



MCCC NEWS



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Amiga Paint Software

In a hopefully not completely misguided article idea, I thought I would write about some of the Amiga paint software I've used over the system's history. For those less familiar with paint programs on the Amiga, they are usually divided into two main types, though the line between the two can be blurred. "Register-based" or "color-mapped" programs use a limited palette of user selected colors, generally from 2 to 256 registers which, when modified, change any parts of the image that use them. These types of programs are especially useful for simpler or stylized works, like cartoons, print art or game graphics. The other main type is "HAM" or "color space" paint software, which paints based on the entire 4096 possible colors the original Amiga could display, up to over 16 million shades of 24 bit graphics and beyond, even if the system itself may not be capable of showing them all. These programs are ideal for complex or subtle full color images, such as photographs, but don't normally offer the same "low-level" modification the as register-based programs. As I mentioned previously, some software sticks to one type, others may offer features from both sides, and a few try to offer it all, probably failing to do so well.

The first Amiga paint program I ever used was "The Graphics Studio" by Accolade software. It was a decent basic paint program, but did not make use of all screen resolutions (the interlaced modes were notably absent). It was notable for being a

port of (or possibly developed along side) an Apple IIGS program, so its interface was much like the GS and Mac software of the time. Later would come the Deluxe Paint series, created by Dan Silva and Electronic Arts software, and pretty much the gold standard, in both features and interface design, that all paint software on the Amiga and even other platforms would be judged by for a long time.

My first version was DPaint 3, which was also a powerful animation creation tool. (I'll save animation software for another time, however.) Deluxe Paint 4 added support for Amiga HAM color modes, along with tools common to those types of paint programs. DPaint 4 AGA supported the then-new AGA chipset A4000 and A1200 systems, with up to 256 color registers or the near-24 bit HAM8 color modes. Deluxe Paint 5 came out after the Commodore bankruptcy, and ambitiously added support for painting 24 bit color images (displaying in Amiga color modes), along with brushes and textures that approximate natural media painting and other effects. Unfortunately, all the features added on from the lean, mean DPaint 3 made the last version a bloated beast, with unacceptable performance even on a heavily accelerated system, and little support for add-on video cards.

The strongest, most direct competitor for the DPaint crown was Brilliance (and Brilliance 2, which lost the annoying copy protection joystick port dongle) by Digital Creations, going head-to-head with DPaint 4 AGA feature for feature, and even copying most keyboard commands. Perhaps one of its bigger performance advan-

tages was that it was actually two separate programs for differing purposes—the register-based Brilliance, which supported animation creation, and TrueBrilliance, which painted in a 24 bit color space with a HAM or HAM8 display, and could save in either form. The Deluxe Paint and Brilliance series were both so evenly matched in their prime that it mostly came down to personal preference of interfaces or specific features or behaviors for which one to use, perhaps switching for specific projects.

While it didn't stay that way, paint programs that used the Amiga HAM (Hold and Modify) started largely as a domain all to themselves, because the code involved in making and painting on a HAM display is a totally different thing than a register display. The advantages to being able to use nearly every color an Amiga can possibly display (at the price of "artifacts" around some color edges) is the capability to display near photographic quality imagery, and create subtle color gradients and transparency effects. Digi-Paint, created by NewTek of later Video Toaster and Lightwave 3D fame, was started as a companion piece to colorize and touch up images from their Digi View video digitizer, but it was easily possible to create images from scratch as well. It displayed HAM painting power with an interface to set up gradient fills with transparency and "highlights" as would appear on a rounded surface. Photon Paint 1 and 2 (barely distinguishable from each other) by Bazbosoft and Microillusions was not quite as simple to understand as Digi-Paint, but offered more direct control and versatility in its transparency and gradient effects,

even applying them to image brushes. Spectracolor, published by Aegis/Oxxi, was basically Bazbosoft's Photon Paint 3, and offered the same power in a tweaked interface, along with new features, including image/brush warping and animation creation.

As powerful as the HAM-only paint programs were, hardly any survived into the AGA era, presumably because Amiga paint juggernaut Deluxe Paint was working the HAM side of the street too by this point, and making tough competition in a small market. I would love to have seen a HAM8 version of Spectracolor though.

In the later years of the Amiga, especially post-Commodore, add-on video cards were more commonly used, which could display higher resolutions and color depths than the native Amiga graphic chips. Sadly, this was a bit of a brick wall to many venerable Amiga paint programs mentioned above, as most relied heavily on the Amiga chips, either coded to access them directly or using Amiga specific display properties a third party video card can't handle, such as the aforementioned HAM color modes, or copper display tricks that change palette colors or even resolutions mid-display for the purpose of an on-screen toolbox or color palette. A new set of graphics programs would be needed for this era, but not as many would step up this late in the Amiga's life span.

In 24 bit, there was also a lot of cross-over between paint software and "im-

age processing" software, with each offering enough features of the other to blur the border between them. Personal Paint by Cloanto is a register-based Deluxe Paint clone, though not necessarily as fully featured as its spiritual predecessor. It gets along well with retargetable graphics and video cards, enabling Amiga or card screen modes up to 256 colors. It's even still being developed today, with versions for Amiga OS4 and MorphOS planned. TV Paint was a (relatively) longtime player in painting on a 24-bit "true-color" display, with versions to address specific 24-bit framebuffer cards even before RTG driver systems like CyberGrafX and Picasso96 came into use. It was similar in style to Deluxe Paint, with growing paint features over time. TVPaint moved on to become a strong piece of animation production software for Windows and other systems.

One I have come to use a lot is Photogenics, written by Paul Nolan, a more paint-centric paint and image processing combo program. Its claim to fame is that it uses paint layers, similar in concept to layers in Adobe Photoshop, and is quite versatile. Paint can be put down on a layer with any number of tools and brushes, including ones that emulate natural drawing and painting media. From there, the layer can be modified or changed, even changing the marks laid down from color to compositing to an image processing effect, until you are satisfied and "fix" the layer to the image semi-permanently. While Photogenics is Amiga software (though later versions were made for Win-

dows and Linux), it was demanding enough that it ran rather poorly on a real Amiga, even one with a video card and 68060 accelerator. (Early versions were pretty zippy, but version 5, the last Amiga version, was on the edge of unusable.) Photogenics found new life on PowerPC and emulated systems capable of running code faster than '060 speeds, making the program very usable and powerful on OS4 or MorphOS, even if it was written for a 68K-CPU Amiga.

FXPaint by IOSpirit was another paint program that works very much like Photogenics, and had direct PowerPC ports for better performance to boot. While similar, I found it had less of the quick "pick up and go" artist aspect as Photogenics, though it might appeal more to those used to Photoshop. Like most Amiga software, neither FXPaint nor Photogenics is still being developed for Amiga, though one can maybe hope for future development rights to go open source or to A-EON like with Personal Paint. Even at their age, they are still very useful programs even today.

While I'm sure some of you out there know of more paint programs I neglected to mention. I stuck with software I used personally at one time or another. Stay tuned in the coming months for my experiences in other graphic endeavors, such as animation or 3D rendering.

...Eric Schwartz, Editor
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July Calendar

July 5 — Amiga-By-The-Loop Chapter
7:00 PM — Grand Prairie Airport
3116 S. Great Southwest Parkway, Grand Prairie

July 5 — Board of Director's Meeting
Approximately 9:00 PM — Location TBD

July 25 — Newsletter Deadline — 8:00 AM

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