



July, 1994

Volume Two, Number Six

TECHNOLOGICAL WIZARDRY

by Todd Karr

"Wonder is the seed of knowledge," said Plato.

"The fairest thing we can experience is the mysterious," said Einstein.



But why should anyone care about magic tricks in today's world of incredible technology? When electronic miracles abound, is anyone really impressed when a magician pulls a rabbit out of a hat? The fact that you can put a piece of paper into a fax machine and have another piece of paper just like it instantly appear on the other side of the world is miraculous. Why should anyone be interested if a magician says "Watch me make this coin disappear"? Yet the world continues to cherish the magician and his mysterious art. Indeed, in a world where science and technology gain

CyberArtist

immense power, a little magic goes a long way.

Cold technology needs to be balanced by human warmth: a sense of humor, art and magic. It's so easy to be lost in the world of the screens and circuits and forget about the world of nature and wonder. But both science and magic are essential parts of human existence. For as surely as man can think and reason, he can also dream and experience magic.

The best science, I think, is balanced by a healthy belief in magic, and the best magic is aided by intelligent use of science. The Northwest CyberArtists represent that kind of positive hybrid. You're technological wizards.

Although technological art forms have advanced greatly, the best cyberart is certainly still yet to come, and I think it will only come if the scientists take a giant step backward and look at technology in the context of actual human experience. Virtual reality is ok, but you're still basically watching TV. An infinitely more vivid and fulfilling experience for humans is to really LIVE something, to see it with your own eyes, to touch it with

your own fingertips.

Magic technology has much to offer to cyberart, because the whole idea of magic is to create an alternative sense of reality. The magician's job is to guide your mind in such a way that you feel with your whole being that you are witnessing events that are impossible, but actually happening.

The knowledge of our art of illusion has really not yet been consulted by techno-artists. Magicians know intimately the paths to take to lead the mind into a state where it voluntarily transcends the intellect. We know the surprising limitations of the five senses. We understand how to hide technology so that participants feel that a real event is happening, not one made up by a machine.

My dream is to create interactive magic spaces, where magic techniques

WIZARDRY



**JULY MEETING:
MONDAY, JULY 11
(THE SECOND
MONDAY - DUE TO
HOLIDAY ON THE
FIRST MONDAY)**

**THE ART INSTITUTE
OF SEATTLE
ROOM 717/718
2323 ELLIOT AVENUE
7:30PM**

**JULY'S GUEST:
TODD KARR**

**MONDAY AUGUST 1ST
TRIMPIN**

PUBLISHER'S CORNER

by Steve Turnidge

When Northwest CyberArtists formed, one of our definitions was to be "future shock absorbers". In my experience and observations it seems we are living in an age of future shock, but we aren't shocked (though we probably should be).

Current news stories contain shocking examples of the future now, and its effect on individuals.

One telling story in the public eye is the case of OJ Simpson. ("Oh no, not here too!" I hear you exclaim. Don't worry.) For some reason, he didn't show up in court. Manhunt is on. OJ Simson made a cellular telephone call. This located the phone cell he was in and brought on the newshounds.

Future Shock Point #1: Cellular phones can be a long leash.

In the first issue of Wired magazine there is an article on cellular phone hackers. In this article we find that, even when switched off, cell phones hand off their location whenever they cross cells. If you are trying not to be seen, avoid cellular phones.

Future Shock Point #2: These phones will become more tightly coupled with your body.

Miniaturization of electronic circuitry is a given. Cell phones are getting to be as small as the human interface allows. It is not too great a stretch of the imagination that soon your phone will be on your wrist, inside your watch. The problem is the interface. I think this is where virtual reality will start: with "text over reality".

When the HIT Lab's experiments with retinal scanners bear fruit, I believe we will have glasses similar to the "look-behind-you mirror glasses" as advertised in the back pages of comic

books. The laser chips (like the ones in CD players now) can be built into the arms of the glasses and bounced off tiny mirrors into your eyes, raster scanning words over reality, like "Your mom is calling..."

The next advance toward VR will be the "graphics over reality" models, then your personal assistant may take shape in your visual world.

Sooner than we know, the miniaturization will encourage another interesting practice. Once the circuitry miniaturizes enough (maybe with nanotechnology) it can be put inside a tiny rice-shaped piece of biocompatible material and placed under the skin. This is happening now to identify lost cats and dogs. What parent wouldn't want to be able to find a kidnapped child? Microchip 'em at birth — scary but likely.

Future Shock Point #3: Anywhere in the world.

Cellular phones provide two way communications, interactively presenting the news you want in your glasses. It can also identify you and your location. If the 800 satellite geostationary cellular net gets built around the world, a la Gates and McCaw, your cellular phone will work in the deepest jungle or on top of Mount Everest.

Future Shock Point #4: People behind the scenes can read and hear what you say.

In every system there is a systems manager who can tap into any info carried on their system. If there is a need to know, they can find out where you are and what you are communicating.

Encryption can help. There is a cryptographic program called PGP (Pretty Good Privacy). This is a virtually indecipherable code with a system of software keys only you and the recipient has. There is currently a great battle going on behind the scenes between exponents of PGP and the

The Northwest
CyberArtist
ISSN 1068-9850

Vol. 2/No. 6 July 1994



10802 47th Avenue West
Mukilteo, WA 98275-5098
Voice: (206)355-6000
Fax: (206)347-7757

Steve Turnidge
Publisher and Host
CompuServe: 72250,3205
Internet: steve@rane.win.net

Bob Moses
Production Manager
Internet: bobmoses@pan.com

Bret Battey, Researcher
Internet: bret@eskimo.com

John Beezer, On-Line Czar
Internet: bisquik@eskimo.com

The Northwest CyberArtist is free for those who ask to be added to the mailing list. The Northwest CyberArtist is published monthly by Northwest CyberArtists. First class postage paid at Seattle, WA

Corporate Sponsorship Provided By:



RANE

government, who are proposing the "Clipper" chip. This chip allows interested, authorized parties to retrieve the keys required for decoding.

SHOCK



The Northwest CyberArtist

combine with technology to allow people to go on a realtime, real-life magic journey. Enter the space, point your finger, and can even drink with your own lips. Then you board a flying carpet that moves you through the space as you verbally guide it toward a garden outside, where, when you clap your hands, a rose bush blooms before your eyes. The carpet lands, you step off and pluck a rose. As a couple of large butterflies bring you your coat, you smell the rose's fragrance as you return to the outside world.

There are many more modest ways that magic and science can interact. Psychological and optical magic

techniques can be used to fine-tune installations so they have more impact. The magician's sense of illusion can create illusions of the senses to help make virtual reality seem more real.

And for video creations, illusion technology is a great low-tech way to concoct astonishing images without great expense. You want to film a ball of fire dancing in someone's hand, a horse appearing out of thin air, or a woman floating over the ocean at sunset? Magic can let you film it in real-time without having to resort to camera tricks, video editing or computer animation.

I hope to participate in an upcoming Electronic Cafe. Interactive card tricks

are a definite possibility, wherein someone in California could choose a card and I could divine it here. Or I could magically transmit a physical object electronically. We'll see.

During my presentation at July's meeting, which I'll call "The Science of Magic, The Magic of Science," I will be teaching you a simple magic effect or two so you can mess up your friends' minds bit. I will discuss many of the complex contradictions and inter workings of those sibling rivals, magic and science. I'll be revealing some precious information about how magic works and what it is. And, yes, I'll also be demonstrating some magic.

Bring open minds. Leave your disbelief at the door. ♣



he lectured before the Magic Collectors Association at their annual convention in Chicago. His magic skills earned him two junior runner-up awards from the International Brotherhood of Magicians and the first prize in the Abbott's magic competition.

Todd studied journalism at the University of Southern California and French

at the University of Paris. He has written articles on magic for the Los Angeles Times, the Detroit Metro Times, and several other newspapers. In the magic world, he is a contributing editor to *Magic* and has been foreign correspondent for France's *Magicus*. His writings have been published in numerous magic trade journals. In 1984, he published a volume of writings by magic philosopher S. H. Sharpe.

During six years living in Paris,

France, Todd performed in a wide variety of engagements ranging from corporate events for companies like Motorola and Cartier to private parties in chateaus, from intimate cabarets to music halls like the Folies-Bergère. He appeared numerous times on French television. Todd was Magical Advisor for the French magic series "Attention: Magic," and guest starred in two seasons of "Les Mondes Fantastique" playing the dual roles of a robot magician and an Egyptian wizard. He also created special effects for various stage and television productions.

In Monaco, he has played five engagements at the Casino de Monte Carlo, and has performed at the Monte Carlo Sporting Club, where he will appear during the month of August this year. He has performed for Monaco's Prince Rainier and Prince Albert, and was featured in the ninth Grands Prix Magiques de Monte Carlo.

He has recently moved to Seattle, where he is just beginning to integrate into this city's performing arts world. He has three sons who he says are indeed most amazing and wondrous. ♣

Todd KARR'S journey as a magician began at age 9 when he discovered Romig's Magic Shop in Detroit and purchased a simple magic trick. Todd began to visit the tiny store every weekend, and the local magicians who hung out there began to help him learn magic. Soon he was performing shows at children's birthday parties for \$5.

By age 11, impassioned by the history of magic, Karr began publishing a magazine for magic collectors. At 13,



Magic

by Einar Ask

Last week while I was recovering from the chicken pox, and while Andreas was getting cranky as he came down with it, I cheered him up by pulling a quarter out of his ear. It's an old trick, but not to him. He was completely shocked that I could make a quarter disappear. He got that look that little boys get when they believe in magic.

Just a little over a year ago I was wondering how I could make a one man electronic music show interesting to a room full of grown-ups. Now, after having built tricky alternative controllers of various sorts and after having played with live interactivity, I'm getting tired of packing and unpacking my bag of tricks, just to drive to a smoky nightclub on a work night for a one hour performance. I still want to surprise people. But I want more kids (like my own here at home) to get excited about discovering some new "magical" toy. And I want it to be enjoyed for a longer period of time.

For my first step in this direction, I contributed a piece to the Random Access show at COCA. Putting something on display like this for an eight week run has been a challenge for me. You have to keep it simple enough that anyone can turn it on, visually interesting enough to draw attention, and complicated enough to make it interesting to play with. Now that it's there I feel hopeful that people will get to play with it at their own speed and "discover" its magic, like Andreas with the quarter. So my first new goal is met - build something that lasts longer than one hour.

As I got my stuff together for Random Access I realized that the electronics involved were very low draw. This was just an accident, since

the only real criteria I had was whether I could spare that particular equipment for the next two months, but since I enjoy being thrifty with electricity it was at the front of my thoughts as I turned on the power and started making adjustments.

As I soldered and sweated and wired and even swore, I started thinking about how I would rather be at the beach with my wife and kids. Enjoying the sunshine, playing - and then it hit me. I could build an interactive electronic musical device that I could take with us to a public place, set up, and then leave alone to allow adults and kids a chance to "discover" it, and then see what happens!

I want to expose some spontaneous magic to the general public.

Just as I did before my first live show, I thought I might tell you in advance how I plan on doing this new portable "CyberArt". If you have a better idea, just let me know - or beat me to it!, but let's keep the magic a secret between us for now.

The ingredients:

1. The Pavo MIDItoolkit custom instrument.
2. A MIDI sound source - my QY-10 because it's small and battery powered, otherwise a sampler.
3. Amplification - a boom box or powered speakers will do.
4. Various custom switches.
5. A 12VDC battery - a solar charger would be needed for lengthy installations.
6. A 12VDC to 110VAC inverter.
7. Time enough to spend a day at the park.

The magic tricks:

1. A photoresistor keyboard.
Photo cells could be spread out on the ground or against a sunny wall, so that as shadows moved past, they would play chimes. Hopefully someone would want to play a song. (I have already done this one in my front yard. Passing cars must have thought I was crazy.)
2. A float switch chime
Standard marine float switches could be hooked up to a long board or pipe, then set on the beach at low tide. As the water comes in, the floats would begin to sound notes. I would surely trigger samples with this one.
3. Something involving helium balloons, wind and kites, though I'm still working on this one. Maybe fighting kites that trigger explosions and jet samples when they touch!
4. Motion detectors by the swing set.
5. I could put sensors on a slide so that as a kid slipped past, a descending rush of notes would be heard.
6. Tilt switches on a teeter totter.

And so on. I have so many ideas in this vein that it's frustrating to have to pick just a couple to start with. So remember, don't be surprised if you hear strange sounds coming out of the bushes around town this summer.

The most important thing about these Cyber afternoons in the park is going to be spontaneity. I mean, that way if a grown man (like me) gets the chicken pox and has to cancel a show - nobody would ever know!

See ya,

Einar

481-3483

CompuServe 71774,640 

How to join the on-line CyberArtists List:

send email to listproc@u.washington.edu. Leave the subject line blank and include only the following in the message body:

subscribe cyberartists yourname

How to join the on-line Electronic Cafe interest group List:

In order to be part of the ecafe list, you must send email to listproc@u.washington.edu. Leave the subject line blank and include only the following in the message body:

subscribe ecafe yourname

Call me at work if you have any problems getting signed on. Please pass this on to all others interested in the Electronic Cafe.

Edward M. Galore,
lemaire@cac.washington.edu,
(206)543-5970

RANDOM ACCESS – AN EXHIBITION OF HIGH TECH ART

CURATED BY JANET AND EDWARD GALORE

JUNE 25 - AUGUST 13, 1994

POWER UP OPENING JUNE 25 AT COCA

RANDOM ACCESS, THE HIGH TECH ART exhibition which powers up at COCA on June 25, showcases installations, sculpture, and computer animation created by artists bending technology to their will. From the base — to the stunningly beautiful. These works show what's going on right now, after the domestication of computers, but before the true "Age of Information" is in place. These works, both humorous and dark, reflect the perspectives of people who understand both the possibilities and the limitations of new technology. Come visit the art that needs you to complete the picture.

ARTISTS

Cyberhead, Am I Really Existing? by Patrice Caire – *SimSex Arcade* by Clair Colquitt – *Interface/EnterPhase* by Mark & John Bain – Computer animation by Guy Hundere – *behaving objects* by Bruce Cannon – *infrastructures* by Teresa Seeman & David Galbraith – *3D projected light sculpture* by Joel Kollin and Holly Bine – *Plate Tech Tonics* by Dan Senn – *Controlled Access* by James L. Acord – *video sculpture* by Kurt & Debla Geissel – *MIDI sculpture* by Einar Ask – and others...

RANDOM HAPPENINGS

JULY 7 Panel Discussion: Artist Clair Colquitt, Bob Jacobson of Worldesign, a representative of Zombie, Inc., and others discuss emerging technologies, virtual reality, and the "generation gap" between artists and commercial developers 8:00 PM - 9:30 PM at COCA \$2 general, COCA members free

JULY 23 Random Event

AUGUST 6 Bay Area electronic musician Mark Trayle performs an industrial lullaby on the powerglove / Seattle's Trimpin plays *Contraption IPP71512* 8:00 PM - 11:00 PM at COCA \$5 general, \$2 COCA members

AUGUST 13 POWER DOWN: Closing Event Roland Barker's *Alchemical 9 Tense*, undulating moebius strips of interlocking samples 8:00 PM – Midnight at COCA \$5 general, \$3 COCA members

COCA is located at 1309 First Avenue, two blocks south of the Pike Place Market downtown. Gallery hours are Tuesday - Saturday, 11:00 AM - 6:00 PM, \$3 general, COCA members free. For more information, call 682-4568.

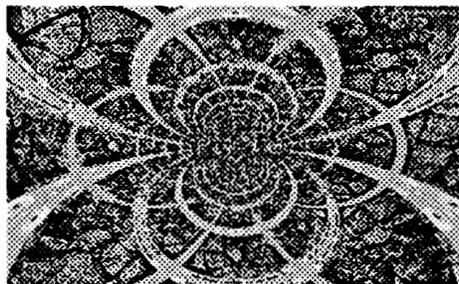
SHOCK

FROM 2

Future Shock Point #5: Instantaneous communication can be bad for you.

Larry Niven wrote a short story about "Flash Crowds," a phenomenon happening in the future when teleporting (via stepping disks) is commonplace. When there was a news event at the mall, everyone wanted to see, so they teleported to the mall. Instant mob.

Back to OJ. Remember, this guy was bummed. He calls his mom on the phone — and all of a sudden news helicopters are flying over his truck. Over the next six hours a continuous



phenomenon occurred. Through live (instant) news, the route taken was known, causing instant participants; "Flash Crowds", to materialize and cheer or jeer along the route of his trip. It was one man's journey off the bottom of the emotional chart. First, to either have killed two people, or almost as bad, to be accused of killing two people. But to have hordes of society at your every step, a parade with no set route with you as the only float — this could not have happened until now. 

The Information Backroads

MORE INTERACTIVE MULTIMEDIA HYPE

By Bob Moses

Hello everybody, I'm writing this on my new Power Macintosh computer. This machine is very wonderful, my two thumbs are up. One of the coolest features is the CD-ROM drive. CD-ROM is certainly not a new technology, but this is my first one. I've purchased a lot of CD's over the past month: Peter Gabriel's XPLORA 1, The Residents Freak Show, The Beatles A Hard Day's Night, Microsoft's Encarta, and a Quick Time Developer's Kit. I'm a total wreck because I stay up late every night playing with them.

The thing I especially like about many of these CD-ROM applications is they do not subscribe to the traditional "walk the zombie through a predetermined linear series of events" paradigm. Instead, you are

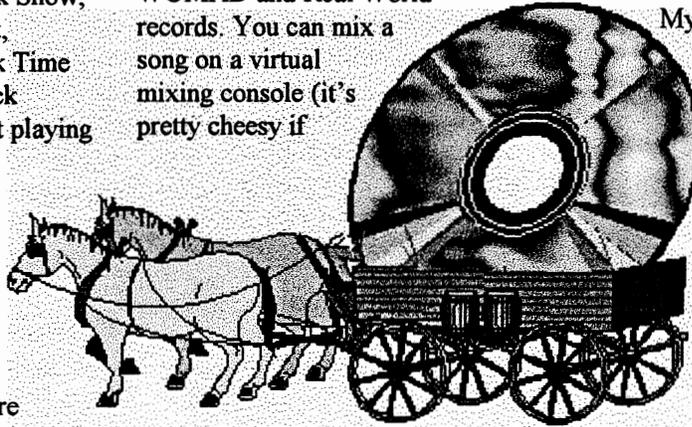
free to poke around and play with whatever you want. Your experience is whatever you make of it. It's analogous to being in a theme park instead of a movie theater.

Peter Gabriel's CD-ROM is very cool. I've never really been a fan of his (nothing against his work, it just all sounds the same to me), but I've spent countless hours with XPLORA 1 listening to his music, watching his videos, learning about his life and projects with WOMAD and Real World records. You can mix a song on a virtual mixing console (it's pretty cheesy if

you're an audio professional, but it's cute). You can play musical instruments from all over the world and learn about them. This is good stuff. The Freak Show is silly and fun. It has very impressive animation, and if you're into three legged men and people with dog faces, you'll get a kick out of it. A Hard Day's Night is for Beatles fans, which I'm not. Amazingly, it has the entire movie, plus several hundred pages of information about how and why they made it. My Quick Time CD has a lot of cool Quick Time art on it.

My favorite is Laurie Anderson's "Personal Service Announcements". Laurie rules. I just got Encarta and I haven't played with it very much yet.

In a previous newsletter Einar Ask proposed that we create a Northwest CyberArtists CD-ROM. I think there is great wisdom in this man. I'm definitely in—anyone else? See you at the meeting on July 11th! 🐾



CYBERARTS INTERNATIONAL IS A REGISTERED TRADEMARK OF MILLER FREEMAN INC.
NORTHWEST CYBERARTISTS AND THE NORTHWEST CYBERARTIST LOGO ARE TRADEMARKS OF
NORTHWEST CYBERARTISTS AND OF THE DESIGNER.

Northwest CyberArtists

10802 47th Avenue West
Mukilteo, WA 98275-5098



ADDRESS CORRECTION REQUESTED

FIRST CLASS MAIL

Is this Junk Mail?

*Please Mark "RETURN TO SENDER"
and drop in the mailbox; Thank You!*