

y Jeff Eaton

"It's great to come to work in the morning," says John Chait, laughing, "and be able to say, 'That explosion needs to be \*way\* bigger!'" He should know -- as the CEO of Reality Bytes Incorporated, he's at the helm of one of the Mac world's up-and-coming game development houses. With two successful titles and another on the way

John began work in the Mac world with Lotus in the early 80's. His resume gained attention because it was created on a Lisa -- "I printed it out in Chicago 12, one of those fonts that screamed, 'I did this on a Mac,' on an Imagewriter I," he recalls. John's brother David has long been involved in interface design, working with companies including Lotus and Specular. When the two decided to team up to create the kind of cutting-edge games that \*they\* wanted to play, they drafted their friend Jason Davis as a low-level 3D programmer. "We yanked him from out of a PhD program." The three founded Future Generation Software, and began work on shareware titles for the Mac market.

"We founded Future Generation," says John, "and we began to realize that we were putting together a 3D engine and a multiplayer engine that could be the basis for something a lot bigger. We began talking to Apple... about whether we could get some additional hardware to meet some of our needs, because we weren't set up to capitalize from day one... Apple very generously took a look at what we were doing and helped us get off the ground."

In early 1994, the three incorporated as Reality Bytes, Inc. The project they were working on eventually became one of the early 3D action games for the Mac -- became Sensory Overload. "One of the reasons we really wanted to partner with Apple is that we were excited about the PowerMacs that were coming. We wanted a 32-bit platform so we could support multiple platforms playing together. We started with a vision of Mac gamers being able to play PC gamers and connect to the whole world... And in the future, even platforms like the Sony Playstation and things like that. Once the PowerMacs came out, we saw some things in terms of performance that REALLY helped 3D oriented titles; much more than a PC could do."

"[With Sensory Overload], I think people were expecting us to make Doom," says John. "I think the audience would have loved it if we had, and I think that's what Bungie was \*real\* successful at. We were trying to do something a little bit different, more of a thinking game. [The continuing sales] are still pretty good, actually. It's still involved in a lot of small bundle arrangements, and you can still find it in some of the major retailers that pay a lot of attention to the Mac, or some of the Mac specific software catalogs."

Soon after SO's release, the three jumped into their next project, Havoc. "[Havoc] actually got started as a project that was on the way to Dark Vengeance, the game we're currently developing. We wanted to make sure that we were doing more than just 3D 'Doom-oriented' development. We wanted to push a 3D full polygonal engine, and enter the arcade-action category with a strong push towards multiplayer."

Havoc was built to support cross-platform game over both AppleTalk and TCP/IP, with up to 16 players in a fully 3D environment. Unique AIs were created for the 80 different types of enemy craft, and dozens of battle terrains were created. Havoc was also the first game to provide support for Quickdraw 3D RAVE, Apple's 3D hardware acceleration standard. Other companies, like Interplay, are just beginning to tap into RAVE. "We designed it all before the first QD 3D card even shipped, so we were doing some risk-taking there. The hurdle in the end was relearn how to sleep! We were on a VERY aggressive development cycle." During the development of Havoc, RBI grew rapidly, and by early this year they had added seven others including Reg Dujour, one of the original artists from Marathon. RBI currently stands at 10 employees, and hopes to double in size by next year.

"Looking to the future," says Chait, "we're also moving our engine base to a level that can support the new things that we're doing, more complex full-polygon games like our upcoming Dark Vengeance, with fully human models and fantasy characters. Also more arcade genre stuff, where fast-moving characters will be very important to us. Things you want to experience in six degrees of freedom, kind of like a movie."

With Dark Vengeance, soon to be released, Chait and RBI hope to redefine the meaning of 'action game.' "We did a lot of the design work on Dark Vengeance before we went to work on Havoc -- we've been working on it officially now for almost a year. It's going to break whole new ground in terms of what a TRUE 3D game engine is able to accomplish. The way our engine is set up, \*everything\* is an actor, even the camera is a separate object." The game is based on what he calls "second person perspective," a halfway point between the first-person feel and the cinematic style of the third-person view. "We want you to get a sense of what a full-motion body strike looks like, someone coming up and swinging their sword from behind you. The camera gets more dramatic, and you feel the motion better, too."

Like Havoc, Dark Vengeance will take advantage of advanced hardware. "We're going to be supporting true 24-bit software rendering," he says. "So, if people have that kind of performance, we'll support the machine and let them get it at a whole new level of detail. Everything is designed with an eye to hardware acceleration, while still supporting the installed base of machines. We really stretched our minds for cool features, things that hadn't been done before. It will take advantage of the new machines and new hardware, but also working on ways of doing it in software [so older machines can be supported.]" Even still, DV will only run on PowerMacs; the game's complex rendering effects and true lightsourcing are too taxing for the old reliable 040's.

Other features aim to turn Dark Vengeance into an Internet-wide gaming "experience." According to John, "DV will have huge 'audience' support, [allowing people to come in and watch with no penalty to the game's speed]. It supports at least 32 players, and we're trying

to scale it so it can go even higher. It will be cross-platform at the time that we ship, even from the moment we start putting out demo versions.”

“You have at least ten different characters that you can choose between when you start the game. So, [in multiplayer games,] it isn’t just you fighting against yourself in the mirror. You’ll also be able to play collaboratively, and the mesh of your skills and capabilities with those in your party will be very important as the game progresses. It’s not trying to be an RPG game, but there are many elements there to stretch your imagination, and things that you have to solve in the plotline during gameplay. It’s designed such that you do it through action, instead of just reaction or solving specific puzzles.”

Looking even beyond the upcoming Dark Vengeance, and another under-wraps game based on the same engine, Chait say the sky’s the limit. “Ultimately, we’d like to get towards full-motion video quality and feel with full interactivity. So that you have a completely immersive experience with characters that can be detailed, with a high enough polygon count that you feel like you’re in there, without requiring true video. That’s always been the direction that we’ve been looking as we took the long term view.

“We’re very committed to do not just PORTS for the Mac -- because Apple is attracting lots of people that take DOS things and make them into Mac games. We’re trying to design for the Mac, first off. We do simultaneous development for Windows 95 and Mac, but we want to give people an experience that fully utilizes their machine and what it can achieve.”