commodore-Amiga], who was working with me before, uses it more like brushes and paint.

**GSW:** Do you like working with it?

**Andy:** I love it.

**GSW:** Are you going to buy one?

**Andy:** Well, we already have two, so we are going to buy the printer.

**GSW:** You are talking about the high-quality printer?

**Andy:** Well, they had the one at the launch, which was this big [measuring four square inches in the air with his hands]. It was really cute. Very pretty.

[People wander about the room. There is conversation in the background. The engineer adjusts cables. The photographer loads film, shoots, moves, shoots some more. The image on the Amiga vibrates with the changing room lighting and with the pass-



ing of people in front of the video camera. The engineer, finished with cables for the moment, goes to change the video camera angle.]

**Glenn:** I like the movement.

**Andy:** Well, it's not... oooh [as the engineer moves the video camera, sending electric streaks of color across the Amiga's screen]. . . it is usually still. I guess the cycle is on. Oh, that stops it. Oh yeah, that is nicer.

[The image settles down to a crimson polarized wash of the day-glo Dolly Parton



painting, leaning crooked behind a bank of video production equipment.]

**GSW:** Do you see this as more video-oriented, as opposed to computer-oriented?

**Andy:** I think everything... anyone can use it.

**GSW:** Do you think there will be a rise in personal art?

**Andy:** That too, yeah. [Crimson changes to mauve to orange to fusia as Andy moves and clicks the mouse.] Well, I've been telling everybody about the machine, but they haven't been able to get one yet.

**Glenn:** Have any of your artist friends seen the stuff that you've done?

**Andy:** We had somebody come down the other day, and people have read in magazines about the stuff we did at the launch.

**Glenn:** How do your friends feel about computer art generally?

**Andy:** They all like it. They have been using the xerox, and they can't wait until they can use this, because there are so many people into xerox art. You do it and then take the stuff to the xerox store and do the prints there. Jean-Michel Basquiat uses xerox. So, if he could be printing out on his own machine, he would be using this.

**Glenn:** Jean Michel was the artist who worked with you on this? [An illustrated punching bag]

**Glenn:** Have you been doing anything with the music capabilities?

**Andy:** Not yet. We were just trying to learn the art part of it first. [Another color change on the digitized video image of Andy's photographic painting of Dolly. Where there were reds are now blue-blacks, where there was flesh-pink there is now yellow-green.] Oh, this is great.

**GSW:** Do you think the computer has a limiting effect?

**Andy:** No.

**GSW:** Do you think it is open ended?

**Andy:** Yeah. [Andy is distracted constantly by the changing colors on the Amiga screen. The Dolly Parton portrait is color-animated with each mouse move and click.] Gee, if we had a printer now, I could just print these out and send them to Dolly Parton in all these different colors. It would save us a lot of trouble.

**Glenn:** Has she seen the protrait?

**Andy:** No, we were going to send it out. This would be great because I could do it in green and another color.

**Exec:** Like you did with the Deborah Harry thing?

**Andy:** Yeah.

[At the Amiga launch, Deborah Harry, singer for the group Blondie, posed before a video camera. A single black-and-white

grams have a lot of different capabilities.

**Andy:** What are they? What new things have come up in the last few months?

**Exec:** I haven't even seen them myself. Everyone has been working on their separate piece of the puzzle. But the last time I spoke with Jack, he asked when he was coming back here. So I know that he is eager to come back.

[Another option of the paint program is activated and the colors cycle through the spectrum on their own with a light and color strobe effect.]

**Andy:** Oh, yeah. Oh, that's weird. Oh, look at that.

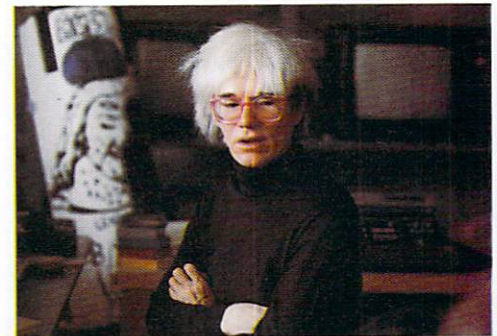
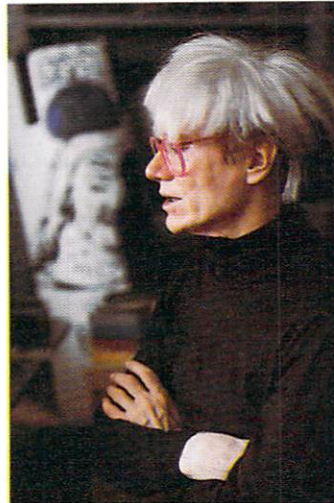
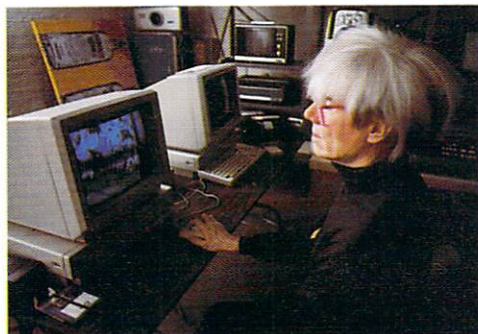
**GSW:** Is there anything that you don't like about the Amiga?

**Andy:** No, no, I love the machine. I'll move it over to my place, my own studio. That way I'll be able to do the colors. It'll be really great, and if we can get a printer, I'll do this portrait in four different colors and send them out to Dolly.

**GSW:** Then you see yourself using it as a major tool?

**Andy:** Oh yeah. It would save a lot of time. I wouldn't have had to do all these portraits all at once. I could have just picked out the colors I wanted and sent them out, and then picked the one I wanted.

**Glenn:** Do you think that it will have any



**Andy:** Yes.

**GSW:** Do you like the machine because it is so quick?

**Andy:** I think it's great. It's quick and everything.

**GSW:** What influence do you think this will have on mass art as opposed to high art?

**Andy:** Mass art is high art.

**GSW:** Do you think it will push the artists? Do you think that people will be inclined to use all the different components of the art, music, video, etc.?

**Andy:** That's the best part about it. I guess you can... An artist can really do the whole thing. Actually, he can make a film with everything on it, music and sound and art... everything.

frame was frozen and transferred to a paint program where Andy filled in colors, added lines, drew with the mouse and finished in ten minutes what would have taken weeks in a studio.]

**GSW:** How much time have you spent with the Amiga?

**Andy:** Just the few weeks that Jack [Haeger] was here. We are waiting to get the final software. And then we need Jack back again for a couple of weeks. Has Jack discovered any new techniques?

**Exec:** I'm sure he has, because the new pro-

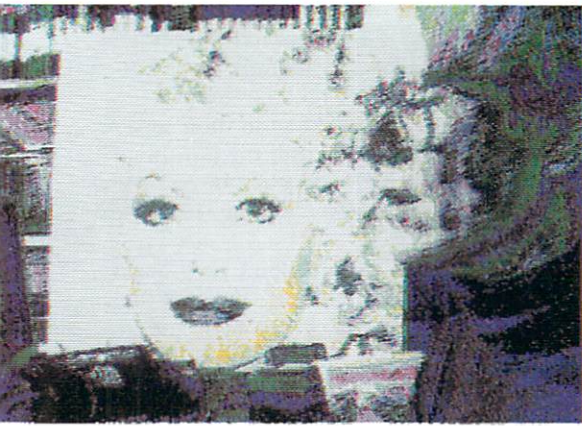
effect on the value of an 'Andy Warhol original'?

**Andy:** No, it would just be a sketch. Call it a sketch.

**GSW:** Do you ever see that as becoming an artwork in its own right?

**Andy:** Oh yeah. Well, actually, Steven Sprouse really did most of his artwork this way. He did his last print, I think, with the planets and stuff, in this way. Beautiful things, geeze!





Illustrations above and on following page were done by Andy Warhol

◀  
**Glenn:** Would you ever think of sending them out as finished pieces?

**Andy:** Well, we are doing that already. After I did that and Steven saw them, he showed me some of his things and they're just great.

**GSW:** The great thing is that you can play with all the color combinations, take a picture of the combination or make a printout and then decide which combination works best.

**Andy:** Well, maybe I could take the painting up there and I could do the color variations on it. There must be a printer we could get, even the small one.

**Exec:** Actually I think we have a larger printer.

**Andy:** How big is it?

**Exec:** Eight by eleven.

**Andy:** Oh really? Could we do that maybe this week?

**Exec:** Next week.

**Andy:** OK. If I brought this picture up, could I just do different colors of this?

**Jeff:** Sure.

**Andy:** [To Guy] And then you could use this in your article. You could show how I could change the picture. Do you know what day next week? Early next week?

**Exec:** They're around. It's just a matter of picking one up.

**Andy:** Oh. OK.

[More adjusting of the camera and painting of Dolly. The photographer is beginning to slow down, but his camera continues to click-zhhh, click-zhhh, click-zhhh.]

**GSW:** What are the things that you like the most about doing this kind of art on the Amiga?

**Andy:** Well, I like it because it looks like my work.

**GSW:** How do you feel about the fact that everyone's work will now look like your work?

**Andy:** But it doesn't. You just showed me other artists' work in the magazine [*Amiga-World*]. It looks like the work that I started doing. I still think that someone like a decorator could use it when he wants to show somebody how their apartment would look all in blue or all in white, or... they could just do it so easily. Change a chair or a color.

**GSW:** Would you ever consider using the Amiga for 'traditional' uses?

**Andy:** The kids from *Interview* magazine [Andy Warhol is the publisher of *Interview*, whose offices are downstairs] want to steal it already. We just haven't given it to them.

**Glenn:** Do you think that you might ever use any of the pictures generated on the Amiga in the magazine [*Interview*]?

**Andy:** Oh yeah. This would be a really good thing for our covers.

**GSW:** Do you ever play computer games?

**Andy:** I'm not fast enough.

**GSW:** There are some slow ones. Interactive fiction. Electronic novels.

**Andy:** Oh really? [To exec] Are the ad agencies getting the machine yet?

**Exec:** You got yours way ahead of schedule.

**Andy:** Oh great!

**GSW:** How do you feel about using the mouse instead of a paint brush?

**Andy:** I thought that I would have the pen [light pen] by now.

**GSW:** Do you find the mouse a little awkward?

**Andy:** Yeah, the mouse is hard. Why isn't there a pen around?

**Exec:** Kurta is working on one right now, and we thought that we would have it by now, but...

**Andy:** Would a pen work the same way? I mean, it could even be a square pen. You could put the ball down here [indicating the corner of the mouse], just holding it differently. If you had a ball at the tip, you could hold it differently.

**GSW:** A ball point mouse.

**Jeff:** The one we are working on doesn't even have a cable.

**Andy:** You mean just like a pencil?

**Jeff:** Yes.

**Andy:** Oh, how great. That is going to do so much. You could trace over a picture and stuff like that?

**Jeff:** Yes.

**GSW:** With something like this [the mouse], do you miss getting your hands in the paint?

**Andy:** No. No. It's really great not to get your hands in paint. I don't know. They always say that plastic paint is bad for you. Is this bad for you?

**GSW:** Nowadays they say that it is the way you sit in the chair in front of the display.

**Glenn:** Could you do a self-portrait?

**Andy:** Oh sure.

[The video camera is moved to point at Andy, and his face appears on the Amiga display. With Andy on the monitor and Andy in front of the computer and Dolly in the background, there is photographic temptation.]



**Photographer:** Could you lean forward? I want to get both you and Dolly in the same shot. [Andy leans.] That's excellent. That's good. OK, thanks.

**Glenn:** Did Dolly Parton come to you to do the portrait?

**Andy:** I did it when I went out to the Madonna wedding.

[Back to the self-portrait. The engineer adjusts colors, levels and gray scales until Andy is satisfied.]

**Andy:** There, that one [indicating a straight black-and-white video image of himself].

**Jeff:** Like that?

**Andy:** Uh huh. [Already working on coloring in the on-screen image of his face] God, isn't that funny?

**GSW:** If there was something that you could add to the Amiga, what would you add?

**Andy:** The only thing that I would add would be the pencil [light pen]. That's the only thing.

**GSW:** What about working on the screen itself, with a touch screen?

**Andy:** Well, that would be great. That would be good with the pencil, because you could add in the color and stuff like that, but with a sharp point, you could get the lines easier.

**GSW:** Have you ever done anything with computers before?

**Andy:** No, this is the first time.

**GSW:** Why haven't you used computers before?

**Andy:** Oh, I don't know. MIT called me for about ten years or so, but I just never went up... maybe it was Yale.

**GSW:** You just never thought it was interesting enough?

**Andy:** Oh no, I did, uh, it's just that, well, this one was just so much more advanced than the others. I guess they started all that there, all the kids from college who went to California. Weren't they the inventors?

**GSW:** Do you think that computers will play a larger and larger role in art?

**Andy:** Uh, yeah, I think that after graffiti art, they probably will. When the machine comes out fast enough. It will probably take over from the graffiti kids.

**GSW:** You like graffiti art?

**Andy:** Oh yeah, I do. I think it's really terrific.

[Andy becomes absorbed in the self-portrait. Adding colors, lines, filling in areas, changing things. The mouse is moved and

clicked and clicked, but his eyes never leave the screen. People continue to move around the room. Some leave, some enter, most just stare at the Amiga screen while the black-and-white Warhol changes from a digitized video frame displayed on an Amiga computer into a full color self-portrait, a Warhol-painting-Warhol original. The iterations of Andy Warhol painting on an Amiga an Andy Warhol painting of Andy Warhol sitting at an Amiga doing electronic painting become too confusing to follow. Vince Freeman, producer of Andy Warhol's T.V., enters and stares with the rest of us.]

**Vince:** You want some air conditioning in here?

**Jeff:** I turned it off, because of the fan.

**Vince:** How about opening the door?

**Jeff:** Fine, thanks.

[Squeak... door opening... crash, rumble-rumble-rumble, metal door rises.]

**Vince:** [Stepping outside onto the roof] I love these skylights.

**Andy:** [Rising for a moment to look outside. The image of his face on the screen, partially colored, stares at an unseen monitor.] They were supposed to be party tables.

**Vince:** Those skylights are being knocked down now.

**Andy:** Are they? [He steps outside.] Again?

**Vince:** People from the other buildings throw stuff on them, and since they put in the wrong weight of glass, they have a tendency to break.

**Andy:** I haven't seen the back in a long time.

**Vince:** OK. Everybody go outside and take a break for five minutes. Is that roll up still there? Andy? Andy?

[Andy returned and the self-portrait was finished. People wandered off. We had to leave. Other interviews. Other... ]■

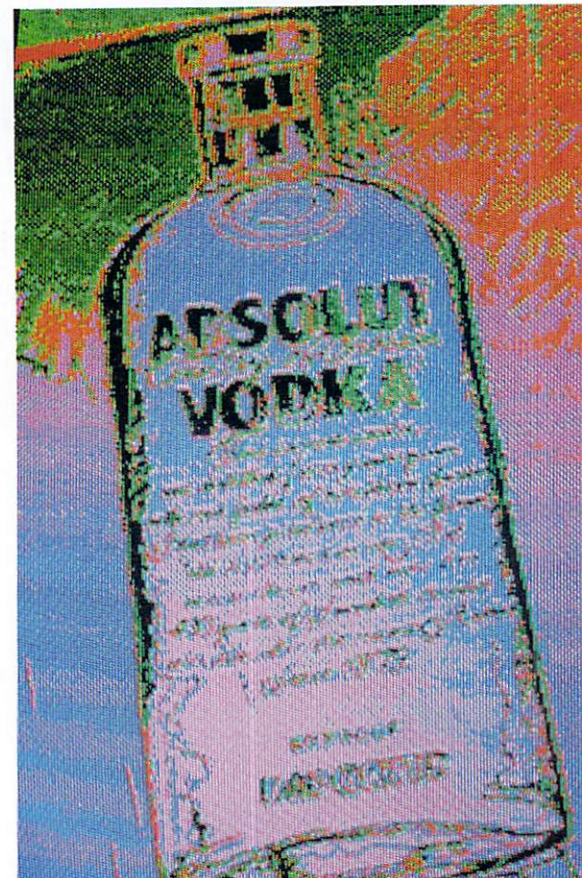
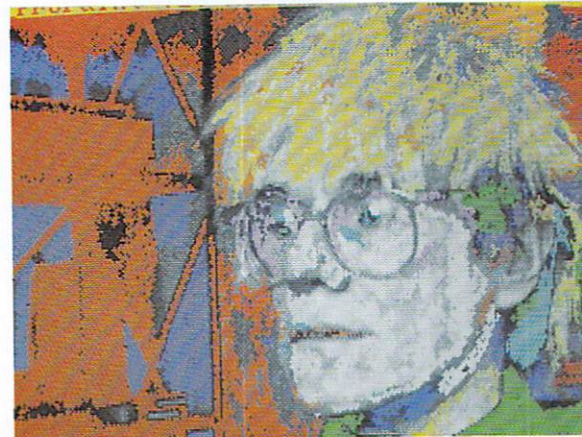






Illustration by Steven Lyons



# Computer Art: Is It Really Art?

By Vinoy Laughner

*Can a computer, austere and logical, be a tool for creative personal expression?*

Modern technology has infiltrated and transformed just about every area of human activity, including the visual arts. After centuries of relative continuity in the materials and processes of two-dimensional visual art, the last century and a half have brought about a revolution in this area. These new methods, offsprings of the dramatic rise in applying modern science through technology, have captured the imagination of those in the creative fields, as well as the general public. Since Louis Daguerre popularized the process of capturing "real" images on sheets of copper coated with silver nitrate (the daguerretype), which led to modern photography, how we view ourselves and visually represent our world can never be the same.

In this article I will give a brief overview of these new visual technologies and then focus on computer art and its potential use for personal artistic expression.

## *Seeing History*

With the advent of motion pictures, another watershed in the history of visual technology was reached. (Where would we be today without good old Thomas Edison—in the dark?) The march of science made it possible for many artists, practitioners of the ancient craft of acting, to walk into the lives of their audience in a dramatic new way, and to preserve their accomplishments on film for us to see decades later. We also could now document our history on film: war, progress, presidents.

By the time I was growing up, my world was inhabited by Popeye, Zorro and the Mouseketeers. Once again technology opened a new window into a land of creativity and imagination (some would say also a land of mediocrity and decadence). It is impossible to imagine America in the sixties without the tube. Our perceptions of the world changed from our living rooms. One minute we were on Gilligan's Island, the next in Vietnam; we rode from the Ponderosa to the streets of Montgomery in a flash. Our opinions changed, we changed, our culture changed. Our knowledge of world events hinged on signals that fired electrons at the back of a fluorescent screen.

Today, video is the rage. VCRs are the newest "must have" machines and many children spend more time with MTV than ABC. (And I don't mean the TV Network!) We have much to gain from this new technology, regardless of the potential abuses. The achievements in film, television and your own "home movies" are now comfortably and conveniently accessible right in your own home. Why wait for film to be developed when you can view homemade movies immediately, with sound? You can tape over those embarrassing parts. Many people now only go to the movies because the current box office fare isn't on videotape yet.

Finally, we have computer graphics, or if you will, computer art. This new field, based upon what so many consider an austere, cold technology, is a radically different world of images. It doesn't have the same kind of appeal as a familiar face on the TV screen, but along with the technology it rides on, it is surely going to change the now and future of what we see and how we see. Whether you know it or not, TV today is filled with the products of this new and revolutionary form of art, and the hottest new movies often depend upon the kinds of effects only computer graphics can make feasible. What we see is being changed by computer art.

How will the traditional art community accept computer art? This is not, after all, just another form of electronic entertainment; it involves personal creative input. Where will it fit in? These are very significant questions. Two things are for sure, it's here to stay and it will dramatically influence visual art in the future.

## *Art of Distinction*

The modern visual technologies are usually associated with their use in "popular culture." The people who create in these fields are considered artists—we would consider the producers or writers of a film to be artists of a kind; we refer to artists of screen and television—nevertheless, we have become accustomed to classing those artists in "traditional" fields of two-dimensional visual art in very separate and special categories from those in the new-tech mediums. We have an area cloistered for them called Fine Art. It's obvious



◀ that they do different things and yet the creative spirit is still the same; but often the division amounts to, lamentably, an elitism—snobbery. Today, this High Art snootiness often has a distinct rarified smell: Money. Upon what grounds can we continue to maintain this distinction? The question should be one of quality (whether computer art or paint), shouldn't it? What valid measure do we enlist to sanctify certain mediums?

#### *History of Security*

Artists working in the traditional mediums of two-dimensional visual art (i.e., painting, printmaking, drawing) have the comforting benefit of long and rich

*This is not just another form of electronic entertainment; it involves personal creative input.*

historical traditions. Precious few, yet monumental, advances have come about in the materials and procedures of two-dimensional art. Beyond the "inventions" of painting or drawing themselves, it isn't hard to recognize the pivotal points in art history. (I am focusing on Western art.) The development of oil paints, usually attributed to the late medieval Flemish school associated with Jan Van Eyck, the use of highly sophisticated perspective accomplished by Renaissance masters, and the veritable "discovery" of color by the Impressionists, especially Claude Monet, qualify as such truly revolutionary and historic advances. Western art, its materials, methods and powerful traditions, make it a very conservative discipline indeed; artists have benefited greatly from the perspective and security provided by such a tradition. All of us are richer because of their accomplishments. Accepting a new medium, especially one coasting on baffling technology like computer art, could prove traumatic.

Even the Modern art movement, in all its supposedly radical glory, was and is conservative in this regard. The difference in a work by Picasso lies in the message or subject matter, not the medium.

Now to place the invention of computer graphics on a level with the rise of oil painting would be for most

artists sacrilege. I would tend to agree. Yet, I don't see computers threatening the hallowed shrine of Art, for I view the popular notion of art as some sort of mystical vocation as repugnant.

An artist's gift is in seeing a different way, in insight, not in having some channel to "Truth." Artists have a role and responsibility just like anyone else; what they do is necessary and important, no matter what some say about artists being in the business of making things people don't need. Every culture has produced and cherished artwork. That's a pretty good argument for its necessity. Maybe we have a problem understanding the necessity of art today because we have fostered a High Art dedicated to producing objects solely for passive contemplation in antiseptic shrines (museums); esoteric objects for a cultural elite.

#### *Misoneism*

It is feared that the artwork produced on computers will rob us further of our personality and humanness. The hallmark of art has been the mark of individual creativity. It is a valid point. (Still, oil paints and lithography are technologies too.) A good argument could be made that the more complex and larger the thing you place between yourself and your art, the less of yourself will end up there. Powerful argument. However, the degree of control and immediacy between you and what you create on an Amiga is astonishingly high. A computer is just a thing; we control it, it doesn't control us or hold us as its slaves. (If you want to get the best of a computer sometime, turn it off.)

Are we less human because we put tires, nuts and bolts between ourselves and the road, instead of just our humble feet? If you want to see cold, impersonal artwork, look at some of the stuff being produced by some human artists today. So much of it is shallow, banal and empty. You may strongly disagree, but my point is that impersonality is not intrinsic to computer artwork; you'll only lose as much of yourself as you allow.

If you're willing to rise to the challenge, a computer can be a fascinating tool (albeit awesomely sophisticated) for your personal creative expression. After all, you don't have to know the chemistry behind oil paints to use them, why worry about what's going on inside that forbidding little box? The knowledge may prove interesting, but it definitely isn't essential.

True, you will not get dirty creating artwork on a computer. You will not notice those old familiar smells, like that from turpentine or poppyseed oil. (If you do smell something, I'd turn the computer off soon.) Still, you can create marvelous things on that screen. They are not paintings in the traditional sense, but they can be complex, beautiful, vibrant. You can make things move, sparkle, colors pulsate or shift, or simply come up with original stationary designs. The object is to master this thing's capabilities to use it to say what you want to. The Amiga doesn't create graphics or artwork, but with one, you can.

#### *Does Computer Art Exist?*

If computer artwork is compared to traditional mediums, it is easy to find fault. No computer screen resolution can equal the nuance or subtlety of oil paints, for example. Yet, is the object to mimic another medium? Isn't it something spectacular in itself? If I want to do a



watercolor, I'll use (that's right) watercolors. I would rather use the computer for its unique features, not to try to feign another medium.

To be fair, and to approach a justified perspective, the radical difference and newness of computer art has to be considered. It falls into the general category of electronic visual technology, but also shares much in common with traditional two-dimensional art: line, composition, color—in short, design. You can combine artwork and video material, save, alter and duplicate works and create animation. The medium is radically different; the future appears to be the limit.

It's also more than just a spectator sport, like TV; it is an activity that demands involvement. Your imagination *will not* be at the mercy of someone else's. You can't sit back and just watch it happen; you have to take the initiative and make it happen. Creating art is always like that.

#### *Creative Computers*

The fact that computers will soon be a common feature of everyday life that we take for granted (for many they already are) is reason enough to demand that they be creative tools. Why should we settle for a computer that only satisfies a narrow aspect of what we are when these machines are becoming so involved with activities

we have previously associated with ourselves, and particularly our minds. We aren't made of only logic, business, electrical impulses and mathematics; we are also made of feelings, creativity, ideas, play. Why in the world shouldn't we have holistically conceived computers?!

I'll submit what I consider to be one major advantage of artwork created on a computer. One which I feel alone makes computer artwork worth pursuing. It has *light*. The Impressionists lamented the fact that, no matter how bright and pure the pigment, light cannot really be captured in oils. This thing glows! In a dimly lit room, I find myself marveling at the illuminated colors on the Amiga's screen. I've spent well-loved time before a canvas, but this is something different, it's unique. The challenge of this lighted screen, I believe, opens up a vast range of creative possibilities.

I have written this as an artist. I have a deep respect (love) for our great artistic past. I've spent a lot of time in those "antiseptic" museums. I also know that this is the twentieth century; computer art can't be brushed aside or simply dismissed.

The artist you will see with this new technology won't be some glossy movie star, and it won't be a bunch of plastic, glass and electrical components (the computer), it will be you. Computer art *does* exist, as soon as you make it. Our challenge is to direct this medium to its most meaningful and expressive application.■

*Address all author correspondence to Vinoy Laughner, c/o AmigaWorld editorial, 80 Pine St., Peterborough, NH 03458.*

Circle 60 on Reader Service card.

Coming Soon....

**AmigaForth™**

*The Language of Innovation*

from the creators of MacFORTH™

 *Creative Solutions*

4701 Randolph Road Suite 12  
Rockville, Md. 20852

*The Only Language You'll Ever Need For Your Amiga.*



Socrates (speaking to Protarchus): "Now does it occur to you... that the majority of the arts, as also those who are busied therewith, are in the first place concerned with opinions and pursue their energetic studies in the realm of opinion?"

—from the *Philebus* dialogue, Plato

# Artists and the Amiga

By Abigail Reifsnnyder

Virtually everybody agrees that the graphics capabilities of the Amiga are technologically incredible. Yet, do graphics capabilities lead to artistic possibilities? Webster's dictionary defines graphics as "the art or science of drawing a representation of an object on a two-dimensional surface according to mathematical rules of projection." Sounds kind of cold and impersonal—the kind of thing many artists would reject out of hand. Even if this is simply a case for semanticists, though, the question remains: Just because you can draw on the Amiga, does that make it an artistic tool?

Taking the words of Plato to heart (if perhaps out of context), I sought out four artists to gather their opinions, using, of course, the Socratic method (albeit without Socrates' great wisdom and sense of humor to aid us in our search for the truth of computer art). None of them had used a computer before, and each responded differently. With only four artists, we still managed to run the gamut of opinion, from one who dismissed it immediately and irrevocably to another who believed it opened up a wide variety of possibilities not achievable through other media.

The four artists were Paula Hible, Daniel McDonald, Rick Prol and Caren Scarpulla. Paula Hible works with a technique called gum bichromate, a process that combines photography and painting in a unique way. She mixes the emulsions herself, and her portraits and still lifes are washed in soft colors. She also does freelance work as an illustrator and artist for magazines.

Daniel McDonald's paintings draw on the influence of Piet Mondrian, using grid forms but adding circular and diagonal shapes. The repetitive qualities of his paintings reflect nature's ever continuing cycles. He is also the art director for two magazines, *Audio Times* and *Autosound & Communications*, which plays a major role in his painting. His works have been exhibited in various group and solo shows in New York City, and several hang in private collections.

Emaciated victims of urban violence populate Rick Prol's paintings and installations. Paintings mounted in dilapidated window frames with shutters let you know you are looking in at someone's private experience. In spite of the bold, dark colors depicting often gruesome scenes, they are not without humor. His works have been shown in many solo and group shows in New York, San Francisco and Europe.

Caren Scarpulla's neo-pop paintings feature scarred women with beehive hairdos and spiked heels. Her cartoony, hard-edged style is reminiscent of TV cartoons of the '60s, but despite its playful quality, portrays women as victims of life. Caren also runs a gallery on the Lower East Side of Manhattan and does freelance illustration for magazines. Her works have been shown in New York, San Francisco and Montreal.

I spoke with each artist individually and as a group as they doodled on the computer. Following are excerpts of those discussions.



Four New York artists gathered at the B-Side Gallery in Manhattan to discuss their views on Amiga artwork. From left to right: Rick Prol, Caren Scarpulla, Daniel McDonald and Paula Hible.

Opposite page, from top to bottom: "Going Shopping With Baby," by Caren Scarpulla; "Luxury High Rise," by Daniel McDonald; "Florida," by Paula Hible; "No Black Cats For Sale," by Rick Prol.



**Paula Hible:** It [creating art on the Amiga] doesn't seem honest because you can't see what's been done. You're not making real decisions anymore; there's no heart in it. If there's something you don't like, you can just blot it out and nobody can know you've done it. With an artist like DeKooning, you can see, if you care to look, where he erased or covered up stuff.

**Daniel McDonald:** I think that's a good point, but I feel as though this is a totally different medium. I feel as though this will never replace any other medium or be the final thing in art. I think it's one interesting variation and a lot of great things can be done with it.

**Caren Scarpulla:** You can put all your accounting on it, do all the stuff a regular computer would do, plus it has this. So if artists are going to buy computers just to do their bills and accounting, they may as well go and buy this—then they can fool around with it. So not only would you have a computer to do business, but you'd have one to draw on. I mean, I'd definitely buy one because I need to buy a computer, and I definitely wouldn't buy a stupid ordinary computer.

**Daniel:** I think this thing is probably more of a breakthrough technologically than artistically. It's not like the discovery of canvas or oils. [Looking at pictures in *AmigaWorld*] Why do this? These pictures would look better in oils, whereas what you can draw on this computer has a new, though primitive, look. There's still a consistency in what I do here with my work, but there's no reason to do the same thing on a computer—it's not using the medium the way it could be used.

**Paula:** What gets me is what do you get for your trouble after this? You get this thin piece of shitty paper with a printout on it. I don't respond to that.

**Daniel:** That's what I meant by saying it's a technological breakthrough, but not an artistic one.

**Paula:** I mean, the stuff this prints out on is horrible. Surface is important, and there's no surface with this.

**Caren:** You know what I could see: you could mix something that was printed out on a computer with oils like a collage. You know, you could do something on a computer, have it printed out and slap that on a canvas—some people use color xeroxes that way.

**Rick:** I can see a whole room of these—a big sort of installation—and then you're really using it. Like 20 of these on a wall with weird heads on them. In other words, using the thing as something other than just the limited image—playing around with the whole thing.

**Paula:** If you could get 20 computers together, that would be a statement in itself.

**Rick:** Its strength in a way is its limitation; it's kind of ready-made. It's like the limitations of video. I use Nam Paik as an example because he did that a lot, he really stretched video in a sculptural way. He made a totem out of video, like chambers where you would go in and lie down and you'd look up to the screen. The result with this is still going to be pretty much the same, but not as surprising. Film is still more manipulatable. This is still a limited kind of thing.

**Caren:** I think it's good for commercial artists.

**Paula:** That's true because the end result is not the printout but where it's going after that.

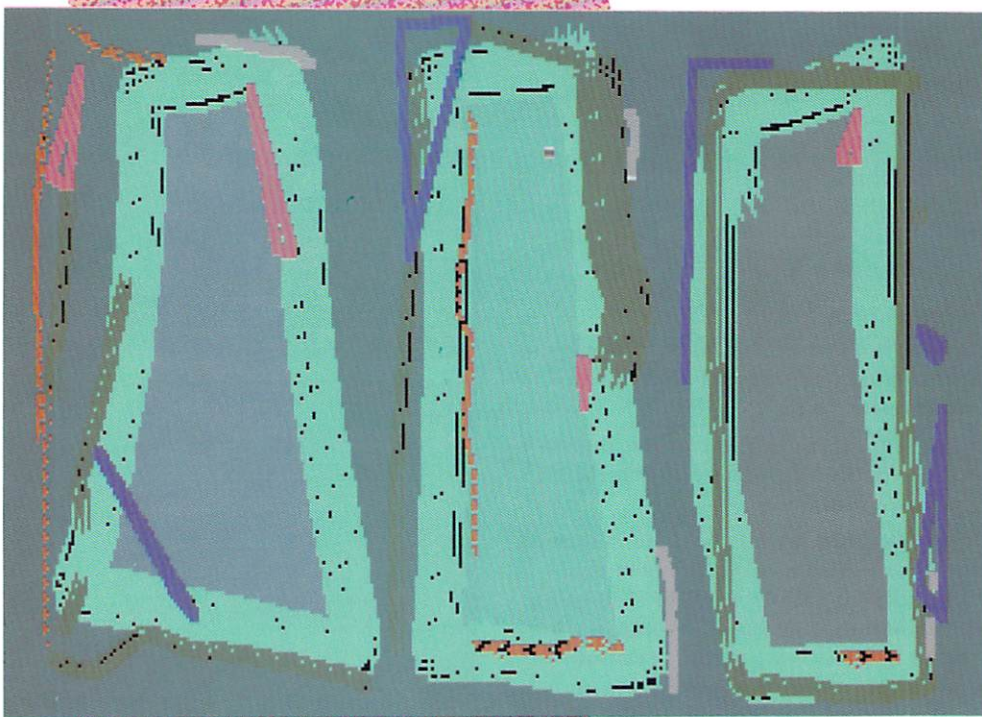
**Daniel:** I think it'd be a nice idea to use this and then paint on top of it like a collage. I mean, if you wanted to do an illustration, you could illustrate it with the computer and then sharpen it up with paint or ink.

**Rick:** The thing is, this is basically drawing with color. So it's just a drawing medium, really.

**Daniel:** Well, you could treat it like a painting, overlaying color. ▶







Amiga artwork by Daniel McDonald

*"I can see a whole room of these—a big sort of installation—20 of these on a wall with weird heads on them."*

◀ **Caren:** It seems like you can't get different textures because you always have those little lines [referring to raster lines on screen].

**Paula:** What's tricky about this, too, is that it's kind of seductive because it's illuminated. It's like when you shoot a transparency, you have a slide, it looks great and when you have it printed, it looks flat. That's not a direct translation. This [pointing to screen] looks beautiful, but if it were printed out, it would be dead. I notice that the things in the magazine look kind of dead. Probably when the artist was doing them, they looked great because they had the light from the screen.

**Rick:** Maybe we don't give it credit because it seems so ready-made. In other words, it's not like the genesis of the oil medium or tempera; those were real breakthroughs because they're really pliable. With this, you'll learn all the variations on something and that's that. It's like those computer games: once you get it down, then you have it. I made the analogy to checkers and chess. It's also like Dan Flavin, who uses the fluorescent bulb. The bulb itself is, well, a sculptural thing; it is what it is, it's completely it. I mean, you could bend it or something, but he doesn't. It's straightforward.

**Daniel:** It's almost like color forms. But who knows what could happen, it might eventually become more sophisticated. It's relatively new and in a way it's just sort of easy to laugh at it and say "Are you kidding?" I guess I'm fairly open to it. I was talking to this one guy at a group show I had last month and he said, 'Did you ever think of looking into computers?' And I said, 'Well, not really. Why would I do that?' And he said, 'Well, because of your repetition, your patterning, you could get so much more out of it.' But I feel as though it's really not the same as getting yourself dirty and getting into the paint. There's just something about working on a two-dimensional surface, dealing with the paint and getting your hands and feet dirty and just generally getting into it. Then he said, 'Well, maybe you could just use the computer and then jump into a tub full of paint.'

**Caren:** It's definitely not a case where you could just switch over from paint to computer.

**Daniel:** Yes, it'll do things I wouldn't consciously do. You couldn't do this just once or twice; it would have to be a commitment. It's not like switching from etching to wood cuts. But anybody could create art with it—especially if you're into color field work, laying on of colors and patterns.

The pictures I drew on this definitely had a much louder palette because the colors are so much more electric on this monitor. But I spent time trying to adapt to something that I might possibly do if I was to use this as a medium. And I enjoyed it. I wouldn't use it as the final thing and just work on computers the rest of my life, but I think to be fair to it, you'd have to spend a fair amount of time and really get involved in it. It's like learning to walk again or writing for years with your right hand, then switching to your left hand. You're doing something you know how to do, but you're more self-conscious. You can still use your basic training, exploring colors and interaction between colors, like using complements to get an impressionistic look.

**Rick:** There's something different about this than painting. I think it guides you more. Drawing with a pencil is a more spontaneous thing, but images are images. The thing that distinguishes them is the signs and symbols that you use; it's the concept behind them. I mean, a rock is a rock, but you wouldn't really think that a Gucci and Michelangelo's David were made of the same thing. The computer seems so concrete and set, but how you use it could become very personal.



I think I like its inherent quality more than its drawing capabilities. If you look at that [pointing to monitor] and consider it visually, that's really beautiful. I mean, there's nothing in the room that's more... well, it's really got something.

**Paula:** But part of that is because it's illuminated.

**Rick:** Yeah, it's a beautiful stained-glass kind of thing, but these are more interesting [pointing to paintings] in a human sort of way, a psychological way, where you know what the person really means. It's not as mechanical. This [computer] is not as personal. It's just a different quality, too. It doesn't mean it's any worse or anything, it's just that visually this [screen] is very striking.

**Daniel:** Yeah, well, it has a mechanized feel to it, whereas if you look at a painting like this one here, you can definitely see the strokes, you can imagine what kind of emotion and sweat and muscle went into it.

**Rick:** The thing is, though, you could paint pictures that have complete anonymity in them. A lot of pop art is like that. Some of Warhol's silk screens are like that, though they still have a human quality to them. Even Lichtenstein's stuff, which is very mechanical, still has a human feel to it. Who else? Well, even photo-realism is that way.

**Paula:** Well, I think if you were in a room with this [screen] and that [painting], you could live with the painting a lot longer than you could live with the screen. That would become interesting to you, whereas you'd lose interest in this.

**Rick:** Yeah, I almost feel like they're just two different things. You can't put it on the same level.

**Daniel:** Yeah, it's like comparing apples to doughnuts, you know, etching to a painting.

**Rick:** Painting's also an historical thing; it's got such a legacy. This is a new thing and technological, though the medium is still drawing.

**Caren:** Would it be possible to buy a disk that had a whole series of work by one artist, so that if you had one of these computers, you could just slip in the disk and look through all of that artist's work? I can see that working; somebody buying it as art. They could go into an art gallery and buy a disk by some artist, if the artist did a series on computer, and then take this disk home and put it on their computer and keep it set up in front of their minimalist couch and say [to guests], well, there's art, there's Keith Haring, there's Jean-Michel Basquiat. Then they could change it; they wouldn't have to worry about living with it forever. I could see that happening.

**Paula:** That's like buying a fireplace tape for your video recorder.

**Daniel:** You know, if I did a picture on this, a painter might appreciate what I did, but a computer person would know that I just pressed a couple buttons.

**Paula:** Well, that's always true. If you're a painter, that always takes some of the mystique out of it because you know how it was done. The same thing could hold true for this.

**Caren:** People always say that the computer will replace such and such. But the com-

*"Painting's also an historical thing; it's got such a legacy. This is a new thing and technological, though the medium is still drawing."*



*Amiga artwork by Rick Prol*

*"I notice that the things in the magazine look kind of dead."*