



VJ Culture:

Design Takes Center Stage

By Momus

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It's early Saturday morning in the basement of the Cafe Moskau, a former gentlemen's club for Russian generals and now the East Berlin home for the club organized by progressive house label WMF. Above the mass of dancing bodies, the walls pulsate with fantastical images of architectural patterns that morph into the natural forms of trees and resolve into blasts of pure color. The images shift, overlap, and flicker with the music. A woman crouches to the side of the DJ booth in a nest of laptops, DVD players, monitors and mixing boards, tapping commands into keyboards, sliding mixers, checking the connection of a live camera trained on the dancers, and all the while furiously smoking Lucky Strikes. Her name is Leigh Haas, of Flora and Fauna Visions, and she's part of a new breed of visual practitioner—equal parts filmmaker, designer and performer—known as a VJ.

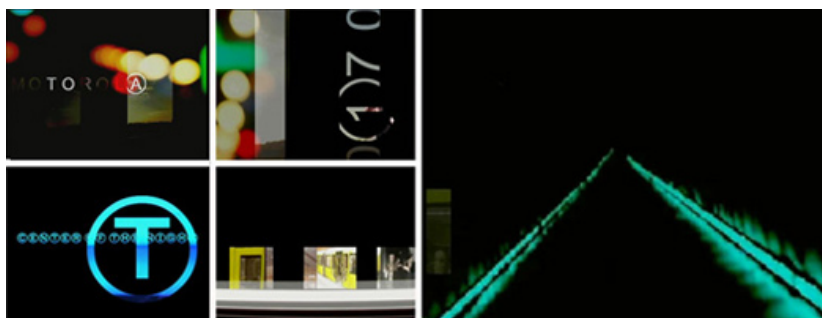


Figure 1. Leigh Haas of Flora and Fauna Visions visuals for the Moto Center.

Camera Obscura

If we think of VJs as part of the family of projectionists, we might trace the line right back to Aristotle, who first noted the specifications of the Camera Obscura—a dark room with a pinhole projecting light and images from the outside world onto its walls—more than two thousand years ago. If we think of the VJ as an electrical projectionist adding visual stimulus to cultural events, figures like Erwin Piscator come into view. In 1920s Weimar Germany, Piscator added radical slide and film projections to the epic theatre of Bertolt Brecht, giving the stage set the documentary aesthetic of a cinema newsreel. More immediate predecessors of today's VJs can be found in the psychedelic projectionists who supplied visuals for the age of rock and roll.

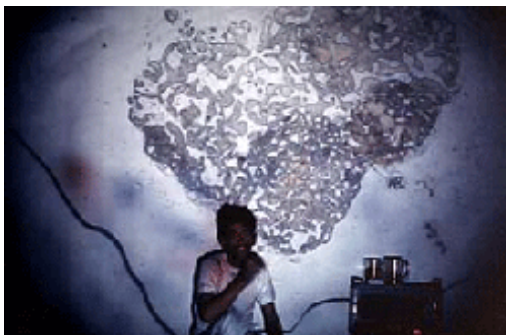


Figure 2. "Son et Lumiere" performed by Mark Boyle and Joan Hills (not shown).

A key pioneer in the mid-1960s was Scottish artist Mark Boyle, who died earlier this year. On December 23rd 1966, Boyle and his wife Joan Hills performed “Son et Lumière for Earth, Air, Fire and Water” at London’s fashionable UFO Club. Boyle used powerful Aldis projectors to magnify and project chemical reactions—the death throes of insects and the shapes made by body fluids like semen and vomit. He was influenced by the LSD-fuelled visuals of Jo Cannon, often called “the fifth member of Pink Floyd”, who used prisms to split flickering beams of pure white light into rainbows, as well as by the “destruction-art happenings” of Gustav Metzger. Following the London performance, Boyle suddenly found himself in demand amongst rock groups and, in 1967, he toured with The Soft Machine and Jimi Hendrix, adding organic, psychedelic backdrops to their orgiastic sounds.

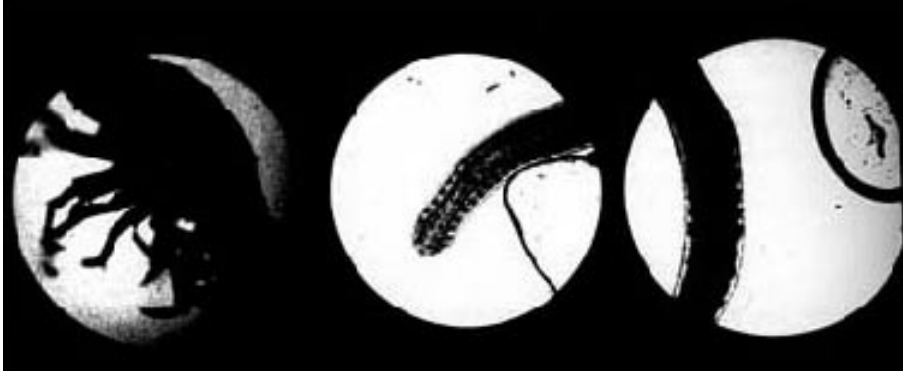


Figure 3. “Son et Lumiere” performed by Mark Boyle and Joan Hills.

Boyle’s chemical reactions couldn’t be predicted, let alone matched to the movements of the music. And yet, he noted, they always seemed appropriate somehow. Boyle, wary of imitators, kept his “recipes” a closely guarded secret. “Whenever we came to do a performance in London people from rival light shows would be there,” he said. “They knew about my supposed ‘paranoia.’ Whenever I pulled off some new manifestation, they would turn to me and say, ‘Great! We’ll work out how to do that by next week.’”

VJs Come of Age

Artists like Kraftwerk and Jean-Michel Jarre pioneered stunning concert visuals in the late 70s. Jarre used lasers, usually projected onto mesh sheets hung on the sides of buildings near the concert venue. He even projected onto the Pyramids and the Eiffel Tower. By the 80s, audio-visual presentations at big concerts were the norm. Among the more innovative concert visuals were the The Pet Shop Boys’s use of filmmaker Derek Jarman’s Super 8 films, projected behind them as they played; and Depeche Mode’s close collaboration with photographer and filmmaker Anton Corbijn. But it wasn’t until the early 1990s that VJing as we know it today—the electronic manipulation and projection of images to accompany music—began to take shape. The rise of the VJ was due to the confluence of two factors. Video projectors and multimedia computers became increasingly affordable even as they became more capable. Simultaneously, with the emergence of electronic music and the rise of the DJs, visuals were increasingly needed to fill the gap created as a single figure bent over a turntable replaced the more visually dynamic rock band.

Our Heroes

Among the first superstar VJ teams was The Light Surgeons, founded in London by Chris Allen and Andy Flywheel. Since 1995, The Light Surgeons have been supplying tour visuals for the likes of Sneaker Pimps, Propellerheads, and The Herbalizer. The Light Surgeons’ style exaggerates media overload; they cram ever-more edits into each minute of screentime, overlapping and layering images to make an aggressive collage featuring skyscrapers, freeways, homeless buskers and floating neon lights. Their activities have now expanded into art and publishing; they’ve made art installations with designer Ron Arad, and their work was included in the group show “Stealing Beauty” held at London’s ICA in 1999. Japanese publisher Gasbook has recently released a DVD of their visuals.



United Visual Artists visuals for Massive Attack.

Plethora and plenitude can merge into a blurry perma-flicker after a while, though. United Visual Artists (UVA), another London-based team best known for their collaborations with U2, Kylie Minogue, Oasis, Massive Attack and Basement Jaxx, take a more controlled approach to their visuals. On U2's 2005 Vertigo Tour, UVA and show designer Willie Williams used a programmable "LED curtain" which sparkled behind the band like a huge digital waterfall, surmounted by four I-Mag video screens relaying close-ups of the band in performance across a single widescreen canvas. The curtain is made from tiny LED ball-shaped modules called MiSpheres, manufactured specially by Barco, that hang 64-to-a-string on 189 strings and which can be lowered and raised at various points in the performance. When the spheres weren't in "waterfall mode", images by Julian Opie and Catherine Owens played across them (Opie's minimalist animation was of a simplified walking man). As well as being visible from 360 degrees (important, since there were seats behind the stage as well as in front of it), the MiSphere strings could provide pictures and patterns without blocking anyone's view of what was happening on the stage.

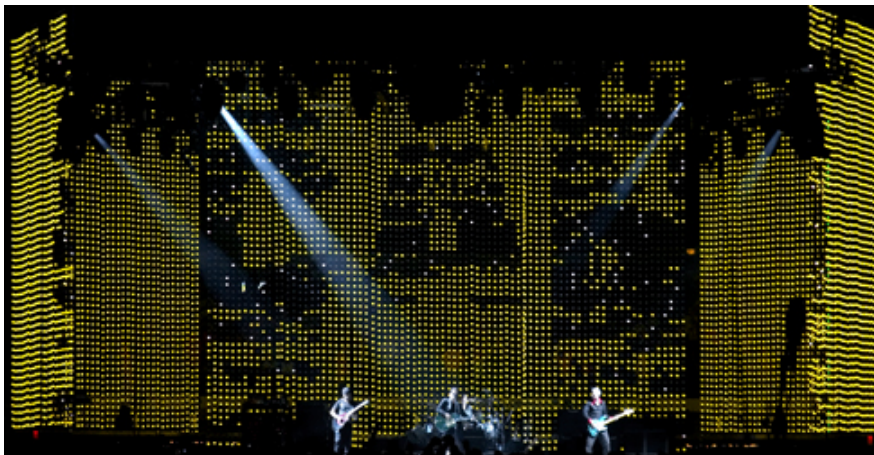


Figure 4. United Visual Artists visuals for U2.

Godfathers of the Genre

Ask today's VJs who inspires them, and UK-based Coldcut is likely to be at the top of the list. Matt Black and Jonathan More of Coldcut simultaneously DJ and VJ and play their own music. Their instruments are synthesizers, laptops for music, laptops for video, and turntables. In 1997, Robert Pepperwell created special customized visual software for Coldcut's performance at Sonar, an "advanced music and multimedia art" festival held in Barcelona. This software formed the basis for Vjamm, a program released in 1999 through the website of Coldcut's label Ninja Tune. Vjamm integrates video and sound, allowing Coldcut's video clips to be triggered and scratched. In their song "Timber", for example, they use video clips of axes, chainsaws, bulldozers, and other thematically appropriate subject matter. They even play a chainsaw solo just by scratching the video.

The history of Coldcut is exemplary in the development of VJing. In 1990, Coldcut's More and Black teamed up with video graphic artists Hardwire (Robert Pepperell and Miles Visman) to form Hex, a research and development lab for CD-ROMs, videos, computer games, club visuals and interactive mixing. The first fruits of the collaboration appeared in the form of "Coldcut's Christmas Break," a 1990 pop video made entirely on Amiga, Archimedes and Macintosh home computers. Long-form videos were made the same year for Coldcut's album, "Some Like It Cold." 1993's CDI release "Escape" (a collection of techno tracks accompanied by interactive visuals users could control with the CDI joystick) introduced a kind of "home nightclub" concept, a mixture of computer game, music album, and light show. Following the very New Age "Digital Love" CDROM—in which an animated figure demonstrated yoga positions, chanted in Sanskrit, and administered color therapy using Buddhist chakras—Hex released "AntiStatic," "headCrash," and "Let Us Play," CD-ROMs which used fractals to generate new landscapes each time the music was played.

Soft and Hard Questions

Irish VJ Barry Cullen (Dodgy Stereo) has been adding visuals to live events for more than ten years. His career trajectory reflects a development the changing technology. Cullen started by using still slides to replace standard stage lighting for a band he played in. The images used were from underground comics like R. Crumb's Zap. He then introduced Super 8 films and loops. Initially shooting his own short ambient lighting experiments, he then moved into making his own stop-motion, featuring logos and other found material. Cullen says he adopted some of Len Lye's techniques, which involved painting and scratching directly onto film, and re-interpreted the results in his kitchen using bleach and curry. "The loops looked a lot better, and I could even make custom loops on the night of an event," Cullen recalls. "I tried moving to 16mm, but was getting frustrated by the unreliable nature of the vintage equipment (mostly found in skips and bins and recycled) which was notorious for eating the brittle films. Since then I've worked either with dual video tape decks to VJ into a digital projector, or a collection of pre-prepared 'compilation tapes.'" Cullen now works with Resolume software for PC, which allows him to use pre-made footage from his Super 8 and video collection, as well as a live camera feed and Flash animation. Resolume also features some basic built-in generative algorithms that act like controllable screen savers.

Today's basic VJ set up, according to Leigh Haas, of Berlin-based VJ unit Flora and Faunavisions, is three laptops, two DVD players, two Panasonic MX-50 video mixers, four monitors, one live camera and two packets of Lucky Strike. So what other software and hardware packages do today's working VJs use?



Figure 5. Mumbleboy's animations for Momus video.

Mario Campos, a young Spanish VJ based in Berlin, uses Arkaos "because it's the software that allows my humble PC laptop to make best use of RAM and doesn't slow down with any clip." Portland, Oregon-based E-Rock uses a custom Flash interface built for his regular collaborator, Mumbleboy, by Karl Ackermann from Milky Elephant. "It's probably too specialized for the average person, but it's made to fit our style perfectly," E-Rock says. "I mix and layer hundreds of Flash loops made by myself and Mumbleboy." Mumbleboy (Kinya Hanada, who is Japanese but currently living in the US) makes imaginative and witty animations by adding squiggles and pixelated layers over eccentric Flash animations. "I used to use Flash exclusively," he says. "Now I'm making videos in After Effects, then I make Quicktime movies, full circle loops, then I use a DVD player and then I have a video mixer and I mix the Flash and the Quicktime. Sometimes I set up a video camera and I have a drawing

pad and I draw stuff on paper in real time and mix that in, videoing it. I'm really enjoying working in After Effects. It looks different from my standard style, but now I'm incorporating Flash into After Effects, and you can do a lot more stuff to it. You can use blur with Flash elements, which you can't really do in Flash. And you can put pixel elements along with Flash. So you get something much more dynamic."

For VJs with a bit of programming experience, modular object-oriented programming tools like Max/MSP from Cycling '74 offer unparalleled flexibility (Max modules like Jitter and Cyclops are the ones VJs use most). Max/MSP is an object-oriented program that allows the control of any kind of synchronised object or gadget that the computer can identify. This makes it ideal for multimedia spectacles in which music and lights can all be plotted and controlled simultaneously. Others, like *Morris La Mantia from Lucidhouse*, are put off by the program's complexity and steep learning curve. "I'm not too obsessed by the whole software and hardware thing," La Mantia says. "As long as it does what I want, I'm happy." He says that his priorities are compactness and simplicity. He uses Resolume for his VJ sets, but to make the images and clips he uses After Effects, Flash, Photoshop, a digicam, and a scanner. His live set up is simple and light, allowing him to react to the musical mood, nuances, pace. "I don't really pander to the whole DJ ego thing," he says, "so I don't use a camera on the DJs. I find this a total waste of screen space. There's nothing that's visually exciting about seeing someone's hands spinning black discs." Haas, also eschews the techno-nerd aspect of VJing. "I prefer to concentrate on what's happening in my brain and how I can use the software that I know to create something that I'm proud of. At the moment it's VDMX or Grid as the single video mixers on the laptops."

All That Jazz

So what of the VJ's role as an improviser? And how does he or she respond dynamically to the music and the atmosphere of the club? Haas makes a frightening comparison: "The best way for me to describe VJing is to compare it with film. The shooting, pre-mastering and rough edit has been done and the job of the VJ is to create the final film edit live while standing in front of a full cinema audience and hearing the final sound mix for the first time. And that," she adds, perhaps unnecessarily, "is a challenge." A VJ might start with abstract shapes and a slow pace, then pick up as more people arrive in the club and the music gets louder, hotter and faster. But it's a fine art to match your material to the feel of the space as well as the beat. "It's sometimes really difficult to match your stuff with what happens live," says beginner VJ Mario Campos. "If you have some psychedelic trancey stuff and you end up in a rock 'n' roll club—that kind of thing happens all the time actually—and you have to go ahead and play for six hours even though it's absolutely impossible to make it fit together. I spent a while trying to make an archive of animations that would fit every mood and music style, but during the process I lost all coherence and my energies became diluted."

E-Rock, on the other hand, enjoys the security of being prepared. "I don't really design in real time as much as compose and collage with pre-made Flash files," There's always a certain amount of improvisation, however. "VJing can be very elastic. Mumbleboy has been doing this really cool thing where he sets up a camera and mixes people's drawings with his VJ set. He did it the other month at an AIGA after-party and it went over really well."

Designs on the Future

VJ Ambrose White describes two common mistakes made by beginner VJs. "First, they rely on too small a stock of images, so that familiar loops constantly reappear without progressing the experience. And, second, they fail to provide a coherent narrative, or sense of meaning. VJing can spend hours tweaking and fiddling on-stage. This may be fun to produce but, for an audience, is often entirely unsuccessful... The scope for VJs is to produce something amazing, coherent and relevant, but the reality often boils down to little more than ten or so clips cycled and cut up."

So what might the future hold for VJing? What are the experts working on? And how do today's VJs want to see creative tools extended?

Robert Sharl is a multimedia designer at UCE Birmingham. "We're experimenting in the Visualisation Research Unit with exo-skeleton motion capture used to trigger audiovisual material. We have a MIDI suit which you can already use to play air guitar (Ableton Live seems to be a favored software package for this). We're excited about Apple's Motion 2 which now has

MIDI control for motion graphics, and we're even more excited by MIDI control in Quartz Composer, which is given away with OS X Tiger. Human movement to MIDI to remix random images from Flickr feeds or Google Image searches? We (and others) are working on it."

In April 2004 Golan Levin and Zachary Lieberman developed software that generated synthetic graphics and sounds in response to the silhouettes of performers' hands as they scribbled on transparencies or moved across the glass tops of overhead projectors. The synthetic responses were co-projected with the organic, analog shadows, resulting in what Levin and Lieberman call "an almost magical form of augmented-reality shadow play."

Others, like New York-based musician Keiko Uenishi (o.blaat), have worked on developing new forms of social networking rather than pushing technology. For five years Uenishi has been organizing an event called Share in which numbers of laptop musicians and VJs turn up impromptu at a club (the back room of a bar on St Mark's Place, or Berlin's Transmediale festival), plug into audio and video mixers, and jam. There are also marketing innovations afoot, like the trend for record labels to release VJ mixes as packaged DVDs. Graphic design publishers, like Gasbook, have begun releasing DVDs of VJ work, and it's also a strong sideline for record labels like UK's Warp. But, as effect is piled onto effect, what is it all adding up to? Keith Gillard describes his experience at a Coldcut show: "I had to close my eyes, and later, to leave the room, just to hear the music without being compelled to take in the incredible visuals." Gillard thinks there should be a sensory "safety valve", allowing people to opt out of the visual components while still enjoying the music.

RESOURCES

- Leigh Haas, Flora and Fauna Visions—www.flora-fauna.de/index_visions.html
- Mark Boyle—www.boylefamily.co.uk/boyle/
- United Visual Artists—www.uva.co.uk
- The Light Surgeons—www.thelightsurgeons.co.uk/
- Coldcut, Ninjatune—www.ninjatune.net/coldcut/
- Mumbleboy—www.mumbleboy.com/
- Lucidhouse—www.lucidhouse.com/
and managing agents Microchunk—www.microchunk.com
- Lullatone—www.lullatone.com/
- Golan Levin—www.flong.com/

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