It is said that smell is the sense most closely linked to memory. Its direct link to the limbic system (which controls basic bodily functions like heart rate, as well as plays a strong role in emotion) tends to support this theory. But I’d wager this is not memory as one tends to think of it, as actual, fully formed scenes with fully formed events.

Rather, I’d say smell evokes emotion (limbic is more emotion than memory), and that combination of emotion and scent may stir up the feeling of an event past, a visceral reaction. You’ll eventually get to memories, perhaps just one, but it’s a couple of jumps down a line.

Music, though, can call a ten year old memory to mind with the clarity as if the event had happened yesterday. In fact, most people around you identify certain times of their life by music. Music reflects our times, and we, in turn remember it, incorporate it into ourselves.

There are songs that when they play on the radio take me back to 20 years ago at the school skating party. I remember (perhaps unfortunately) my winter of Radiohead – I still get in an anxious funk when I hear the intro to *Street Spirit*. Music is so much a part of us, so ingrained, so recognizable, there have been entire gameshows built around people’s ability to Name That Tune in but a handful of notes.

So, when the first bleeps and bloops appeared in 1970s arcade games, did we have a slight inkling of how grand this genre (yes, genre) of game music would become? Well, analog was still the name of the game in sound, so actually, we probably didn’t. But in the mid to late 80s, when a round of home consoles and PCs came through, using digital music readers, the future was wide open.

Game music went from highly repetitious, infectious sounds to virtual symphonies supporting the increasingly intricate stories and gameplay.

And this leads us to today, where fans can buy the soundtracks alongside their favorite game titles. *Final Fantasy* fans can go spend a night among friends, enjoying the surprisingly deep anthology of music from the decade old series. Entire bands make their (at least partial) living sampling, covering and making up lyrics to old favorites from games gone by. And so, because this genre has grown to become part of the foundation of games, we turn our eyes and ears to the subject videogame music in this week’s issue of *The Escapist*, “The Beat Goes On.” Enjoy!

Cheers,

Doot doot doot,
doodoo doodooot,
doodoot doodooot
doot doodooot
doodoodoot.

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**LETTERS TO THE EDITOR**

**To The Editor:** Interesting article ['In 3-D', by Allen Varney], but disappointing to see the negative use of the word “pussy” in the first sentence. I doubt you’d publish an article describe the technology as “totally gay”, so why fall back on a similarly offensive playground-level prejudice?

Shame on you, The Escapist - for a magazine that has made a real effort to examine and counter some of the sexism around games, you’ve let yourselves down with this. Please remember that you have a lot of readers for whom a pussy is a part of their bodies, not an insult.

- Kerry Turner

**Author’s Reply:** A little etymology lesson: Believe it or not, “pussy” was originally an informal term for a small kitten. That original usage gave rise to the slang term meaning (according to the American Heritage Dictionary) “a man regarded as weak, timid, or unmanly.” The slang usage meaning “vulva” is later, though apparently more pervasive on Mkt’s playground.

- Allen Varney

In response to: “In 3-D” from The Escapist Forum: As an artist who often makes stereographic still work, I’ve always wanted my games to one day be in 3-D.

One possible drawback would be that once we have fully stereoscopic games...
we will realize exactly how much visual information in our game environments, objects and characters are implied by flat textural images mapped onto polygonal surfaces. In a way it will be a big step backwards: in 3-D, Halo 2 would suddenly look much like Marathon 1 (but with depth).

- David Miscavige

In response to “Shark Bone or Snake Oil?” from The Escapist Forum: From my experience, Brain Age doesn’t make you smarter, but it does seem to make you a little more alert (something I wasn’t expecting). A while ago, I was getting consumed with my responsibilities. From 6:30am to 9:00pm, it was all about my son, work, my wife, and the house. I ended up selling my Xbox and GameCube, as I had no energy to do anything. Not even play games. This went on for several months. My work was being affected by my unhealthy routine. Then I bought a DS Lite and Brain Age. Each night I’d play it for about 20 minutes. What I noticed is that after a month or so I became more satisfied with my efforts at work, I had more mental energy for my responsibilities at home. Now I “train my brain” with Clubhouse Games.

- Echolocating

In response to “From the 360 to the Moon” from The Escapist Forum: When someone comes up with an energy shield and says “I got the idea from Halo”, shame on him. Give the credit to Halo? Come on. Do you really believe the concept of “energy shield” made a first appearance on that particular game?

Video games are not references for new concepts, new ideas, break-throughs in science, they are a powerful media. And when you combine a talented game designer with a great idea, you get awesome games. Making an energy field fun in a game is difficult. Getting the idea of an energy field is something else.

Game designers often cite their references. Give the credit to who deserves it.

- MacTuitui

In response to “From the 360 to the Moon” from The Escapist Forum: Say that to a 7-year-old who doesn’t read sci-fi but plays Halo 2 like there’s no tomorrow.

- Joe

In response to “Final Fantasy XII’s Unfair Astrology” from The Escapist Daily: Well, I think we can take this as a lesson in game design; one that I have always pondered. Should we let the player access the most powerful weapon in the game with a minimum of work? Or, should we force them to squirm knowing any minute that they could squander their chance to get their hands on the Portable Earth Smashing Gun (or whatever you want to call it)?

- generalissimofurioso
That game music and popular music are two separate beats, banged out on two separate drums, sounds, at first, like one of those obvious truths that are impossible to ignore. Like the fact that Liberace was gay. Popular music is what you listen to when you have a choice. Game music is what you turn down so that you can listen to your popular music instead, right? But to anyone with an appreciation of the myriad musical techniques and influences at work in even the most pedestrian pop jingle, the line begins to blur.

Music is music, whether constructed for the benefit of a game developer, a toothpaste manufacturer or a record label. The techniques, the mathematics and aesthetics of the thing - the songs, if you will - remain the same. And no matter who you are, no matter what music you’re making, it’s all hard work. It’s all effort.

The myth of the musician who taught himself to play guitar, in a garage, without ever learning a single phrase of notation, is mostly that: a myth. The legend of the open-shirted, flared-cuff-wearing rock god, spotting a blonde bombshell across the crowded bar and composing a power ballad in her name, right there on the spot, is just that: a legend. And the cliché of drug-addled musicians, stumbling blind-drunk into the studio and hobbling out a few hours later with The White Album pressed into vinyl is just that: a cliché.

These things may happen, but only with the same frequency with which Sasquatch comes down from his snowy retreat to forage for food in your trashcan. That is to say: rarely.

As with anything, an appreciation of music without an understanding of it can only take one so far. Music is nice, in other words, but how does it get made? How does one become a musician, and how does one then set about making abstract noise into what can be called “music”? More specifically, how does one do all of this for a videogame, and why?

To get behind this music, I asked the musicians themselves.
Introduction

Having never played an instrument myself, in spite of frequent exposure to both music and musicians, my first question was how and why one becomes a musician. What’s the golden ticket that starts one on the journey to being a craftsman who makes music instead of, say, chairs or porcelain dolls?

“I knew from a very young age that music would always be in my life,” says Tom Salta, the composer for Ghost Recon: Advanced Warfighter. “But it was right after high school when I was looking at colleges that I had to make a career decision; would I study to be an electrical engineer or would I study music? I chose the latter. The first instrument I ever played was the baby grand that my parents owned when I was 5 years old. My mother actually taught me to play the piano until I was 13. My father was a conductor, so he was trained to play almost every instrument in the orchestra.”

Having musical parents seems to have been a unanimous factor in the musical development of all four of the game composers I interviewed, and really, it just makes sense. People tend develop to an affinity for things they enjoy, or rather, don’t develop an affinity for things they don’t enjoy. Being introduced to the joys of music at an early age would seem, then, to make it more possible to develop musical skills at an early age.

“My parents were an inspiration,” says Frank Klepacki, the award-winning composer of Command & Conquer and Star Wars: Empire at War, who’s been working in games for 15 years. “Dad played guitar and sang, Mom played bass and sang.”

“My parents are both musicians, though not ever full-time pros,” says award-winning composer, singer and instrumentalist Ian Dorsch. “Both of my sisters are singers as well, and one of them plays a pretty mean Celtic harp. I don’t believe that there was any specific event [that started me on the path to become a musician], it was more like a slow convergence of the twin realizations that I was happiest making music and that it was possible for me to make money making music. Once that finally hit me, I was pretty much sold.”

“My dad was a drummer and my mom played piano and clarinet,” says Jason Graves, composer for Lineage II, Blazing Angels and Star Trek: Legacy. “That’s how I got started in music, first with piano lessons and eventually drums. Growing up, I thought I’d have to get a ‘real’ job eventually. So far, that hasn’t happened! I’m still writing music for a living, and am happy to be doing it. I’ve worked on more than 40 games; before that, I was composing for television and film in Los Angeles. I must say it’s a lot more satisfying working on games. You have a lot more creative freedom.”

Exposition

But creative freedom to do what, exactly? Music may be the food of love, to quote Shakespeare, but what does love have to do with games?

A musician composing a song to feed his love or out of some creative impulse born of a heroin high may have only himself to please, but a game is a complex interweaving of many disparate elements, all of which must work together as a whole. The music is but one part, and must play nice with the others. To what muse, then, does the game musician owe his allegiance? Whose appetite does it feed?
POLITICIANS CONSIDER VIDEO GAMES TO BE AS DANGEROUS AS GUNS AND NARCOTICS. AND THEY’RE SPENDING $90 MILLION TO PROVE IT.

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Knowing what the producer wants is one thing, but giving it to him is another. In a game lasting several hours, with varying musical needs and styles, how does one fill that blank page? What’s the key? According to the composers, this is where a background in music helps out; specifically, drawing on works for other collaborative media. Namely, movies.

"I try to figure out the main theme," says Jason Graves. "That’s the heart and soul of the score. Once the theme is worked out, everything else kind of falls into place. The main theme will dictate the tension, drama and energy that the rest of the score will have."

"[I] try to figure out the main theme," says Tom Salta. "That’s the heart and soul of the score. Once the theme is worked out, everything else kind of falls into place. The main theme will dictate the tension, drama and energy that the rest of the score will have."

"The main theme melody [for Red Steel] (which I call the Katana theme)," says Tom Salta, "shows up throughout the game in various guises, sometimes very discretely, but it’s there. I love hiding melodies and themes, sometimes almost subliminally, in music. It helps the score gel and sometimes people don’t even realize why. Even though the musical styles are so diverse, the entire score has a distinct personality."

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"Let me first say that I love feedback from so-called ‘non musicians,’” says Salta. "It’s always real and pure. People always say to me after a compliment (or criticism), ‘Well, I’m no expert.’ And I always say, music isn’t for ‘experts,’ music is for everyone. It’s the only true universal language. I always love to hear how ‘real people’ react to my music … without the distraction of musical training."

Frank Klepacki, more to the point, offered this example of feedback he once received from a game producer: “Make it sound like The Rock soundtrack.”

"My first order of business is to attempt to get as much information as I can, regarding the developer’s musical expectations,” says Dorsch. "It helps to get lots of examples of music they like, because in general these guys aren’t musicians themselves, and language that
means one thing to me as a musician means something entirely different to a non-musician.”

**Development**

Remembering that an artist’s most intense criticism usually comes from the artist himself, I wanted to know what the musicians themselves thought of their work, and which, of the projects they’d worked on, was their favorite.

“*Red Steel* was probably the most unique, challenging and fun game score I’ve ever worked on,” says Tom Salta, citing his most recent title for the Nintendo Wii. “The main reason for that was the sheer variety of styles I had to create. It almost started becoming an ongoing joke. For example, in one area, they asked for a Japanese ‘70s love song playing on the radio, lyrics and all. In another section, some late ‘70s funk (ala Gap Band), in another ‘50s sci-fi infused killer circus music, then perhaps some super modern ‘click-n’-pop’ electronica, then bombastic movie trailer-like choral fight music, free jazz, Led Zeppelin inspired rock with Japanese melodies played on violin, and the list goes on.”

Frank Klepacki says one of his favorites was, of course, the music he composed for the seminal RTS *Command and Conquer*, owing to its pivotal role in establishing game music as an art form in its own right, but his favorite for another reason was the music he made for *Star Wars: Empire at War.*

“I am an absolute die-hard *Star Wars* fan,” says Klepacki. “You cannot imagine how much I jumped for joy when I got the opportunity to do [*Empires at War*]. I felt like I’d spent my entire life grooming myself for that moment. I was born on the day that *Star Wars* came out. It was released on my third birthday. Really, John Williams is the first grand musical exposure I have gotten. I don’t remember any music before the giant *Star Wars* letters came on the screen. So when I got the call I was like, ’This is it. This is the peak of my career. I don’t know where I’m going to go from here.’”

**Recapitulation**

Charting the course of music’s importance in game design is as simple as following the credits of the four men to whom I spoke for this interview, who are continually at the forefront of the

Fringe comedian Bill Hicks once said about music and the war on drugs: “If you don’t believe drugs have done good things for us, do me a favor. Go home tonight. Take all your albums, all your tapes and all your CDs and burn them. ’Cause you know what, the musicians that made all that great music that’s enhanced your lives throughout the years - real fucking high on drugs.”

That Hicks was himself a struggling musician (and a drug addict) lent some credence to this, his most quoted of many thousands of quotable utterances, but according to every single one of the musicians I interviewed for this article, it’s a bit of an exaggeration; or should be.

“Well look,” says Tom Salta, ”I’m glad we have musical treasures like Pink Floyd, The Doors, Jimi Hendrix and The Beatles. If drugs played a role in their music, so be it. But I have a feeling that the aforementioned artists (not to mention countless others) would be very capable of creating some inspired music *without* drugs - perhaps even better music.”

Frank Klepacki agrees: “Imagine how much better sounding and more time efficient and less costly albums would get if the musicians weren’t always stoned or drunk. That and I bet we’d have even more music to enjoy from some of the geniuses of our time as they wouldn’t have overdosed themselves to death like freakin’ morons.”

Ian Dorsch puts it more succinctly: “I think I’d probably only need to burn half of my records, tapes and CDs.”

“But who, knows and I don’t really care,” says Salta. “All I know is that for me, I need to be completely sharp and on-point to do what I do. I also respect myself too much for that kind of thing.”
movement to make better music for games. Naturally, then, who they look up to is a good indicator of who to watch in the coming years.

I asked them who’s “getting it” now, in terms of what makes music an important force in a game, rather than something that will prompt a player to turn the “Sound” slider all the way down. “I think one of the best examples is Marty O’Donnell and the team at Bungie,” says Ian Dorsch, who’s currently working on a game called Badge of Blood, by independent developer Warpig Studios. “The system they’ve developed for adaptive soundtracks is just jaw-dropping in its elegance and flexibility, and their work has really set the standard for the entire industry.”

Tom Salta, who’s currently working on a “next-gen” title for Ubisoft, is a bit more sanguine on the subject. “The answer is more and more [developers] every day. Having worked on several Ubisoft titles, I know for a fact many of the development teams there really ‘get it’ ... so much so that they will invest a ton of money into recording a Hollywood orchestra playing the score, even when many people wouldn’t know the difference unless you showed them.”

Frank Klepacki’s answer is typically brief and characteristically self aggrandizing: “Petroglyph,” he says, referring to his own company. “Oh, and definitely the makers of Guitar Hero.” He is currently working on a “secret RTS game ... for Sega.”

Coda
As the writer Anais Nin once said, “Music melts all the separate parts of our bodies together.” A saying all the more true when considering the role of music in games. Music enhances our game experiences, broadens their impact and makes your heart pound even faster when it’s time to kill those stupid, stupid zombies. But the people who make the music are rarely the starry-eyed, ostentatious dreamers we often imagine them to be.

While there may be someone, somewhere finding musical inspiration in the bottom of a bottle, or the bosom of a comely, young lass, the real professionals are the ones who can juggle the weight of an exhaustive library of musical influences, soothe the nerves of fretful game producers, tap the vein of a game’s inner meaning and still deliver a powerful score before the game goes to press. These are the true musical geniuses, and while the work they produce may not ever hit the Top 40, it does add a great deal to the games we play; enriching the experiences and enhancing our enjoyment of them. A surfeit of that would not be a bad thing at all.
In the late 16th century, a group of Italian intellectuals calling themselves the Florentine Camerata gathered together to talk about, among other things, contemporary music. They felt that the common practice of multiple singers singing the same lyrics at different times was getting in the way of the public's engagement with and understanding of the music. The polyphonic effect sounded good, but it made it hard for listener to be “moved by a true perception of the emotional content of a text,” as Columbia music professor Susanne Dunlap put it.

To combat this problem, the Camerata developed a totally new form of musical performance called opera. Characterized by one distinct, highly emotional voice singing at any one time, the opera created the opportunity for a full narrative to be strung together through a sequence of songs. By the early 17th century, opera had become the standard form of musical production for the royal court, a fashionable alternative to the stodgy old style of polyphonic singing.

Fast forward to today and opera, indeed all of classical music, is in a rapid decline in popularity among the young. An entire generation associates classical music with fancy dress, stuffy theaters and polite applause. Less than eight percent of subscribers to online resource Classical Archives are 24 and under – nearly 60 percent are over 45. Financial constraints are forcing renowned symphonies around the country to scale back or shut down entirely.

Which is why it’s surprising to see T-shirt clad 20-somethings rubbing elbows with polo-shirt wearing grandparents in a 5,000-person strong National Symphony audience at the Vienna, Va. Wolf Trap National Park for the Performing Arts. They’re here to see Play: A Video Game Symphony, a concert that eschews the common symphonic fare of Bach, Mahler and Strauss for pieces by the likes Square’s Uematsu, Nintendo’s Kondo and Konami’s Gregson-Williams. While parts of the audience have never played a game and other parts have never heard a live symphony, they’ve all gathered together to experience another world without fully leaving the comfort of the one they know.
Play is part of a small but quickly growing trend of videogame music performances by professional musicians. Japan has hosted such concerts since 1987, when Dragon Quest composer Koichi Sugiyama conducted a collection of his game music in Tokyo’s Suntory Hall. The idea didn’t reach the West until 2003, when the Czech National Symphony Orchestra performed a “Symphonic Game Music Concert” in Leipzig, Germany. Game concerts finally reached America in May of 2004 with “Dear Friends: Music from Final Fantasy,” performed by the Los Angeles Philharmonic in LA’s Walt Disney Concert Hall. Coinciding with E3, the performance sold out in a single day and eventually spawned the expanded Play concert tour, with music from games ranging from Super Mario Bros. to Blue Dragon.

The melding of a high culture symphonic orchestra and music from the traditionally low culture world of videogames is not always an easy task. “Usually when we first start - when the musicians first get on stage and they look at the sheet music and see Super Mario‘ and Sonic and Zelda and Warcraft - they look a little on the skeptical side,” says Tommy Tallarico, a veteran videogame composer and co-creator of Video Games Live, another popular game music tour.

The hesitance fades at rehearsal, when the musicians realize game music is “more than just bleeps and blops,” as Tallarico puts it. But the orchestra really starts to catch on once the show begins. “The real magic happens when we play the show ... and the crowd is cheering like it’s the second coming of the Beatles or Elvis Presley or something,” Tallarico says. “After the show the orchestra will come up to us and go ‘Oh my gosh, we’ve never heard applause like this ever. ... When can you come back?’”

Indeed, the wild hoots of recognition as the audience hears the sweeping grandeur of Play’s opening Final Fantasy fanfare is unlike anything you’d expect to hear from a crowd at a classical music concert. Likewise for the laughs that accompany a later transition to Super Mario Bros.’ underwater theme, complete with a montage of swimming animations from Mario games on the giant projection screen above the orchestra. When the familiar Sonic the Hedgehog theme begins during an extended medley, a young boy sitting in the center orchestra section actually gets so excited he turns to his side and high-fives his dad! Show me an 8-year-old who does that when he hears Mahler.

Tallarico says the original idea for Video Games Live came when he was 10 years old, performing air guitar for his friends to the strains of taped Commodore 64 tunes. The actual process of getting the idea out of the bedroom and into the concert hall started in 2001 and finally made it onto the stage at a 2005 Hollywood Bowl premiere that drew over 11,000 attendees.

“We decided we wanted to show the world how significant videogame music is, how special it is,” Tallarico said. “We decided the best way to do that is to create a show that not only videogame fans would attend, but a show that the non-gamer would go to and really be blown away by.”

The key to doing that, Tallarico says, is synchronizing the music to lighting effects and video performances of the game. “Just doing an orchestral...
performance is great for the fans, but it doesn’t draw in everyone else. It was important to us that we want to draw in everyone else and make it a real entertaining show.”

Does it work? You bet, says Tallarico. “The most e-mails we get, oddly enough, after a show, will be from the mom who brought the neighborhood kids or the grandmother who brought the grandson or the girlfriend who got dragged there by the boyfriend. Those are the letters we get that go ‘Wow, I never knew that videogame music was this powerful. I never knew that the graphics were this amazing. Thank you for turning me on to this thing. I get it now.’”

All well and good, but does the transference work the other way? That is, can a videogame concert get gamers into the classical music scene? Not so much, according to 8-year-old Play attendee Andy Ng. Despite his enjoyment of the videogame concert, especially the Kingdom Hearts medley, Ng said he probably wouldn’t come back to hear the National Symphony perform other classical music. Still, Marilyn Ng, Andy’s mother, considered the show to be “a great way to introduce them to [classical] music.”

If the number of planned concerts is any indication, a whole lot of people are eager for the same introduction. Video Games Live already has 50 to 60 shows planned for 2007 and 100 more being set up for 2008, according to Tallarico. "Videogames have become the radio of the 21st century. ... I think you’re absolutely gonna see this grow and grow and build and build,” he says. Videogame concerts might not revive the 21st century classical music the same way opera revived it in the 17th century, but if they don’t, it certainly won’t be for lack of trying. COMMENTS

Kyle Orland is a video game freelancer. He writes about the world of video game journalism on his weblog, Video Game Media Watch.

The most E-MAILS we get, oddly enough, after a show, will be FROM THE MOM who brought the neighborhood kids or THE GRANDMOTHER who brought the grandson or THE GIRLFRIEND who got dragged there by the boyfriend
For once, The Fat Man – one of gaming’s most garrulous storytellers – holds back. “What I have to say about current game audio runs a high risk of making somebody’s day worse rather than better, which runs counter to my personal goals.”

Aww, c’mon. What The Fat Man thinks about game audio, people want to know. In these primordial days, the gaming equivalent of classical music’s early Baroque, maybe the industry hasn’t yet found its Johann Sebastian Bach; but musician and composer George “The Fat Man” Sanger stands in well for Vivaldi, say, or Telemann. Since 1983, he and his group, Team Fat, have scored over 200 computer games, including *Wing Commander I* and *II*, *Loom*, *Master of Orion*, *The 7th Guest* and its sequel *The 11th Hour*, and (lately) dozens of Indian-reservation slot machines. Sanger composed the game field’s first General MIDI soundtrack, its first direct-to-MIDI live musical recording, and its first Redbook soundtrack included with the game as a separate disk. He wrote the truly remarkable treatise *The Fat Man on Game Audio: Tasty Morsels of Sonic Goodness* (New Riders, 2003), which he describes as “a book about game audio wrapped in a biography wrapped in a philosophy on life.”

The Fat Man knows his stuff. People listen to him. So when George Sanger finally admits, “There is very little game audio I like to hear,” that’s not just a personal problem; however unwillingly he says it, it’s a grave indictment.

Sure, Sanger likes Blizzard and Ensemble games, and *Katamari*, and Michael Land’s soundtrack for *The Dig* – “and *Guitar Hero*, of course.” Composers send him pieces they wrote just for him, as gifts: “Those things are great, and there are plenty,” he says. “There are good sound guys and friends and musicians out there, doing good work, some dedicating their lives to this strange job. You guys need to know I have every bit of respect for you that I can muster. I love y’all.

“But for the most part, here’s my problem. ... When I put a game in the machine, what I hear feels brutal and clumsy, like people trying to imitate the most intense moments in famous movie trailers or TV shows, all without the appropriate emotional
subtext from a good film. It evokes in me the vision of a sound guy [who] has somehow miraculously threaded the needle and come up with something that has appeased every one of his six bosses. And then I get a vision of all the idiots on the committee.

“Game audio really strikes me as being all about somebody trying to amp me up by using superlatives and cheap tricks, and I just don’t enjoy that very much. I enjoy warmth and beauty and quality and grace and finesse and style and personality, and a sense that some individual has attempted to communicate something.

“Maybe this is asking too much. Maybe I’m looking in an inappropriate place for Art. But game audio seems to have skipped from beating on log drums, right to record-company politics and robber baron aspirations. I had expected a Woodstock stage in there somewhere.

“And you know what? I know I’m not alone, and I certainly haven’t given up hope.”

Indeed. The Fat Man has talked this talk for well over a decade. More to the point, in all that time, in significant ways, with increasing numbers of colleagues, The Fat Man has been walking the walk.

***

Sanger is, in fact, tall and lean; the nickname reflects his gift for audacious self-promotion. He started writing game music back when it was (as he has put it) “considered to be at the artistic level of, say, writing the tones that tell the McDonald’s workers the French fries are ready.” To draw attention to the new field and to Team Fat, Sanger adopted a yee-haw Texan persona. He wore a Stetson hat and outrageous suits made by celebrated Ukrainian-American tailor Nudie Cohn. (The Fat Man tells a great “Nudie Suit” story.) In 1995, Sanger promulgated his “Manifatso.” He swore that on the new frontier of game audio, Team Fat’s music would be “expressive, touching, and made for the sake of the human spirit, not repetitive, imitative, mechanical by convenience, nor needlessly enslaved by styles imposed by fashion or limited machinery.”

Sanger’s image-building, and hard work, paid off. A 1997 Wired story by Gary Andrew Poole compared Sanger to another hit songwriter: “Michael Jackson has his Neverland Ranch; The Fat Man has El Rancho Gordo, a $900-a-month rented house. Michael has his glove; Fat has his thrift-store handmade Western suits inspired by the late Nudie, Elvis’s designer.” (Correction: The suits were authentic Nudie originals.) “Michael is into being white, yet he’s not; The Fat Man is into being a Texan, yet he’s a Jewish guy from Southern California. And they have each sold more than 20 million CDs.”

Today, though, you might plausibly suspect The Fat Man has departed the hardcore gaming field. His humongous list of credits includes no recent AAA titles; today’s high-flown game music composers, with websites far more polished than his own homespun page, seldom mention as influences either Team Fat or any other early game composer. The audio legacy of gaming’s early days survives mainly in that obscure offshoot of the demo scene, chiptunes.

Yet that suspicion is wrong. Sanger, shrewd self-promoter that he is, has promoted himself into a loftier sphere of
More than a composer, The Fat Man has escalated to conference host and General Expediter of Audio Progress. For 10 years, Sanger, along with Linda Law (Mrs. Fat, in the figurative sense) and friend Teresa Avallone, has hosted the Project Bar-B-Q Annual Interactive Music Conference. Staged each October on a ranch in the hill country west of Sanger’s hometown of Austin, Texas – this year’s conference took place at the Canyon of the Eagles – Project Bar-B-Q has earned a fine reputation and, through its many workgroup reports, has shaped computer audio development. The conference website lists Bar-B-Q’s many successes.

"Teresa Avallone and I dreamed up BBQ as a way to serve the game audio community without having to be too well-behaved about it," Sanger says. "The idea was to put a bunch of very smart guys into an informal, open situation, one that was conducive to warmth and inspiration rather than politics and competition. They could then put their brains together to solve problems that were too big for any individual to solve."

Avallone handles logistics; Linda Law books speakers and formulates topics, and also handles legalities and finances. Sanger himself is MC and raconteur: "I give the welcoming talks, run the roundtable, touch base with everybody during meetings, that sort of thing. I set a mood in which people are ready to do the things they dreamed of when they were kids. I try to personify a spirit of effective idealism."

Sanger believes Project Bar-B-Q has helped establish and strengthen the community of computer audio professionals. "I think a lot of our work has increased value for consumers, and reduced the likelihood of a crash or an incompatibility experience – although we still have a long way to go in that department. It’s a humbling experience to realize that Microsoft’s new program to certify computer gear as ‘High Definition Audio’ came directly from BBQ. Nobody ever was in a more powerful position to affect the industry than they are while at the conference."

"I’m proud of having participated in a positive, helpful part of the ‘coming of age’ of this industry. When I’m sitting around BBQ watching the magic happen with all those great people ... I can’t even describe it. I sincerely don’t think anything could possibly be better."

Well, we’ll see about that. In In November of 2006, the Bar-B-Q team initiated a second conference, Project Horseshoe, an invitation-only think-tank for “an elite group of brilliant minds working to positively influence the art and science of game design.” As shown by the list of Horseshoe topics proposed ahead of the conference, “Horseshoe is aimed directly at solving game design’s toughest problems ... which would lead to better games, a healthier industry, better quality of life, and games that are more helpful to society.”

How well did Horseshoe run in its debut year? Sanger says, “We expected a 7 out of 10, and could only envision at best a 10. We got a 12.”

Attendee Dan Cook, on Lost Garden, said of Horseshoe, “Sparks were flying. And hay. Don’t forget the hay. ... It gave me faith that if you just get the brightest people of our industry off their isolated islands and give them a chance to talk, amazing ideas are inevitable. Experience shared is multiplied, not diminished.”
And Raph Koster’s Horseshoe talk, “Influences,” attracted much post-conference comment.

Horseshoe had a more freewheeling, individualistic atmosphere than Bar-B-Q, Sanger says. “Nobody’s anywhere near ready to sit down and follow a formula, let alone a guy they’ve only seen succeed as a musician in games for the past 24 years. So I found I was stepping aside more often than usual, and letting Linda, the speakers, the facilitators, the other attendees, common sense and the laws of physics convince people where to direct their energies.”

Four workgroups organized at this year’s conference are reporting on new design approaches, reduction of business risk, online game design and business practices, and ways to establish legitimacy in mainstream culture. Because Project Horseshoe is a think-tank and not an industry organization, the reports include action items to be handed off to organizations such as the International Game Developers Association.

Aside from his conferences, The Fat Man still maintains a hectic schedule. Team Fat just recorded the music for the demo of a new MMOG, as well as the latest installment of the Scene-It DVD trivia games. Sanger writes slot-machine tunes for Multimedia Games and supervises the design and installation of their sound systems. He has released three CDs of his early game music through Haight-Masonic Laboratories. Sanger also travels and lectures frequently, writes for MAKE and sits on the advisory board of the Full Sail media arts college in Winter Park, Florida. And, with other Austin gaming luminaries like Richard Garriott and Warren Spector, Sanger is helping the University of Texas Center for American History establish an archive of the history of gaming.

Meanwhile, his thinking about music keeps evolving. In the past, in his book and many articles, Sanger repeatedly called on composers to strive for innovation. Today, “I’m ready to back off from using the word ‘innovation.’ The word is overused, and the act of innovating is overrated. It’s like wanting to ‘change the world.’ Well, anybody could and does change the world. But to what end? What are we going for?

“There will be plenty of innovations in future game audio. Almost all of them will be superficial – especially if they are marketed as ‘innovations,’ or worse, ‘revolutions.’ Anything, for example, that bills itself as ‘movie-like’ raises a caution flag to me. Since when is ‘movie-like’ a good thing? In the whole history of the world, nobody ever went to a movie because it was ‘movie-like.’

“I guess the thing to strive for, with or without innovation, is to do something warm and helpful and all that, and not just trying to make a buck and/or sound like somebody else. What’s needed is brave and beautiful sound that makes peoples’ lives a little nicer.”

Allen Varney designed the paper-and-dice roleplaying game (2004 edition) and has contributed to computer games from Sony Online, Origin, Interplay and Looking Glass.
It’s intimidating, knowing you're talking with a Grammy winner and accomplished composer like Arnie Roth, so setting the tone early is key. I felt around for the perfect remark and opened with a smooth, "I really loved your Final Fantasy show," wincing at the sheer geekiness dripping from my voice. While others may know him from his work with the likes of Diana Ross, The Three Tenors or Mannheim Steamroller, it was his conducting work on the Atlanta stop of the Dear Friends: The Music of Final Fantasy tour that brought him to my attention. I might be a bit on the reluctant side of geeky, but even I was forced to admit that the ground-shaking rendition of "One Winged Angel" with full backing choir was beyond cool.

However, the classical music world and videogames seem incompatible, on a cultural level, at first glance. I asked him how a classically trained violinist and composer, not to mention the director of the Chicagoland Pops, wound up in front of an audience wearing everything from suits and ties to stitch-perfect White Mage robes.

"Jason Paul [creator of the concerts] and I knew each other from some other entertainment business [dealings] — Pavarotti, arena concerts, things like that we'd worked on together," Roth says. "I found out that Jason had done the one performance of the Dear Friends show in Los Angeles with the Los Angeles Philharmonic." After a quick conversation, they’d "worked out the components of a tour of Dear Friends, which the Atlanta Symphony dates were part of."

After a tour of several major cities, they worked out, "a similar show called More Friends: The Music of Final Fantasy, and Nobuo Uematsu [the famous composer of the Final Fantasy series] and his rock group came out for that, as well, so it's kind of been an ongoing process." Around the same time, Roth and Park put together their current tour, Play: A Video Game Symphony, which is currently ongoing.

I asked him if he'd call himself a gamer, or if his being one of the guys in this new nexus of the classical and videogame worlds was a coincidence. "You know, I certainly wouldn't call myself a gamer," he said, but added, "It's not a total coincidence." As a music director, part of his job is to put together concert series and shows, and being
open-minded is part of the key to being a successful music director. Trying new things like accompanying a movie with a symphony and, yes, videogame concerts is one of those things you have to do to succeed. “And I’ve done a lot of multimedia things,” he added, “I’ve produced a lot of film soundtracks and CDs for artists like The Irish Tenors and Peter Cetera, so I am constantly looking around. This was not a totally unnatural thing from an entertainment standpoint.”

He says introducing the music to a symphonic perspective is “challenging. The interesting thing about videogame music is, from a creative standpoint, all of the songs [the audience] is used to hearing … be it Halo or Nintendo games or Final Fantasy, they’re used to hearing the same music tracks with the same mix and the same audio compression and the same tempo over and over again.” He had to start with that music and present it to a live audience. “You start with the tempo they are used to, start with the melody they are used to, but the wonderful thing about a live symphony orchestra concert, or any live concert, is that it lives, it breathes, it has a different audio mix live than what you’re hearing when you play on the PlayStation or whatever game platform you’re using. The tempo will fluctuate, maybe infinitesimally, but it will fluctuate. On the end of a phrase, it may stretch a little bit longer. On a heroic scene or battle scene or whatever, it may get going a couple beats per minute faster through the excitement of a live performance, and this is what we live for as performers and what audiences should be living for, and I believe they are.

 “[In] arrangements where we’ve taken very old themes — for instance, even Super Mario Bros. — and orchestrated it for full symphony orchestra, [the audience is] hearing it in a new setting for the first time, in a new arrangement. … It’s very challenging, especially when we have the audience there that knows all these themes and knows all this music really well.”

In addition to audience expectations, he has to consider the composers themselves, as they may well attend the shows or even contribute as guest composers. They had “Uematsu, of course, for the Final Fantasy music, but a lot of other composers come in for Play concerts. And, you know, they wrote this stuff, and they worked for thousands of hours on these music tracks, so I feel that there’s a great responsibility on me to get very close to what they wanted to say in their music. In that way, it’s not very different from my conducting a score by Debussy or Brahms or Stravinsky.

On the other hand, I think in many of these cases, we’re trying to do many innovative, unique things that were never fully realized.” As mentioned before, some of these game soundtracks are MIDI noises from the early ‘90s, and “[to take] little bleeps and bleeps … and to turn that into a full orchestral suite is a lot of fun, very challenging, and, yet, it has to make sense musically to the audience out there, too. It can’t be just kind of a musical joke.”

As for the music itself, I asked for his assessment of it as a musical professional. What is it about this music in particular that fills concert halls? While you can talk about videogame music in terms of its relationship to common musical themes in the traditional canon, he says it’s a more emotional experience, referring to “RPG games where [the player] actually goes through an emotional encounter, a battle scene, a growing situation, where they actually —
whether it's moving to another level with the game or whatever it is — they have these certain emotional ties. It doesn't always have to be music that's associated with a battle or with victory. For instance, 'Aerith's Theme' from Final Fantasy.

Here's a character that, everywhere we go, [her] music is perhaps the most beloved music we run into. Certainly, 'One Winged Angel' is hugely popular, but I get emails from people that have used the music from 'Aerith's Theme' to get married to. It [symbolizes] very deep, life-changing experiences for them. So I think what Uematsu-san has done is touch certain basic, deep, emotional cores with people.”

More than the simple repetition over the course of gameplay, the music represents “significant marks in their lives. And they bring this music back to accompany them on their life's journey, not just the videogames. And I don't think that's so dissimilar to someone who wants to hear a famous Beethoven theme or whatever it might be. ... There's a particular emotion that people associate with the music, and they want to bring that back. It's reliving that emotion.”

I was also interested in his take on the audience at those shows, as I couldn't imagine he'd done a lot of shows with some audience members in full, accurate costumes. “Well, you know, I've talked about what a wonderful hybrid the audience for these shows is. They combine the best qualities of classical audiences, in that they're very disciplined during the performance of the pieces. You can hear a pin drop. They want to hear every note of music. [They're] very attentive, very respectful. On the other hand, they're full of wild abandon when the piece is over or when you announce what you're about to perform.” He hearkens back to his first Dear Friends show, when he got eight standing ovations and continues, “As a matter of fact, we just performed with the Royal Stockholm Philharmonic, and the orchestra was commenting on the audience and how wonderful they were. It really opened their eyes [to the fact] that there is this other audience out there that they should be cultivating.”

Shifting into a mode I'd characterize as the Music Director rather than the Conductor, he added that, “the onus goes onto these orchestras that are presenting these concerts. We're bringing this audience into the concert venue for them. These orchestras have their traditional audiences dying off at this point. They need to find ways to capture [the new] audience and keep them coming to symphony orchestra concerts. And that's a very important fact. ... It's a wonderful thing to bring in these new audience members. In many cases, they are people who have never been in.” He used the Atlanta concert as an example, where several audience members told him it was their first time at the Atlanta Symphony, and I happened to be one of them. “[They] would certainly come back, and said as much. They'd love to come back to another concert, if the programming can keep them hooked and keep them interested.”

Intrigued by the notion of videogame music saving symphonies, I asked him how they might go about keeping younger audiences interested. He mentioned opera companies as doing the best job of growing a new audience, saying that they took a crowd looking for more spectacle and put more production efforts into typical operas. Symphonies, by contrast, “have tried lots of different things, and I believe they've met with more mixed success. And I would say that Dear Friends or Play is another way to reach out and touch another audience that was previously untapped by symphony orchestras. It's really a...
question now of someone having the
vision as a music director and
programmer to follow up and grab those
people. ... A lot of this programming fits
perfectly fine on a concert hall stage,
right next to Stravinsky or Wagner or
Holst or any number of composers. ... I
think they need to investigate that.”

According to Roth, these kinds of
concerts are not just quirks of the pop
culture landscape. “I think that there will
be more of them,” he said. “How
widespread it gets, I don’t know. I think
that part of the fascination with Dear
Friends and More Friends was the
uniqueness of the concerts. They hadn’t
been done, so it was quite a unique
experience. ... I also think that the music
of Final Fantasy has a different kind of
fan than some of the other games. They
are more loyal to the music, so I think
that’s important, as well.”

Looking to the future, “we can start to
see, over the next five to 10 years,
certain key pieces of music making their
way to the concert stage. Maybe not full
concerts of videogame music, but
perhaps movie scoring parts of the
evening, where there might be suites of
music from various movies, and sitting
side by side with that may be some of
the big hits from Final Fantasy, or
whatever it may be,” though he’s not
sure whether it will be a few pieces in a
full program or an entire concert of
videogame music.

Reflecting on his comments about the
opera companies, he mentions the opera
scene from Final Fantasy VI (“which I’ve
conducted a couple of times”) and muses
about doing “a little more staging, not
just showing video clips, but maybe
some live action on the stage, along the
lines of opera. It’s a new genre and it’s
going to evolve, and it’s certainly an
important thing. Since the symphony is
the star here, it’s an important thing for
symphony orchestras to look at, to take
a very serious look at this to bring in a
new audience.”

I asked him what he told his colleagues
about what he does, picturing a “Sorry, I
have to go conduct Final Fantasy music
tonight” delivered to a bewildered
monocle-wearer. “The colleagues that I
work with that almost only work in the
classical world may have no clue what
that is, so there’s some background
information.” He adds, though, that “the
reality is, we don’t live in such a
sheltered world anymore. All the
orchestras are looking around. They’re
looking at ways to build up a new
audience. ... Conductors and music
directors and musicians, they’re all
branching out and they’re all involved
with classicization, whether it’s
symphony musicians playing in opera in
LA, recording sessions, movie
soundtracks [or] live symphony
accompanying movies, they are
musicians and they’re doing more and
more about that.” When it comes to the
Final Fantasy concerts and Play, he says
“the word has kind of gotten out there
already, certainly around North America,
and I know that Europe and Asia are
anxiously awaiting. Japan has had
concerts for a long time, but there
haven’t been very many concerts around
the rest of the world. And they’re
anxiously awaiting some of these live
concerts coming in. And there are plans
in place to have that happen.” It’s an
unlikely story, but Aeris, Cloud and
Sephiroth may save the symphony.

“If you have a problem, if no one else can
help, and if you can find him, maybe you
can hire Shannon Drake.”

we don’t live in such a SHELTERED
WORLD anymore. All the orchestras are
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NEW AUDIENCE
stretches the tension as the story unfolds. In the days before “talkies,” a piano player provided the sound effects. Fast forward a few decades, and today, some of us will go to certain theaters because we think the sound is better there.

Similarly, good sound makes a good game an even more immersive and enjoyable experience. Forget the eye candy for a minute and think of the aural cues. In a world limited to the 19-inch or smaller screen in front of you, how many times have you cranked up the sound so you could keep track of what was going on around you or figure where your enemy was from the sound cues?

Sound design in computer games has been lagging behind advances in graphics, but the *Thief* series began pushing the envelope with its excellent use of ambient sound effects. These were games I played, not only with my eyes but with my ears. Along with visual cues, sound cues were an integral part of the gameplay.

The sound element added a thrilling aspect I had not previously experienced in a computer game. Being a thief, silent movement was all important. I could run, but that would be noisy and might attract the attention of a guard patrol. I could walk gently; walk on grassy edges instead of the paved street. My heart was always in my throat, my ears always keenly attuned for any sound. I was hooked.

With surround sound, immersive sound really shines (or does it rock?). And when you have a sound system that costs more than a top-of-the-line TV, it’s literally moving, which is why when I logged into Xbox Live to check out Capcom’s *Lost Planet*, I cranked up the sound before doing anything else.

What are your favorite sound memories of games you’ve played? The theme from *Mario*? The “zeeyuuum” of TIE-fighters as they zoomed by in that first 50-center – that sweet arcade machine shaped like the cockpit of an X-wing fighter? Is the “ding” you hear when your character goes up in level sweet music to your ears?

Think about how sound and music creates a more immersive experience in movie theaters. Even the absence of sound sets a certain mood, silence movement was all important. I could run, but that would be noisy and might attract the attention of a guard patrol. I could walk gently; walk on grassy edges instead of the paved street. My heart was always in my throat, my ears always keenly attuned for any sound. I was hooked.

With surround sound, immersive sound really shines (or does it rock?). And when you have a sound system that costs more than a top-of-the-line TV, it’s literally moving, which is why when I logged into Xbox Live to check out Capcom’s *Lost Planet*, I cranked up the sound before doing anything else.

**Aural Fixation**

by Carolyn Koh

The wind howled like a banshee in the sub-zero atmosphere. The snow sucked at my legs with each step I took. My environment suit was made to absorb and store thermal energy for my own use, but I would have to make a fire soon. I lifted my weapon and cocked it, the sound of the bolt action distinct even through the wind, and fired at some mechanical wreckage. The rat-a-tat of the automatic weapon was almost comforting: a counterpoint to the howl of
the wind. The jeep’s gas tank exploded. I ran toward the source of heat, my boots thumping clumsily in the snow.

I moved toward the abandoned buildings. There could be a weapons or energy cache, or if I was lucky, an operational mech. The wind had eased. My labored breathing was loud, echoing in the confines of my face mask, my steps crunching, squelching.

In the lee of the building, the howl of the wind faded to a soft whine. I looked in: It was an old parking garage, complete with abandoned clunkers. Ah! A hive of giant alien bugs! I plucked two grenades from my belt and lobbed them in. The explosions rocked the empty building, and I charged in, my boots ringing hollowly on the concrete floor. I fired without pause, spraying bullets at the bugs still alive and pouring out from the hives. Gunfire and the bugs’ angry squeals became my very existence. But my gun wasn’t doing much to thin out their numbers.

I switched to the grenade launcher. The resounding, heart-thumping “thooomp!” was followed by a cacophonous explosion. A few shots later, the odds were back in my favor. Mopping up the last few bugs with my rifle, I swept up thermal pods and replenished my suit’s energy.

I could see another building up the hill beyond the one I was in. Stepping out into the wind, I moved toward it through the thigh-deep snow. Suddenly, sound erupted all around me - and I almost fell out of my chair - as the bug hive’s queen shot up from under the snow. Swearing, I backpedaled as fast as I could, firing rapidly, ineffectively. I switched to my grenade launcher, unloading it into the belly of the monster. The surprise and the overwhelming mélange of sound made me all thumbs. The monster bug struck again and again, connecting with solid, flesh-rending blows and shaking the ground when it missed and punched through the snow to the frozen ground. The close range explosions of the grenade launcher pounded in polyphony to the blood hammering in my head. The screen faded to red. I was dead.

My heart racing, I found myself standing and wondered when I had left my chair. Six 12-inch subwoofers move a lot of air, so I felt each explosion I had caused except the final one; it must have been then that I stood up.

I shook my head to clear my thoughts and checked to make sure nothing had shaken off the walls. I thought about turning down the volume, but decided not to. I wanted it loud.

Carolyn “Sylvene” Koh is a regular contributor at MMORPG.com and formerly the Exclusives Director at Stratics.com

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