

11
Musical score snippet 11-16, featuring a vocal line with asterisks and piano accompaniment.

17
Musical score snippet 17-21, featuring a vocal line with asterisks and piano accompaniment.

22
Musical score snippet 22-26, featuring a vocal line with asterisks and piano accompaniment.

10
Musical score snippet 10-14, featuring a vocal line and piano accompaniment.

Musical score snippet 15-19, featuring a vocal line and piano accompaniment.

Musical score snippet 20-24, featuring a vocal line and piano accompaniment.

Musical score snippet 25-29, featuring a vocal line with the word 'dolce' and piano accompaniment.

Musical score snippet 30-34, featuring a vocal line and piano accompaniment.

246
Musical score snippet 246-250, featuring piano accompaniment with the word 'dolce'.

Musical score snippet 251-255, featuring piano accompaniment.

Musical score snippet 256-260, featuring piano accompaniment.

Musical score snippet 261-265, featuring piano accompaniment.

Musical score snippet 266-270, featuring piano accompaniment.

Musical score snippet 271-275, featuring piano accompaniment.

Controversy Surrounding Virtual Music

- Who is affected
- What people are saying
- Where it's all headed

By Meg Boberg

Journalism Research

16 December 2005



Meg Boberg

Professor Madelyn Williams

Journalism Research

16 December 2005

Controversy Surrounding Virtual Music

Instead of hiring a full orchestra, Conductor Jay D. Meetze decided to use computer-based Sinfonia[®] for his opera company's production of *The Magic Flute*, in 2003.

Little did Meetze know, he was headed for a whirlwind of controversy.

Flipping on the radio or going to a concert today isn't what it used to be. In an age with endless technological possibilities, it's tempting to take the easy way out, make big bucks and ultimately, disregard a subliminal art form: music. What is lost in this process?

Superstar singers can avoid using professional musicians in tours, choosing to perform without live accompaniment. Disc jockeys are far more common, not to mention more affordable alternatives to a live band at wedding receptions or bar mitzvahs. A recent strike at Radio City Music Hall meant the world-famous Rockettes had to take the stage without the any live music for their annual "Christmas Spectacular" show last month.

The switch from live to "virtual" music isn't unique to the radio or your cousin's wedding reception. Virtual music is becoming quite a trend which has affected theatergoers, musicians, musicians unions and anyone connected to a production utilizing this new technology. Some musicians say the integrity has been taken away when they

play in orchestra pits next to a “virtual orchestra machine.” Has the art form been cheapened as theatrical producers pinch a few pennies, or are we witnessing a technological advance? After all, many balked in the 1920s when sound was introduced into “talking pictures” and live musical accompaniment in the movie theatre was a thing of the past. New art forms always move in and change the old, tired ones.

Looking at history, however, one art form rarely replaces another. If this weren't true, books would be obsolete and no one would listen to radio when motion pictures came along. Photographs came along, yet they did completely replace the work of painters. Did video kill the radio star? Technology merely offers new and improved ways of seeing or hearing entertainment.

As it turns out, music is something many are willing to fight for.

Sinfonia[®]

Picture this: you're at a theatrical performance, but there are no musical instruments in the pit. You can hear them, but you're not going to see them. If you're curious as to where the sound is coming from, there is person who plays a keyboard connected to a computer and dozens of speakers to emit sound from this unconventional contraption. The sounds coming from it sound exactly like an orchestra. Strings, brass, percussion, et al. But is this a musical instrument or a machine?

Ever since it was created, Sinfonia[®] has been at the heart of controversy. The term “virtual orchestra” strikes a chord with a number of people, especially those involved in music-related fields. Sinfonia[®] has been called many things, and whether you're talking

to a musician's union or a forward-thinking conductor, you'll get a different answer as to what exactly it is.

Sinfonia[®] combines a small keyboard and computer to produce sound. It is manufactured by RealTime Music Solutions. It utilizes "music instrument digital interface" (MIDI) technology, a process that marries sampled acoustic music with a computer. Ultimately, it mimics the sound of live musical instruments and it is meant to enhance the sound of a live orchestra and can even produce sounds which an acoustic orchestra cannot. A musical score is recorded and put into a database so a musician can play a keyboard in real time, reading a musical score and following a conductor to stay in time with singers for performances.

Some refer to Sinfonia[®] as the demise in musical integrity, calling it "canned music" or even a "karaoke machine" which puts musicians out of work when it is used in an orchestra pit alongside or even in the absence of live musicians. True, Sinfonia[®] can take the place of an entire string section or the entire orchestra as the Sinfonist simply presses a key on a keyboard. This is where those who oppose it have a problem. But those who see the possibilities offered by the use of Sinfonia[®] would say that it's a technological advance "used for the betterment of the art form."

"It's a fight worthy of an opera of its own," said J.J. Ramberg in a report on the use of virtual accompaniment on CNN. The main players in the dispute over virtual music include the musicians unions, particularly American Federation of Musicians' Local 802 and the manufacturers of Sinfonia, RealTime Music Solutions (RMS). RMS explains on their web site how they understand the viewpoint of musicians' unions, yet

they believe most of their concerns are “largely unfounded and frequently grossly overstated.”

David B. Smith, the co-creator of Sinfonia[®] and director of development for RealTime Music Solutions (RMS), said he began working on making an instrument to enhance live music in the late 1980s with his partner, Frederick Bianchi, artistic director. Before he began work on Sinfonia[®], he received classical training in violin performance and music composition. Smith said Sinfonia[®] is a musical instrument, although the media frequently depicts it otherwise. He said that Sinfonia[®] has the ability to replace a live orchestra, but that is not the goal of RMS.

“People who haven’t seen Sinfonia[®] in action are fed a lot of fear and scare tactics,” Smith said in a recent interview. “The menace is invented out of whole cloth. We espouse live music, we’re very pro-live orchestras. But if you’re faced between doing [a production] or not based on your orchestra size then it might be advantageous to use new technologies.”

Smith said he is used to hearing the complaint that Sinfonia[®] is not musical.

“I take a little bit of umbrage on the fact that they’re saying ‘this is not musical,’” Smith said in an NPR radio broadcast in August of 2003. “It’s very musical, it’s just different.”

According to its manufacturers and others who support its use, Sinfonia[®] was invented to enhance the sound of an orchestra. It can make a smaller ensemble of musicians sound bigger, but it is not intended to replace an entire orchestra, they say. This point has been highly contested, especially by musicians unions who aggressively work to ban the use of Sinfonia[®] in live performances and are not convinced that

Sinfonia[®] is beneficial. Some union members express fear that it will take jobs away from hard working musicians and threaten the future of live music as we know it. Others have said virtual music takes away the soul from real, live music.

The American Federation of Musicians, Local 802, is a musician's union located in New York City with a mission statement to preserve live music and protect the interests of musicians employed in New York's music and entertainment industries. Their platform on Sinfonia[®] is that it is not a musical instrument, it takes jobs away from musicians and it cheapens the art form; therefore, Local 802 has tried eradicating its use.

Some union members would argue with Smith that Sinfonia[®] has no place in live performances.

Local 802 union member and bassist, David Finck, has played in orchestra pits with Sinfonists before in theatrical productions on Broadway. He said he doesn't buy the argument that Sinfonia[®] enhances live music.

"If you want to enhance live music, you invent a microphone that has an unbelievable sound for a violin," Finck said. "Management doesn't use the virtual orchestra because it sounds better, they use it because they can fire people. The idea of it is that it replaces live music."

An untrained ear probably won't hear a difference by going to a production with virtual music, Finck said, but he and his fellow musicians notice a difference.

"Anything human in it has been programmed," he said. "It's not a horrible sound, but it has been intended as a replacement. It's being used as a tool, an idea that can be used politically as if they can replace live musicians and get a beautiful sound and not have to pay pensions and salaries to human beings. It's something used as a threat.

Management likes to say ‘we’re going to reduce your salaries.’ It’s a prettier way of saying they’re using taped music.”

Another Local 802 union member, saxophonist, flautist and composer, Laura Dreyer, confesses she has never seen Sinfonia[®] in action, yet she does not see how it can be considered an instrument from what she has learned.

“Yes, it differs from acoustic instruments,” Dreyer said. “It’s the sound of it: you’re never going to get the range of overtones, harmonics, feelings and soul as a person putting air into a horn and playing it. It’s very complex and it can’t be reproduced by a machine. It hasn’t been. You don’t feel that from a virtual orchestra, there’s no soul.”

Sinfonia[®] has gotten attention from Local 802 from the management, as well.

“We consider the virtual orchestra a machine,” said Lynne Bond, the senior theatre representative of Local 802 of the American Federation of Musicians. “It’s a computer, so it does not pertain to live music,” Bond added.

Bond said the organization tries to ban the use of “the virtual orchestra machine.” She said its use takes jobs away from musicians, which goes against the mission statement of the organization.

“We’re getting bans and any new contract that we get Off-Broadway and symphony contracts,” she said. “If we hear about a virtual orchestra machine we will go out and see what we can do about it. We’ve heard about it being used and we try to get them to use live music in place of the machine. We have a pretty active campaign to keep them out of our jurisdiction.”

The phrase “virtual orchestra machine” has been coined by several musicians union to describe Sinfonia[®]. Musicians from unions have said they are worried about the

possibility of job opportunities being taken away once Sinfonia[®] takes the place of acoustic instruments, and therefore, live musicians.

President of the Local 802, David Lennon, claims to protect the careers of musicians. In order to accomplish this, Lennon has made it his goal to ban the use of Sinfonia[®]. He said he is “dedicated to the preservation and promotion of live music and music education,” according to the Local 802 web site.

Lennon has compared Sinfonia[®] to a tape recorder in an interview with *The New York Times*.

“Claiming to have composed for the virtual orchestra is about as valid as claiming to have composed for a tape recorder,” he said in an article published in March of 2004.

Lennon insists Sinfonia[®] is a machine and not an instrument. In an April, 2004 report in *Allegro*, Local 802’s newsletter, Lennon describes his position as succinctly as possible:

“The virtual orchestra machine improves nothing. It is a machine. It is not a musical instrument. It is not played by a musician. It is a machine designed to eliminate live music and cheapen the art form. Producers hope the ticket-paying audience will be fooled, in their belief that patrons won’t notice what’s missing from live theatre. The live part. Shame on them for trying. Shame on us if we let them succeed.”

Jay D. Meetze of the Opera Company of Brooklyn (OCB) says Lennon has an old school view and refuses to get along with new technology. Meetze also said Lennon passes his fear along to union members.

“People can’t just say ‘no,’ you can’t do it,” Meetze said in a recent interview. “You can’t say ‘stop the research, we went too far this time.’”

Meetze is the conductor of the OCB, which was founded in 2000. Their mission statement, according to their web site, states OCB “makes opera accessible and affordable throughout New York City to all generations by offering a diverse selection of opera favorites and overlooked rarities. OCB draws talented singers and musicians from the rich resources of the New York Metro area, and allows them to share their enthusiasm and love for the art form with audiences in an intimate, dynamic setting.”

Meetze said Lennon is a complete liar at the helm of leading the members of his organization blindly.

“Sinfonia[®] is an art in and of itself,” Meetze said. “People have spent their lives at this, at trying to make this, their dream. Their dream is to compose for this instrument. It’s their dreams, their lives. The musicians are using it. It sounds more and more like a live orchestra. They commit their lives to making the synthesizer better. We’ll all benefit from these 40 and 50 years, and then we put a ban on it?”

Meetze first used Sinfonia[®] for a one-night only production of *The Magic Flute*, in 2003, in place of a live orchestra. He said the reason for using it was due to a lack of funds for his small opera company and when he was faced with the decision of having piano accompaniment or virtual accompaniment, he chose the latter.

“‘We’re a small company,’” Meetze said in an interview with *The New York Times* for an article printed in August of 2003. “‘Our hearts are in the right place...I would prefer live music, but I wanted something more than a piano could produce.’”

The use of virtual accompaniment outraged the local musicians' unions, which led to the resignation of opera singers Marilyn Horne and Deborah Voigt, from the production. Meetze said Horne and Voigt left the production solely for political reasons.

“Everybody is afraid of the musicians union, they are goliaths,” Meetze said. “They’re afraid of being blackballed.”

And the show went on, as planned. A review of the show appeared in *The New York Times*, calling the sound of Sinfonia[®] “better than expected yet still rather odd, and substantially inferior to a live orchestra.” Still, the review praised the production and said the virtual accompaniment was rather unobtrusive, allowing the audience to focus on the acting and singing of the production.

““Will the virtual orchestra replace real players as part of this distant future? For now, anyway, a true symphonic simulacrum is safely in the realm of fantasy,”” the article concludes.

“Technology enhances the spectrum of possibilities in music,” Meetze said, in a recent interview. “Without the synthesizers, the palette of colors is smaller. Rather than just painting with red and green, you can have all these different colors. Musicians want to say ‘no one can use this color.’ If I want to use this color, I can.”

The use of Sinfonia[®] has outraged and continues to anger the officials of musicians unions. The RMS web site says President David Lennon has made a habit of spouting off uninformed statements to members of Local 802 regarding supposedly “virtual” orchestras. While RMS admits performances without live musicians are possible by employing Sinfonia[®], Smith said he does not recommend taking that route.

“Sinfonia[®] is a musical instrument that has been designed to accompany other instruments and vocalists in performance situations when budget or space or time doesn’t allow traditional full orchestras,” Smith said. “There are a lot of aesthetic choices and ways to perform music. When you look at the whole scope, it’s fairly trivial way to change music. It is possible to do performances completely without acoustic musicians, but we don’t recommend it.”

Jeff Lazarus, the CEO of RMS challenges Lennon to explain what he means by referring to Sinfonia[®] as “canned music.” Lazarus said he is angered by Lennon’s accusation that Sinfonia[®] is replaces live musicians.

“It’s not a tape recorder,” Lazarus said. “He’s sucked into that mindset of seeing it as a tape recorder and not an instrument. It’s not static and stays the same way, it has to be performed by a musician. You are sitting at a keyboard and reading a musical score. It’s not canned. I would invite him to come take a look at it.”

Lazarus said Local 802 has a dubious strategy and he doubts their sincerity in preserve the sanctity of live music. He said Sinfonia[®] is a complex instrument which musicians unions often criticize unnecessarily.

“Some members of Local 802 make us out to be the medieval witch that needs to be burned at the stake,” he said. “They don’t make an attempt to try to learn about it even though they stake their whole platform to demonize us and turn us into the devil. David Lennon is afraid.”

The web site for RMS explains further how the unions are adding to the problem and creating unnecessary disputes.

“We thought the Union would surely recognize that Sinfonia[®]'s innovations allow more productions to run more successfully, with greater musical quality, providing more jobs to musicians and other theatre professionals,” the web site explains.

The RMS web site describes why they believe Sinfonia[®] is a musical instrument. According to The Harvard Dictionary of Music, a musical instrument can be defined as a “generic name for all mechanisms producing musical sounds and hence for all musical media with the exception of the human voice.” Based on this criteria alone, Sinfonia[®] should be included in this category since it generates music and musical sounds.

Jack Gale, of the Local 802 executive board, says Sinfonia[®] cannot be considered anything other than a machine because all the music is sampled. His main concern is the live aspect of performance is lost when virtual accompaniment is used in place of live musicians. That's the threat: live theatre and live performance are thrown to the wayside, he said. He refers to Sinfonists as “operators” rather than musicians.

“Virtually any sound, or device which can produce a sound can be used as a ‘musical element’ in this exaggerated sense: a door slam; a dog bark, a belch, a telephone ring or a steam whistle are examples of such sound sources,” Gale wrote in a piece entitled “Virtual Orchestra Machine Interactive Technology Vs. Musical Instruments”

Gale said even though the untrained ear might not be able to pick up the differences between a virtual orchestra and a live one, the integrity of live music has been damaged by the introduction of Sinfonia[®].

“A Violin player can play whatever music is placed in front of him or her. The Violinist can play every single note on the sheet, or leave out some, or add a few, and can choose the exact volume, tempo, attack, release, inflection and vibrato for each note in

real time. Violinists place their personal stamp on every note played. Players of true musical instruments can control all of these parameters and can instantly adjust to the orchestral balance by playing louder or softer in real time either based on the player's instincts or at the direction of a conductor," Gale wrote. "By contrast, the operator of a Virtual Orchestra machine can only adjust the volume or tempo of the prerecorded sampled instrument patches and cannot adjust even these parameters individually note by note for each of the voices controlled by the sequenced program."

In a recent interview, Gale went into detail about why Local 802 has a problem with the use of the "virtual orchestra machine."

"One person sits at a keyboard and tries to imitate live music. We have a problem with that," Gale said. "The fear we have is they don't care about the humanity of music, it replaces human beings playing in an orchestra. It cheapens and makes it less human, the whole concept of live theatre and live performance. We have to fight it because it's the end of music as an art."

Stephen Alper, a pianist and member of Local 802, said he considers Sinfonia[®] a musical instrument, but does not put it in the same category as other acoustic instruments.

"In the same way as any synthesizer, the work must still be performed, the parts played, sequencing, sampling, patches created," Alper said. "But in the same way as any synth it is *not* the acoustic instruments it supplants. And the quality of the virtual orchestra is very dependent on who has done the programming. In addition, playback can be very dry and/or robotic."

Opera singer, Phoebe Fennell, said she can understand the position of union members and proponents of Sinfonia[®].

“Well, of course [Sinfonia[®] is] a machine. Most musical instruments are. Have you seen a tuba?” she said, chuckling. “My biggest peeve is that people see the phrase or hear the phrase ‘virtual orchestra’ and they leap to conclusions.”

Fennell said she has faced criticism and ridicule from some of her colleagues and the public in general for supporting the use of Sinfonia[®] in live performances. Although she welcomes discussions about the use of Sinfonia[®], she encourages people to know the facts before they make judgments.

When she played the role of the Queen of the Night in the Opera Company of Brooklyn’s production of *The Magic Flute*, Fennell said some people involved in the production received death threats because musicians were angry or afraid over the prospect of losing their jobs.

“I mean, it was really silly,” Fennell said. “Folks were saying ‘you’re taking food out of our children’s mouths.’ The logic was wrong. We don’t hire people to play Sinfonia[®] over people in the orchestra. It’s either Sinfonia[®] or a piano. How many people does it take to play a piano? One. And Sinfonia[®]? One.”

Fennell is a member of several unions, including American Guild of Musical Artists, Actor Equity, Screen Actors Guild, AFTRA. She says she is “a strong fan of unions,” but she is not a fan of union officials who mislead their members.

“Talk about people who ‘take food of out children’s mouths,’” she said. “It’s really sad that somebody who is unwilling to behave professionally is in such a position of power over other’s lives and careers. I sincerely hope that the folks who are members

of that union are able to see that *he* is the problem, *not* the Sinfonia[®] and *not* the management.”

Other musician’s unions have echoed Lennon’s sentiment.

“Our position is both short and straightforward: AGMA believes that the live performance of artistic works, including live music, is central to the full enjoyment of America's cultural heritage,” said Alan S. Gordon, National Executive Director of the American Guild of Musical Artists. “We are, thus, unalterably opposed to the use of recorded or computer-generated music to replace live musicians.”

The idea of Sinfonia[®] being included in the orchestra pit has made musicians worried about their own jobs.

“It’s really an insult if you’re losing musicians to a string section played on a synthesizer,” said Michelle Wright, a freelance violinist, to *The Independent*. “Musicians must be protected.”

Smith says contrary to popular belief, Sinfonia[®] actually can create job opportunities rather than take them away. Smith’s colleague, Jeff Lazarus, said when managements use Sinfonia[®] the same number of musicians are involved that they would’ve used anyway. Lazarus also said Sinfonia[®] can do things logistically that couldn’t have been done without its use. RealTime Music Solutions contests the musician’s unions who accuse them of taking jobs away from musicians. They say Sinfonia[®] has never swooped in to replace live musicians; rather, it has been incorporated to enhance smaller ensembles.

In May of 2004, theatrical producer Cameron Mackintosh had a dilemma. He had to move his production of *Les Misérables* to another venue because The Palace Theatre

was in need of renovation. When the production was moved to Queens Theatre, the smaller orchestra pit meant a smaller sound. In order to make up for the loss of 11 members of the once 22-member orchestra, Mackintosh decided to use Sinfonia[®] to enhance the smaller group because he did not want to sacrifice the musical integrity of the score.

Union officials said Sinfonia[®] took away 11 jobs.

“Don’t ever let them fool you into thinking that they are enhancing live music,” Lennon said to *Pittsburgh Post-Gazette* in January of 2005. “Mr. Lazarus would love to desensitize his audiences into oblivion so he can grease his wallet and his pocket. We’re here to tell him that wherever he is, that’s where we’ll be.”

Lennon said the use of Sinfonia[®] is merely a cost-saving measure that takes musicians out of the orchestra pits.

Lazarus responds to Lennon’s argument by saying he has no evidence of Sinfonia[®] taking jobs away.

“People spin it to say Sinfonia[®] causes the shrinking of the orchestra pit,” Lazarus said. “Every show we’ve done has the same number of musicians as would have been used if Sinfonia[®] was not present.”

Smith said if Sinfonia[®] had not been used, the show would have closed as a result.

“The net loss would’ve been 22 jobs instead of 11. The entire organization supports 300 people, so their jobs were kept,” Smith said. “Sinfonia[®] allowed the show to stay open. It caused a net gain of 11 jobs,” he said.

Still, one of the main points of contention is the question of live musicians being employed versus virtual accompaniment. Some musicians say virtual accompaniment

was borne from the theatrical producers' desire to cut production costs and add money to their own wallets.

“It makes musicians very uncomfortable because it’s the idea of being told by management that you can be replaced,” said union member, David Finck. “Eventually they will say to actors ‘we’re going to replace you with holograms.’ You might as well go see a movie. You’re not looking or listening to anything real. You get to see and hear human beings in the arts. That is what is forgotten about live arts.”

As far as live performances go, nobody does it better than the Big Apple. Broadway productions, operas and concerts draw people passionate for the arts. But has live music been thriving in Manhattan or being tossed to the wayside?

In March of 2003, Broadway went dark for four days straight. Why? The number of musicians in the orchestra pit had dwindled to a point where musicians said they were being put out of work. Producers wanted to restrict the number of musicians in the orchestra pit to 14 people while musicians unions wanted the number to be between 24 to 26 people.

Bill Dennison, the recording vice president of Local 802, described the organization’s view on the strike and minimums in an article entitled, “Sound of Broadway Music is the Point of Contention” appearing in *USA Today*:

“When a musical's creative team puts together a show like *Oklahoma!* and wants 24 or 25 musicians, they won't be able to have them. The producers will want a few musicians and a machine.”

Once again, the word “machine” was used in reference to Sinfonia[®].

Theatrical producers and musicians unions could not come to an agreement about orchestra minimums and many were outraged, including disappointed audience members who had to refund their tickets.

Actors walked out of their productions to join the protest. Belle Callaway, who played Roxie Hart in a production of *Chicago* on Broadway, told *The Boston Globe* why she was protesting.

“We want to maintain the integrity of performance on Broadway. We want it to be worth the hundreds of dollars the people spend to come here - the hotels, the food, everything.”

Not all actors were eager to support musicians during the strike. Phoebe Fennell said she is frustrated because musicians have much better, stronger unions that protect their jobs.

“As a leading lady I’m singing 2 hours and 15 minutes,” she said. “Meanwhile, a trumpet player is sitting on a chair with music. I have words as well as music and act as well as make music. Do I have to dance? You bet I do. Here I am working so hard, and although he’s playing his 20 minutes beautifully, he’s making 7 times as much as I do.”

Fennell said she has no problem with unions being aggressive advocates for their missions, but she is annoyed that actors are not being paid as well as musicians and no minimums policy is enforced for actors.

As the strike continued, Mayor Michael R. Bloomberg became concerned about the major economic losses the strike caused the city. Up to \$7 million were being lost each day Broadway was dark. In order to end the strike, Mayor Bloomberg employed

Frank J. Macchiarola, the president of Saint Francis College in Brooklyn, to mediate the dispute.

Eventually a compromise was reached. The new minimum requirement was set at 18 musicians.

Technology continues to change entertainment, especially live arts. Whether this change is a step in the right direction or the downfall of live music is the subject of ongoing controversy.

The president of the Local 802 organization in New York City, David Lennon, has said in an article entitled “President's Report: Perpetrator Turns Into ‘Victim’” in *Allegro*, the organization’s newsletter, that he will do whatever it takes to uphold live music.

““We must continue to send a loud and clear message, to New Yorkers and visitors alike, that New York has always been and will continue to be the live music capital of the world...The future of live music in this city is ultimately in the hands of future generations. That is why we must explore initiatives that will engage and educate the next generations of professional musicians, from our grade schools up to the conservatory level.””

The use of virtual orchestras has outraged some and earned praise from others. Jay Meetze, artistic director and principal conductor of the Opera Company of Brooklyn has used Sinfonia[®] in his orchestras for live performances of *The Magic Flute* and *The Marriage of Figaro* among other productions. He said technology is never detrimental, even in the context of live entertainment.

Jeff Lazarus of Realtime Music Solutions said technology has certainly changed the face of entertainment, although he said the issue is much bigger than Sinfonia[®]. Lazarus said he hates the phrase “virtual orchestra,” especially because it has earned such a negative connotation.

“‘Virtual orchestra,’ is kind of a catchall phrase, I don’t think it’s what we do,” he said. “It’s anything the union says to describe something they don’t like. [Sinfonia[®]] is a next-generation synthesizer with a lot of additional functionality.”

Jack Gale, an executive board member of Local 802, has his own opinions about what he refers to as the “virtual orchestra machine.” Gale said he only considers something a musical instrument if every parameter can be controlled by a musician, such as vibrato, dynamics and tempo.

“Our mantra is live human beings playing music,” he said. “All virtual orchestras are not used to play new sounds, they replicate old sounds. They get someone to go in a studio, sample it, and then they push a button. It’s a machine from that point on.”

David B. Smith, co-creator of Sinfonia[®], says the last acoustic instrument to be invented was the saxophone in 1840. Since then other modifications have been made to musical instruments such as the inclusion of electric instruments.

“Acoustic instruments reached their maturity over 100 years ago,” he said. “We’re only at the beginning – the adolescence - of the implications of this technology. You cannot go to a place in modern society where the computer has no impact on how things are being done. To protect the orchestra from this development seems a bit naïve to me.”

Smith explained how musical instruments evolve after years, even centuries, of development tactics. He said Sinfonia[®] is a unique, innovative instrument because of its versatility. Sinfonia[®] can play dozens of instrumental lines simultaneously.

“Sinfonists do much more than say, a piano player, because they’re responsible for more instruments. When we move from the violin to the piano, they are responsible for more note events,” he said.

The difference between Sinfonia[®] and other instruments, however, is a computer. A musical score must be entered into a database before the Sinfonia[®] can be played. Smith emphasized, however, that a performer does indeed play Sinfonia[®], it is not a CD or a tape recorder.

“It is rendered by the performer,” he said. “The person who plays Sinfonia[®] is responsible for the aspects of the performance that are flexible in real time. A human interprets tempo, articulation, temporal navigation through a piece, and dynamics.”

Local 802 has stated that using Sinfonia[®] is a way of taking the easy way out by cutting costs.

“The challenge facing organized labor in the entertainment business will be to anticipate the changes that will occur because of that expanding technology and adapt to it, rather than try to artificially maintain the status quo,” said Alan S. Gordon. “Likewise, I think the use of computer generated music will replace live musicians to some extent but, rather than fight against it, I think that the musicians union, for example, should try to explore existing and new opportunities for live performance rather than merely fighting against the unstoppable tide of technology.”

For now, union will try to ban virtual music and producers will keep using it, if needed.

The Future of Virtual Music

The music industry is taking a turn toward virtual music. Like it or not, virtual music is here to stay, just like rock ‘n roll in the 1950s.

The Vienna Symphonic Library manufactures virtual music for the professional market in the place of orchestral music.

“Instead of getting upset about it, find a way to creatively adapt to it,” said Mike Babbitt, a creative director of Ilio, a branch of Vienna Symphonic Library, located in Southern California. “The technology continues to advance and no one can really stop that. Find a way to work with it as a working musician to ensure that you are making a living.”

Babbitt agrees nothing sounds better than a live orchestra, but sometimes the financial aspect of hiring a full orchestra is too much. Babbitt also said just because music is virtual, that does not mean it is automatically terrible quality compared to any ordinary live orchestra.

“Any kind of music can be cold and sterile if it’s not used properly,” Babbitt said. “Some people don’t understand the difference from something creating from the soul or just dinking around, creating for the sake of it. You can tell whose put their passion into a piece of music whether it’s electronic or not, you can hear it. In the end, it’s all created by a person - the computer isn’t doing anything for you.”

Pretty much everyone agrees nothing sounds better than a good live orchestra. The main dispute over virtual music is whether it is being used properly and who is being affected along the way.

Preserving the art of music is the main goal of musicians' unions such as Local 802. Executive board member, Jack Gale, said he isn't sure what the future holds for live music, but he will do what he can in the meantime to keep virtual accompaniment out of live performances.

"We may be a vanishing breed or music as we know it could die," Gale said. "We believe professional musicians are the most important element and they wouldn't exist if there wasn't a professional music business. We don't have near the kind of money the producers have. They're intent on getting rid of us."

The Realtime Music Solutions web site clearly asserts that Sinfonia[®] is not a threat to musicians' careers.

"A certain level of concern is understandable, since a Sinfonist can play many musical lines at once. But the level of hysteria and belligerence the Union has demonstrated is disproportionate."

Opera singer Phoebe Fennell said people will calm down when they familiarize themselves with the fact about Sinfonia[®] rather than meaningless hype.

"Sinfonia[®] will slowly come into use and be used as it was intended: as part of an ensemble. It's not meant to be used by itself," she said. "The intention was to have Sinfonia[®] to fill out a small ensemble."

Fennell said Sinfonia[®] is a worthwhile option, especially for traveling performing groups when having a full orchestra is neither feasible nor practical.

As the debate continues about the validity of Sinfonia[®], some people are already planning ahead.

Conductor Jay Meetze said he is passionate about keeping the arts alive, despite the skepticism of people such as David Lennon of Local 802. Meetze said his first goal is to help the careers of young singers. In addition, Meetze said he hopes to make opera productions affordable and accessible, which is stated in the mission of his company.

“I continue to be an American and make choices regarding any instruments I want to use,” he said. “If Sinfonia[®] happens to be one, it happens to be one. If you’re given a new option, I say use it. I’m not into eating vanilla ice cream every time I get ice cream.”

Meetze added that people should be more willing to accept new technology and not write it off immediately.

“The Sinfonia[®] will get better and better. To say ‘no stop, it’s wrong,’ is not going to stop this. People will always be creative, learning individuals if you give them an opportunity.”

Jeff Lazarus of Realtime Music Solutions said he doesn’t mind if people criticize the use of Sinfonia[®], although it will not stop the advancement of technology.

“People start to understand what is possible,” he said. “We’re dealing with the reality of a different type of orchestra than existed in the days of *Oklahoma!* and *Showboat*. We have been given the opportunity for a better sound.”

Lazarus said he is not discouraged by the continuing frenzy caused by musician’s union, only more determined.

“[Unions] can use certain language and contracts to limit technology but that strategy has never worked. Certainly not in the long term, you might get a short term ban when people don’t understand the issues,” he said.

David Smith agreed by saying writing off technology because of disagreement is silly.

“Musicians take advantage of the most sophisticated technology available to them,” he said.

Not everyone sees Sinfonia[®] as useful in the spectrum of musical theatre, particularly not union officials such as David Lennon. In his “Perpetrator” publication, he described how he feels about technology juxtaposed with music.

“‘The cliché is that in the industrial world ‘technology always wins.’ But art is not industry! And New York is not Peoria! ‘Live’ is the operative word in ‘Live Musical Theatre.’ And even in the world of industry and machines, technology only wins when it improves the process or the quality of the product. The virtual orchestra machine improves nothing.’”

Meetze said he believe Sinfonia[®] has a bright future and he would argue with Lennon on his biased, closed-minded views.

“I’m optimistic about society moving forward, if you know, everything goes fine,” he said. “People will continue learning and growing. Sinfonia[®] will get better and better and people will learn to get along with another.”

Works Cited

Alper, Stephen M. Personal Interview. 23 Nov. 2005

Associated Musicians of Greater New York: Local 802 AFM. (n.d.). Retrieved November 10, 2005, from <http://www.local802afm.org/>

Babbitt, Mike. Personal Interview. 22 Nov. 2005

Chartrand, S. (2004, May 31). Inventors of a virtual music machine try to overcome objections by giving it musicality. *The New York Times*, pp. Section C; Column 1; Business/Financial Desk; Patents; Pg. 4. Retrieved November 4, 2005, from Lexis-Nexis database.

The Drama in the Opera House (2005, August 8). CNN. Retrieved December 11, 2005, from Opera Company of Brooklyn Web site: http://www.operabrooklyn.com/presskit/digital_files.htm

Bond, Lynne. Personal Interview. 17 Nov. 2005

Brown, A. (2004, June 16). Science & Technology: Music By Numbers; A Clever Piece of Technology - Sinfonia... *The Independent*, pp. Pg. 11. Retrieved November 30, 2005, from Lexis-Nexis database.

Dreyer, Laura. Personal Interview. 22 Nov. 2005

Eichler, J. (2003, August 11). A 'Magic Flute' on the Stage With Invisible Instruments in the Orchestra [Review of the opera *The Magic Flute*]. *The New York Times*, Section E; Column 1; The Arts/Cultural Desk; Pg. 3. Retrieved November 24, 2005, from Lexis-Nexis database.

Fennell, Phoebe. Personal Interview. 14 Nov. 2005

Finck, David. Personal Interview. 22 Nov. 2005

Gale, Jack. Personal Interview. 9 Dec. 2005

Gale, J. (200?, ____). *Virtual Orchestra Machine Interactive Technology Vs. Musical Instruments*. Paper presented at Local 802's Arbitration presented by David Lennon, Los Angeles.

Gordon, Alan S. Personal Interview. 4 Nov. 2005

Lazarus, Jeff. Personal Interview. 4 Nov. 2005

Lennon, D. (2004, April). *Allegro, CIII* (2). Retrieved November 8, 2005, from
Local 802 Web site: [http://www.local802afm.org/
publication_entry.cfm?xEntry=17723625](http://www.local802afm.org/publication_entry.cfm?xEntry=17723625)

*Local One Says All Issues Decided in Musicians' Union/Radio City Music Hall
Dispute Except "I'm Sorry, I Lied"*. (2005, November 4). Retrieved December
7, 2005, from Local One Web site: [http://www.iatselocalone.org/news/
press41.html](http://www.iatselocalone.org/news/press41.html)

Meetze, Jay D. Personal Interview. 4 Nov. 2005, 11 Nov. 2005, 8 Dec. 2005

Pitz, M. (2005, January 30). It's Not Just the Sound of Music, 42 Musicians Protest.
Pittsburgh Post-Gazette, pp. A-11. Retrieved November 1, 2005, from Lexis-Nexis
database.

Pogrebin, R. (2003, August 4). Board Members Quit Over Opera Troupe's Virtual
Orchestra. *The New York Times*, pp. Section E; Column 1; The Arts/Cultural
Desk; Pg. 1. Retrieved November 4, 2005, from Lexis-Nexis database.

RealTime Music Solutions. (n.d.). Retrieved November 11, 2005, from
<http://www.rms.biz/>

Smith, David B. Personal Interview. 4 Nov. 2005

Sutherland, J. (Producer), & Fox, C. (Director). (2003, August 8).

Computer-Operated Opera Draws Protest Los Angeles: National Public
Radio. Reported by Mike Pesca.

Synthesizer Maker Fights Musicians' Union. (2004, March 12). *The New York Times*,
pp. Section B; Column 1; Metropolitan Desk; Pg. 4. Retrieved November 4,
2005, from Lexis-Nexis database.

Virtual Musicians, Real Fight. (2003, August 25). Retrieved November 15, 2005,
from Musuem of Music Web site: [http://museumofmusic.org/vibrationsback/
030825/z2.html](http://museumofmusic.org/vibrationsback/030825/z2.html)
