## MG Interview: Bill Appleton

by Tuncer Deniz

For over a decade now Bill Appleton, 32, has been developing great software for the Macintosh. A true legend in his own time, Appleton is often mentioned with the likes of Steve Jobs, Steve Wozniak, and Bill Atkinson when discussing the true pioneers of the Macintosh. After developing ground-breaking software like World Builder, HyperDA, and Super Card in the Eighties, Appleton two years ago formed CyberFlix to create his own software instead of creating it for others. His company's first two products, Lunicus and Jump Raven, went on to sell over 50,000 copies each on the Macintosh. With 2 titles in production and two more set for production in early 1995, his company, CyberFlix is on the verge of becoming even bigger than the legend himself.

But despite the success and the temptations of fame, Bill Appleton and CyberFlix still reside in Knoxville, Tennessee, where, despite long tedious hours of corporate meetings in the morning and a nasty head cold he had the day we visited him, Appleton was nice enough to sit down and chat with us.

IMG: Was it a religious experience when you first saw the Mac?

Appleton: When I first saw the Mac at a computer shop in 1984 it just changed everything. Within 2 weeks I spent every penny I had in the bank to buy a Mac, which had 128K of RAM, which I thought was amazing. So I quit graduate school, where I was studying economics at Vanderbelt and moved home to my parent's house to write software. Of course, that kind of got them upset because I had just quit grad school and had no experience writing software. But I knew it was the thing I was supposed to be doing.

IMG: So you started hacking away at home? What did you develop and how did you end up in California?

Appleton: In '84 I wrote World Builder and used that to write Enchanted Scepters in '85. In '86 and '87 I worked on Course Builder. Did HyperDA in '88, and somewhere in there I did Apache Strike. In '88 I started Super Card and sold that to Silicon Beach in '89. And spent about a year, '89-'90, in California working on Super Card. So that's how I ended up in California for a year or so. IMG: So you developed World Builder and Course Builder here in Knoxville?

Appleton: I sure did. Those were great days, I didn't have a lot of distractions like I do now. I had a lot of fun back then developing software.

IMG: So why did you move back to Knoxville after developing Super Card in California?

Appleton: California's a great place and I have a lot of friends out there and had a lot of good experiences there. It's also quite a lot to handle. It's a big place, and a fast moving place. I felt that if I stayed there I would have ended up following the ideas of various publishers instead of following my own ideas. And I kind of believed in my own ideas and wanted to see them to completion so that's how CyberFlix came about.

IMG: Tell us about how CyberFlix exactly came about.

Appleton: Well, World Builder as your remember in '84 was an authoring tool designed to create fantasy adventure games and that got me started in doing authoring tools and doing entertainment products. There's a number of problems with authoring tools as a business, it's very difficult to capture any value in an authoring tool or find that many people that can take advantage of it. But when CD-ROM came out I recognized that here was an opportunity to use authoring tools to take advantage of the enormous storage capacity of CD-ROM. So as early as '90-'91, I started developing authoring tools to create CD-ROMs. Of course the area I was most interested in was interactive movies, so that's how the software started.

I spent some time with Mike Saenz (of Reactor) and learned some things about his vision for interactive movies and had some of my ideas. That really didn't work out to well. So in 92 I really started CyberFlix. At first Jamie Wicks came on to do that art and basically Jamie and I did Lunicus in a period of 7 months. Scott Scheinbaum did the music and sound. Then Andrew Nelson came on. Andrew's the screen writer for Jump Raven and does a lot our PR work. Then my lawyer quit his partnership at a law firm and came on to run the company. So that's when things really began to pick up steam.

IMG: So CyberFlix kind of grew out a garage band-like atmosphere to a rather big company in a relatively short time?

Appleton: It really did. Cyberflix kind of unfolded like a flower. There hasn't been any false starts, or hesitations, or changes of direction at all. I think our big turning point was when Lunicus won CD-ROM of the year in 1993. It gave us some confidence that our work was as good as other people's work. We signed a 3 title deal with Paramount to handle our distribution for Lunicus and Jump Raven. So with that we made enough money to start our new titles and about 6 months ago took the floor below us, so now we have about 25 people working here and about 12,000 square feet of space. We have two new titles in development that we're working on and have plans for a number of new ones.

IMG: So why did you decide concentrate on entertainment titles? Why not spreadsheets or word processors?

Appleton: Well, one thing is, if you're writing something like a spreadsheet then you have an installed based, and you may upgrade your spreadsheet, and you may upgrade your installed base, and so on. Entertainment products are great because you can keep doing new ones and people love to see your new work. And if one of them isn't so good or doesn't do as well as some of the others, then there's a chance that the next one will be good. So it's

## really exciting in that way.

Another thing is that we really like entertainment software. That's really been my dream is to be able sit down at the computer and do a feature film like Terminator 2 or Aliens. I love those movies and when I see them, I just don't enjoy them, I want to participate, I want to do something like that. So that's also part of it, we're trying to develop the software tools necessary to do interactive movies. That's really part of an old dream that goes back ten years.

IMG: What kind of tools do you use to create your products? We've heard a lot of the Dream Factory.

Appleton: Dream Factory is our attempt to let artists create interactive movies on the desktop. The reason for this is to both control the cost of putting together these products, which can be immense, and to really let the creative people to develop their own ideas without having to go through a programmer. Speaking from experience, if you have to go through a programmer a lot of your ideas will be diffused, or changed, or some of them will not be implemented because of time. That's the reason for Dream Factory.

Dream Factory itself is a set of seven tools that do a number of different things. The major ones are Central Casting and Prop Department which create walking and talking actors and props. Set Construction which creates digital terrain that the actors can move around in. Then there's the Movie Editor which creates linear movies that can be played in this environment. Head Shop, which creates talking heads which you can interactive with and say things to you and you can say things back. But the most important thing which brings everything together is Dream Factory itself which is a high speed multi-platform interpreter which can control the flow and behavior of all these different elements and coordinate them.

IMG: Lunicus was big hit for a first product. Why do you think it did so well?

Appleton: I've been recently involved in porting Lunicus to the IBM and had a chance to go back and look at it again. There's some sweet things about Lunicus I like. The story maybe not be as deep in terms of screen writing as some of the things were working on now, but it's still a nice story. Lunicus really takes you on an adventure.

I think people were tired of the performance problems with CD-ROM and wanted to see something that was faster and they could kind of get that suspension of disbelief and lose themselves in. I think we were really lucky with Lunicus when you consider it was done with two people. It's been really popular here and popular in Japan. I'm not exactly sure why it's been successful but we've certainly had fun with it and I'll always have a fond place in my heart for Lunicus.

IMG: Almost everywhere you look in the computer print media you see CyberFlix. In fact, you were recently featured in Newsweek. Why do you think people and especially the media is attracted to CyberFlix? What's so unique about you guys?

Appleton: That's a tough question. I think part of it is just the American Dream, a group of kids putting together a successful company. And part of it is just a reflection of how our society is changing. When I look around CyberFlix, for example, Scott Scheinbaum can do a digital audio recording of a symphony that he creates and masters it on a CD right at his desk. Rand Cabus, who does all our packaging, and print media, inserts, he creates those all at his desk. And Andrew Nelson and the things he does with the PR, and publicity. Again, he can do everything at his computer.

We can build feature films and movies on the computer completely digital without any actors or without anything and were doing it right here in east Tennessee. So that's another thing, people see what we are doing and they realize that here are these guys without a printing press, recording studio, movie studio, or a movie camera or anything like that and they're able to this stuff with just computers. I think it's really a message of what the future holds and what the future may be like and that the future may belong to the creative instead of the rich or the powerful. So it may be the creative and the knowledgeable people who have an edge now. So I think it's a real compelling story and people are into it.

IMG: Would you say "freedom to create" is the company's modo?

Appleton: Yes, I think so. One of the really nice things about CyberFlix is that it is internally held, all the major players here are shareholders and we don't owe any debt to anyone. It's not like we have a bunch of venture capitalists who tell us to tone down the violence because we might get sued, etc. So we really do have an environment where it's really creative and basically anything goes. We really only have one manager and that's Eric Quist, who somehow runs the show alone. So it's really a very creative environment, we don't have any rules. But it's a very competitive environment, your status here is based on how good you are, which is really a good thing.

It's been interesting. Like Jump Raven. We've heard that it's politically correct, it's no politically correct, it's racist, it's trying to be too politically correct. It makes me think we're doing something right.

IMG: Do you see more garage-band like software developers popping up around the country in the future? Kind of like how you got started?

Appleton: We're definitely seeing a lot of new companies being started. We have a lot of friends in the industry like Drew Pictures, Pop Rocket, Presto Studios, etc. It's been great to see a lot of this growth and spreading out and seeing a lot of new and exciting things. But I think there might be another trend though and that is, when the larger companies get into the CD-ROM market, are they going to squeeze out some of the smaller ones? So that might be a force in the other direction. I hope not.

For CyberFlix, we're really trying to do everything we can to protect and expand what we're doing so hopefully within a couple of years we'll be able to compete with some of the large software houses. We probably won't ever do as many titles and we might not have their advertising budgets but if we can keep on doing hard hitting or sexy or violent or compelling or emotional or cinematic kind of titles that we want to do here that have a hard hitting impact on our audience, then I think we'll be successful and we'll be able to hold our own with those guys.

IMG: Do you believe your partnership with Paramount Interactive was one of your keys to early success?

Appleton: I think it was very helpfully. Being allied with Paramount gave us certain amount of credibility and they had a wonderful marketing and distribution organization that we took great advantage of because we had the two hot products for them. And so that was a good situation.

Viacom bought Paramount about six months ago and obviously there's been some disruption and difficulty but we have a lot of confidence in Viacom. They seem to be doing well. We are still publishing under the Paramount imprint, and Viacom wants to be as much a success in interactive media as Paramount ever did.

IMG: I'm sure you've heard these complaints before. CD-ROMs are too slow, CD-ROM games have great graphics but poor gameplay. How are your products different?

Appleton:Well, we hope they're different (laugh). They may have faster game play and not as good graphics, I don't know (more laughter). We've worked really hard to look at what a CD-ROM drive does, what a hard disk does, what a computer does and to backwards engineer the technology and titles off of that. And I think that's been very successful for us.

Things like MacroMind Director really weren't designed for CD-ROM or for entertainment. We've tried to take things in a different direction. The Quad-speed drives are on the way and that's going to increase the throughput but still the basic limitation of CD-ROM is and will always be seek-time. Being about a quarter second, or ten times slower than a good hard disk. And because of the constant angular velocity of the CD-ROM head over the drive, the seek-time problem looks like it will never go away.

So the challenge is to design compelling and interactive titles that are fast but not just a linear movie. Linear movies are great for CD-ROM because you can just play a linear movie without any seeks and so that's a nice thing to do but it won't hold the users interest.

That's the unique challenge of CD-ROM, is to be able to take advantage of the data capacity and what throughput you have and not get killed by the seek-time problem. And that's what our whole concept has been designed around.

It's interesting that people here and there will complain about CD-ROM but I haven't heard anybody come up with any alternative to it. So we think CD-ROM will be around for quite sometime.

IMG: Your new games like Dust, Skullcracker, Titanic, etc. seem to be drastic departures from shoot'em up like Lunicus and Jump Raven. Are you moving toward interactive movies and less arcade type games?

Appleton: Definitely, of the two titles in production, one is Skullcracker. Skullcracker is a really amazing entertainment product based upon a future where werewolves, and vampires, and gouhls, and zombies are part of society and what kind of world is that and what happens there. Skullcracker is based on a wonderful side scrolling combat engine, so it's going to be a really unique product, there's really nothing like it.

Dust is a little further out, around second quarter '95. Dust is an interactive western. And that's the first Dream Factory 3.0 title we've done. You can freely walk around this large western town and talk to players and an entire plot develops with sub-plots mixed in. There's puzzles, there's card games, there's arcade action. So Dust is really a different product than Lunicus and Jump Raven.

And I think you're right, I think we want to move more in the direction of story-telling, of cinema, of dramatic elements, and less reliance on arcade and action. Because we think that's a really viable type of product and that's what we want to do as an interactive movie company. But I think that we still will have action elements in all of our titles, we still like that part of it.

IMG: Where will CD-ROMs be in 10 years? Extinct?

Appleton: Well, we still have 5 1/4 floppies, so I don't think there's any reason to believe they'll be extinct. I actually think they might be more popular then ever. Unless some really fast storage medium comes about that offers very inexpensive manufacturing, very high throughput, and very high seek times, I think we'll be using CD-ROM for quite sometime.

IMG: One of the things that most surprises me about you and your company is your unbridled enthusiasm for your games, your company, etc. Where does this enthusiasm come from?

Appleton: That's a good question. We love what we're doing and we're having a lot of fun and were working very hard. A lot of the people here at CyberFlix are people I've known for 10 years, 20 years, and 25 years. Jamie grew up across the street from me, I ran track with Eric, I've known Scott for 15 years. So we're really a tight knit group.

We REALLY know the Macintosh and we use the Mac to our advantage to get these titles done. And now we have the graphic artists that are learning the Silicon Graphics, and we've got now the delivery vehicle on MPC. So we're excited and we were doing what we want to do. We think we're changing the world in our own way and we're bringing a lot of great entertainment titles to a lot of people. I think it's been a really exciting time for us. So that's why there's a lot of enthusiasm.

IMG: Is the CD-ROM market becoming overly saturated?

Appleton: Yes, we're worried about that. It's interesting, they say there's 1700 titles out there and there's no shelf space. But yet, only two dozen of those titles I would buy. So I think it's a combination of problems. Some of the software is just not very strong and there's a lot of hardware problems. A lot of people are moving from 1X drives to 2x drives, and from 386's to 486's and other things like that are improving the types of titles that can be played.

On the other hand, this Christmas '94 and '95 will be a really good year for bringing more multimedia MPCs into the market and expanding the base of people that can enjoy these titles. So, we're worried about troubles in the market place but we're hopeful too.

IMG: I see PowerPC's everywhere here at CyberFlix. Will you be developing for the PowerPC?

Appleton: Yes, Dust and Skull Cracker, for example, will come on one disc for 68000 and PowerPC native and one disc for Windows. So we're big, big believers in the PowerPC. All of Dream Factory runs native on the PowerPC. So all of the time consuming activities in Dream Factory can be accelerated greatly. We think the PowerPC is a great machine for the future. Actually, we may even have enhanced version of some products for just the PowerPC, it's just that good.

IMG: Where do you see CyberFlix in the next five years?

Appleton: Well, there's kind of an ongoing debate going on here at CyberFlix, how big do we want to get? How big can we get in a place like Knoxville? Do we even want to be so big or are we already too big. There's some people who kind of want to go back to the basement, it turns out. So that's something we're going to have to decide on.

We know that we want to do really great titles. That's the most important thing, that the titles are really good, that they are hard hitting, and that they challenge the audience and that it's a really special experience for them. On the other hand, my feeling is that we have to be big enough to compete with the biggest players in the industry. So, we're not quite

sure how that's going to take off or how big we're going to get. But I can see the company getting quite a bit larger and having more titles in production. We basically want in 6 months to have four titles in production, if that's possible.

But I think that the most important thing is that the work is good, and that we're having fun, and that our audience loves the products. As long as we can keep those things in place, we can get considerably larger.

IMG: What's the most important aspect when developing CD-ROM games?

Appleton: I think the most important thing is that you have a really clear vision about what you want, and what kind of experience you want to give your customers. And then, that your vision is somehow in tune with the technical realities of what's possible for you to give them. So I think if you have those two things and a really beautiful graphic sense of how to do the design, then I think you have about everything you need to be a success on CD-ROM.

IMG: What do you think of the recent popularity of ultra-violent games like DOOM?

Appleton: We really support the ability of other people to express themselves. I do think the customer deserves information on the box about what kind of product they are getting. I know that Jump Raven 2 will be our first R rated title. We'll have interactive erotic elements, adventure elements, and some really ultra-violent arcade sequences as well. So we're definitely exploring that area as well.

We definitely don't want to do anything to hurts people, especially kids. As long as the information is there on the box, then I think anything should go.

IMG: Are you in support of a game rating system?

Appleton: We're in support of it. Viacom has been very active in developing that. Of course, with Beavis and Butthead and some of their other products, they have to worry about that as well. We think it's good, we think people deserve information about what kind of product they are going to get in the package.

IMG: A lot of people consider you as a leader in the CD-ROM market. Do you see yourself as a leader?

Appleton: That would be nice. We've worked very hard and we've done some good titles. And we've also paid attention to the business end of things. You've got to handle those things in the correct manner or you can get in trouble. And if you're not making some money or enough money to keep going, then you're not going to be affecting the world or making good titles or doing anything for long.

We have tried to kind of lead the way and show what can be done with CD-ROM from a technical sense. And now we're kind of branching out to show what can be done in the creative sense as well in terms of screen writing, drama, and emotion.

So, yea, if we're a leader that's great. I think we're having a lot of fun and we have a lot of friends in the Macintosh world that we treasure a great deal. So if we can lead the way and show what to do with CD-ROM, then that's great too.