Beyond COVID-19 Immersed in the Future

June 2, 2022

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ALAN BROWN: Good morning ladies and gentlemen. We are finally ready here. My apologies for the late start. I guess Susan Nelson, who is a wonderful friend and colleague, was to have spoken in this room about capitalization, an equally important topic. I just saw the cancellation notice for her session. I'm actually worried about her and hope she's okay. But — so we've moved my session in here to accommodate any extra people who come in.

So welcome, good morning. I'm Alan Brown, principal of Wolf Brown. I last spoke at a league conference in 2000 — in Nashville, I think that was 2019, on format innovations. And I'm pleased today to offer kind of a follow up session to that session. Because we're starting late we're probably going to go a little later. I have an enormous amount of material to share with you this morning, and I'm going to move so fast it may be frustrating to some of you.

So please know that a recording of this session in one form or another is going to be available to you. I ask you just to sort of sit back, let it wash over you, and we'll have hopefully at the end 10 or 15 minutes for kind of comments and questions. But just to set it up, how many of you have been to an immersive Van Gogh exhibition? Can I see a hand count? Okay, great. How many of you have ever been to a theme park? Yeah. An Imax theater? Yeah, all right, you all know what immersive experiences are.

And the American public does too. I went to the immersive Van Gogh presentation in Detroit, I don't know now, two years ago? A year and a half ago. And I'd always been a fan of installation art, and I've been to Burning Man three times, and you know — and I'm a student of public par-ticipation in the arts, and shifting public tastes in art. And it just struck me walking out of the immersive Van Gogh exhibition that something has changed in our culture. And in terms of public acceptance of immersive experiences as a form of entertainment.

And so I said I've got to understand what's happening. It's my job to understand. So I just — by dumb luck, I found a wonderful, wonderful intern named Marco Bruscoli [?], who is a student at the Accademia de Teatro alla Scala in Milan, Italy. And Marco worked with me for six months just doing nothing but researching the history and current practice in immersive entertainment experiences. And wow, what an awakening it has been.

So I'm here today just to share with you the research, and hopefully provoke, stimulate, excite you all a little bit about this new vista, this new landscape of experiences. And to think about how do we make sense of this as an orchestra field. Because what's happening in our culture right now, in both commercial and nonprofit sectors, is extraordinary, and it's moving quickly. And I would like to think that we as a field have something to add to it.

So I've sent someone up to my room for the power cord, so if someone comes here and starts playing with my computer while I'm talking, don't be alarmed. Okay, I just want to say I am not here to advocate for any particular technology or type of experience. There's a — you know, with COVID we all ran towards digital, right? And we started live streaming concerts and recording concerts and producing recordings and — digital. And that's all important, I under-stand that completely.

But it doesn't really make sense to just look at digital programming in a silo, when there is this world of immersive programming, and virtual programming. It makes much more sense to look at digital/immersive/virtual kind of in the totality, and what I call beyond conventional, right? Everything beyond conventional concerts in a concert hall. And look at the various myriad pro-gramming opportunities. So I'm not here to advocate for any particular technology or format.

So our research was organized in two phases. I wanted to understand the history of immersive experiences, like where has this come from. Because some of you may think, oh, this is a flash in the pan, you know? This will be gone in a couple of years, it's just sort of what's new and ex-citing. And I wanted to understand, is that what this is, or is it something else. And actually, what are the sociological, psychological, and cognitive drivers of public interest in immersive programming.

You know, like what's happening here? Why are people attracted to these experiences? Which is really complicated, and beyond my scope. But that's what we have to all try to understand. So we looked at the history, and then we just set out to learn as much as we possibly could about what is happening worldwide in this space. And as we got into this, we'd learn about new pro-jects almost every day. And we continue to learn about new projects almost every day.

Driving in yesterday, I saw the sign on the side of a building for the new Frida immersive expe-rience here in LA. The ABBA program opened in London I think last week, and it got reviews, and it's just — it's really kind of amazing. So that's the organization of my session today. You know, what is an immersive experience? Good question. I don't think there necessarily is an accepted definition. But it all comes down to this sort of perceptive sensation of being sur-rounded by a different reality that is in a parallel space in the here and now, right?

It's not just watching a recording, that's not really immersive. But you get the impression of be-ing surrounded by an artificial environment. And it's an experience, okay? Multi-sensorial ex-perience. And the cause and effect is the sensorial involvement being engaged visually, orally, smelling, you know, all the senses, and that that leads to this perceptive sensation of being in a different environment.

The history is actually amazing if you think of it. The earliest immersive experience one might argue, in 19,000 BC, the drawings on the Lascaux caves in France, which depicted hunting scenes, and were used to teach young people to hunt. Fast forward a few centuries, the frescoes at Pompeii were designed to surround people with images and make them feel like they were in the room with these images. The Pantheon is an immersive example, early architecture, of be-ing surrounded. The stained glass windows in the great cathedrals were intended to immerse you in this feeling of being dominated by God, and were very immersive if you think about it, and still are.

Interesting, 1420, the first drawing of a disappearing horizon. The use of linear perspective in drawing, created the illusion of being in an infinite space. And then 1475, obviously the Sistine Chapel is this masterwork of immersion, using the technology of the day. Fast forward to the electric age, which of course allowed all sorts of new technologies to happen. Alessandro Volta, the Italian physicist, is credited with inventing the electric battery in 1800.

Do any of you know about the Pepper's Ghost illusion, early stage illusions, where they would reflect an image through a mirror and project it on to a sheer piece of fabric, and it would give the illusion of a ghost? This is one of the early theatrical inventions that would suggest an alter-nate reality. And that was 1862, 1876. Just the Beirut [?] Theater itself was immersive in a new way, in that the audience

sort of surrounded the stage, whereas old sort of boxy theaters the sep-arated the audience from the stage.

You know, but if you think about it, you've all seen pictures of the early concert venues, where some of the audience members sat on stage. You know, particularly the royal — members of the royal family, you know? And I thought, wow, that must have been kind of immersive, because some of the audience members were actually on the stage with the performers. In a very crude sense, they felt part of the action, or the concert.

The panorama technology that came around in the late 1800's, you seen maybe some of those. The sensorama invented in 1957, which started to play on all the senses. And then finally, the father of virtual reality, Ivan Sutherland, who invented the first goggles, head mounted display units in 1968. So the purpose of this is just to say actual immersive experiences have been with us for centuries. And new technologies are adopted and adapted to create more and more im-mersive sensations.

So to think that what we have today is sort of new and a flash in the pan, no, actually it's been evolving for centuries. So where are we now? In the digital age, the change of paradigm of course around 2002. In terms of physical experiences, we've seen the peak of live exhibitions, festival experiences, large scale, particularly outdoor festivals, electronic dance music festivals have grown so large. And that all stopped with COVID in terms of live events.

But if you look at the digital development, we had the rise of social media platforms around 2006, which really changed — because the dominant promotion distribution channels. Aug-mented — rise of augmented reality gaming in the teens. And then with COVID, what actually happened is maximum growth, right? So what we had during COVID is commercial producers, gaming companies and live

entertainment companies investing massively in new technologies, new experiences, new venues, while the nonprofit art sector closed down.

And what we're beginning to see is the chickens coming home to roost of those investments, which I'm going to share with you today. So where are we headed? Obviously towards the metaverse. Mr. Zuckerberg has bet his company on that. I'm not going to spend much time talk-ing about that. It's kind of an obtuse concept right now for most of us. But the macro trends are — you know, the big trend is transitioning from Web 2.0 to Web 3.0, right?

Web 1.0 was just, remember, those of you who are old enough, the first email. It was just dis-tributing information. Web 2.0, which very much involved connecting people through social media, e-commerce, and so forth, that really rose around 2004. Web 3.0, we're not quite there yet, which is convergence of the physical and digital worlds, and the metaverse, and the best estimates are 2026 for that. So we're kind of in the middle of 2.0 to 3.0, we're on a timeline to-wards the metaverse, and it's inevitable we're going to get there at some point.

And the only question is, what are we going to make of it in terms of the technology. The tech-nologies of the metaverse are already here, it's just a matter of sort of stitching them together into coherent experiences. So what's even more important here in terms of the drivers are the progression from mental immersion to sensorial immersion. And this I can't emphasize enough. Mental immersion of being transported, so sitting around a campfire, telling stories. You're im-agining the story. Reading a book, you're imagining a story. Sitting in concert halls, looking at art on the walls. You know, your mind is activated, and you're going on a journey with the artist or — but you're — the creative imagination is happening in your head.

And the continuum of progression here is towards sensorial immersion, which is more and more senses being stimulated visually, aurally, and otherwise, which gives you a sense of being pre-sent in the art as an active participant, right? So obviously theme parks, you are present, right? You are immersed. Many of you have been experimenting with visualizations in your concert halls, and potentially others. We're taking steps towards immersion, baby steps, but this is the cognitive transition that's happening.

And I kind of think art is like sex and drugs, the more you get it, the more you want. It's addic-tive, and that's what they want. They want you to consume more. Young people going out to nightlife now, the lighting technology that young people get when they go out and hear DJs is overwhelming. The lighting technology, if any of you have been to popular music concerts, I highly recommend it. Go to an arena show, and see Dua Lipa or Ricky Martin. The lighting is unbelievable.

And this is now a standard, an expectation of a generation, of people who grew up gaming with the stimulation. So I don't have much time to really go into this, about this transition from men-tal immersion to sensorial immersion. You can see here, you know, the transitions. The expecta-tion of interactivity, I'm not going to be able to get into now, is part of this. The idea of sharing, the idea of collective experiences, and immediacy. You get the idea.

So just to recap, the drivers of adoption are the transition in Web 2.0 to Web 3.0. This progres-sion from mental immersion to sensorial immersion. And the increased expectation of interac-tion, and the lean in, lean out is a framework I'm not going to bother you with right now. But the point I want to make is that public interest in immersive experiences is being driven by larger cognitive, social, and psychological macro trends that are beyond our control.

And is inevitably, as it is, this is giving rise to demand in dollars for new kinds of experiences. So what kinds of experiences? Thank you so much. So we discovered immersive experiences in all these fields, you know? I saw Van Gogh, and I thought it was just like, you know, art. But it's fashion, it's in architecture and even real estate development. Obviously theme parks, night-life, and installation work. Nightlife is becoming installation work, if you go to Las Vegas. Ob-viously visual art museums has kind of been leading the way.

Visual — particularly educational museums have been doing immersive exhibitions for dec-ades, right? Because of its educational value. It's a different way of learning for kids, so they had to adopt that technology early. And then performing arts. Obviously I want to share with you as much as we can about what we learned about immersive experiences in the performing arts this morning.

So I'm going to go quickly through some of these other areas here, but I did just want to give you, you know, these lighting festivals, outdoor lighting festivals. Like, what's with that? Is there — maybe there's one in your city. You know, the LED projection mapping technology is breathtaking, isn't it? You know, to be able to light the skin of a building, and turn architecture into art, is just stunning. And the artists who are making imaginative work, using LED projec-tion mapping, is stunning.

My favorite example of this is the Vivid Sydney Festival, which actually I think just ran. In Australia, they light the exterior of the giant — of buildings, including obviously the opera house, and you know — and hundreds of thousands of people come out to watch it. And it's an immersive art experience. It's so accessible. You can come when you want, you can leave when you want, and you can go where you want. But there's lighting festivals all over the world now, so many of them I can't even show you.

I have some videos, but I'm not going to take time for this. We'll come to other ones. So — and they're very popular. I want to call attention to the amazing installation the LA Phil did. Is any-one from the LA Phil here? Anyone? No. Now, four years ago they had their 100th anniversary. They commissioned the Turkish artist, digital artist, Refik Anadol, to — they gave him their whole digital archives, and he made a work of art from it, which he projected on to the exterior of Disney Concert Hall. And this is worth looking.

[MUSIC]

ALAN: So his — Refik Anadol's sort of stock in trade is using artificial intelligence to make animation art, to make digital art. So imagine standing in the parking — the roof of the parking garage across the street, and watching this.

[MUSIC]

ALAN: I can't imagine how much they spent on projectors. Seriously. To cover every surface of that quirky building.

[MUSIC]

ALAN: Oh my goodness.

[MUSIC]

ALAN: You get the picture. So is it really too difficult to imagine a time when your concerts are simulcast to a gigantic screen on the side of your building or somewhere else in town with a fantastic audio system and thousands and thousands of people are sitting in a park watching it? Maybe for free, maybe charging $10, but it's like a secondary or tertiary venue. You know, the best seat in the house is from the parking lot across the street.

So this just really — and this was four years ago. This really impressed me as something hold-ing enormous potential. So I want to move on, the immersive entertainment spaces are happen-ing. Massive commercial investment is happening right now, technology is developed, and then the most amazing example of this is the Madison Square Garden is collaborating with casinos in Las Vegas in building a facility called the MSG Sphere. You can look it up at MSGSphere.com. It's half built. $1.8 billion. This is an 18,000 seat auditorium in a spherical building.

The audience will be surrounded on 270 degrees with LED mapping technology. It'll be the largest LED panel in the world. It'll seat another 5,000 people standing. Just like airports be-came malls, entertainment facilities are also becoming malls. There are all sorts of spaces out-side the auditorium for people to socialize and shop. This is opening next year, the MSG Sphere. It's visible from outer space.

And I don't know about you, but my concern is that folks in your cities are going to save up their money and go to Las Vegas, where they can get these incredible cutting edge experiences. So this is happening. This is not futuristic, this is happening. Area 15 is a — the newest facility, immersive facility in Las Vegas. It's this enormous playground. They've collaborated with Me-ow Wolf on — one

of the big installations inside Area 15 is a Meow Wolf installation called Omega Mart. There's also another immersive space inside it.

Overactive Media, which makes gaming, is building a half billion dollar e-sports exhibition pal-ace in Toronto. E-sports, like it doesn't make a lot of — like you're building a venue for e-sports? Yes. And it'll also have an entertainment complex. What's happening in real estate is even more mind boggling. In Saudi Arabia, where they have as much money as they need, they're actually building a massive new development out of nothing in the desert that will be an immersive destination.

We don't have time to go into that. There's a beautiful sizzle reel for it here. I'm just going to keep going. And this is also happening here in — not far from here in Orange County. There is a $3 billion development planned for Anaheim, a 95-acre mixed use site where the Honda Center is currently now, will be transformed into an immersive entertainment destination where you can live. Also a collaboration with Meow Wolf. Like that tells you the influence of Meow Wolf, which is an artist co-op based in Santa Fe.

Let me see if we have this video. No, I don't think we do. All right, and Disney now, maybe you saw it in the New York Times, is creating a real estate development in Rancho Mirage, Califor-nia called Cotino. It is a Disney planned community that is basically an immersive experience. It leverages all of their assets. So people are not only going to the future of immersive experi-ences to entertain themselves, they are actually going to live in them.

The architect, Zaha Hadid, her — who passed away several years ago, her studio has actually created a virtual city called Liberland in the Metaverse, where you will be able to go as your avatar, and explore the city. So that just gives you a sense of where this is going in the long run. So spaces are

transitioning. You know, real questions are, what can we do with our existing fa-cilities? Can we transform them into spaces for immersive experiences, or is our money better spent on temporary spaces, or leasing warehouses, or other kinds of spaces.

So in fashion, of course fashion is leading the charge. They have brands to manage and they need to create premium brand experiences, so they're all over immersive experiences now. My favorite example is Balenciega. Balenciaga sells $1,100 backpacks that you can wear on your avatar in virtual space. I kid you not. I'm not quite ready to lay down $1,100 for a digital back-pack, but a lot of people are. Bulgari has created temporary installations on the plaza outside of Il Duomo in Milan. It's just gorgeous.

Burberry has an immersive experiential store in South Korea that doubles as a futuristic art in-stallation. I mean, it just goes on and on and on. Ray-Ban now is making the next generation of wearable eye glasses. And Prada has now created the first virtual model, whose name is Candy. And which is actually the name of their new fragrance. And is now exploring the use of essen-tially digital avatars for models instead of humans. So fashion is crossing into immersive expe-riences, leading the marketplace, because they need to.

I'm not going to talk at all about theme parks. All I want you to know is that a few months ago, Disney patented new technology that allows you to see a three-dimensional image with no wearable goggles or technology. It's breakthrough technology, it's in their — the only image we could find was this one from a famous movie some of you — it's like, agh! Right? And of course they're using it for their theme parks because that's where they're going to make money, you know? But this is — the investment of tens of millions of dollars in new technology pays off in theme parks, right?

But eventually, this technology will find its way into theater production and concert halls. So the popularity of augmented reality and virtual reality is growing every day. We have a genera-tion of adults who grew up gaming, they've come to expect that kind of stimulation, they're very comfortable with those technologies, and those people are coming into the marketplaces for entertainment.

Nightlife and installations, there's — you know, I don't know if any of you have gone out to DJ programs. You know, it's approaching installation work with the lighting and video. And it's sort of — obviously a worldwide phenomenon. The biggest electronic dance music festival is Tomorrowland in — I think it's Belgium or the Netherlands, I'm sorry. And what they did — you know, they sell out 400,000 tickets in like 10 minutes.

And during COVID they couldn't have their festival, so they invested in essentially recreating their facility in virtual space, and they opened it up to a worldwide audience and sold millions of tickets to a live event. And there's just this gorgeous, gorgeous video that shows you what they're doing. I'll show you just a few seconds of it. This is their physical edition from 2019.

[MUSIC]

ALAN: Just look at the sensory stimulation.

[MUSIC]

ALAN: This is their digital production.

[MUSIC]

ALAN: They actually recreated their whole space and setting in virtual space. And then they're able to integrate live images of DJs into that virtual space so it feels like you're at a live event in a physical location. But it's virtual.

[MUSIC]

ALAN: Okay. Immersive sound — light and sound installations are popping up all over the world. The best example is Dark Matter in Berlin, it's a ginormous industrial facility where they've done monumental lighting installations. And you kind of walk through. It's really an astonishing sensation of seeing these huge lighting sculptures. I'm going to keep moving on.

So the point here is if people are in these spaces and losing awareness of their surroundings, right? Which is part of the phenomenology. I mean, people have always gone to arts programs to kind of lose track of their daily problems. And now, actually they're losing their sense of sur-rounding, and going completely into the experience in a way they haven't been able to. So im-mersive experiences in visual art, of course we have to start with Van Gogh here.

And this is just — you're all — many of you have seen this. It's experimental use of projection mapping. The immersive Van Gogh exhibitions, actually, there are five commercial producers producing them. They all intentionally blur the brands between them so the public has no idea which production they're seeing. They're all called Van Gogh Immersive or Immersive Van Gogh or

whatever. And you know, if you haven't seen this, you must go. From an audience per-spective, it's time ticketing, so you arrive kind of when you want to. You stay as long as you want to. While you're there, you can walk around wherever you want to.

You know, it's really empowering the audience to design their own experience, and fit it into their lives in the most flexible way imaginable. I'm told by people in the museum field that cu-rators kind of look down their nose at this. You know, it's not real. And I'm very concerned about that. Because millions and millions people around the world are actually learning some-thing about Mr. Van Gogh, who would never darken the door of a museum. And my partner, when we went, and walked out, and he said, "Alan, I think I learned something about Mr. Van Gogh." And I just thought, this is what — this is the impact that museums would wish for, right?

It's gorgeous. It's not the real thing. It's animation art. It's an artist's reinterpretation of Mr. Van Gogh's work, you know, as mediated through a curator. And it's dramatic. There are five exhibitions, the largest one is an Australian company called the Grand Experience. They have played 70 cities worldwide, sold 8.5 million tickets. The Belgium Exhibition Hub has an expe-rience, they've been in 40 cities. A French company, I can't pronounce even their name, has sold millions of tickets. And two Canadian companies, Immersive Light House.

I just want to point your attention to this wonderful — so Tom Gabbern [?] in Charlotte kind of figured this out. And reached out and made a deal with Light House Immersive in Canada in a 50/50 financial partnership to bring Immersive Van Gogh to Charlotte. They leased a warehouse space, they went from zero to open in like a few weeks in terms of acquiring all of the equip-ment, setting it up, building it out. They went on sale, they sold a million dollars of tickets the first day. They were going to run for three months, they extended it to seven months, they re-cently closed.

They hired local artists to design merchandise for the stores, and local artists have gotten a half a million dollars in revenue out of that deal, which is fantastic. The Blumenthal Performing Arts Center netted $5 million during the height of COVID. What I found so interesting is they thought this was a good use of their shuttered venue's money. Because it would just welcome in so much more of the public. They had 300,000 buyers, 80% were new to file, all right?

So you can't say that this has to be commercial, no. Nonprofits can get a cut of this. I'm not go-ing to go to this — what is coming down the pike now, you know, Van Gogh was the tip of the iceberg. Now, here comes Frida, Monet, Picasso, Banksy, Klimt. I mean, these productions are already out. Frida just opened in London last week. It's opening here, right? This isn't going away. This is going to be a dominant presence in the entertainment space in all of our cities. And it's great stuff.

So all sorts of exhibitions. Even the Louvre is getting in the action. They've created an immer-sive experience just on the Mona Lisa, you know? When someone threw a cake at the — right, last week. Thank god it was protected. So wow, the Mona Lisa, and now here in LA the Bridger-ton experience for those of you on Netflix. So Netflix is leveraging its assets to create live im-mersive experiences corresponding for some of its TV shows, right?

And that's what's important for you to understand, is this is the leveraging of assets into another manifestation to essentially create commercial revenue. And so lord only knows what we're — it's only a matter of time before Disney is renting a warehouse in your community and doing Beauty and the Beast the immersive experience. Will we be involved in this, or will we let them run away with demand?

So education and culture. The immersive art experiences happening now all around the world are

amazing. Team Lab is the studio in Japan that's responsible for a lot of this. They have done some

really wonderful work. There's some images here of the fantastic installation in the Asian Art

Museum in San Francisco. But more and more of their work is interactive. So as you walk around the

exhibition space, there is motion sensor technology, and the images actually change based on your

own motion.

[MUSIC]

ALAN: Okay. Onion Lab is another one of the major studios designing interactive installation work.

I'm not going to show you that. But what's this with interactivity, right? People are now designing for

interactivity, people are coming to expect interactivity in these experiences. And what does that

mean for us? New facility opened in San Francisco just not too long ago called the Unreal Garden.

Have any of you been there? It's an augmented — mixed reality art experi-ence. You have to wear the

Oculus goggles, and you move through nine different artist installa-tions.

You can read about it at the UnrealGarden.com. I mean, this is happening now. This is a com-mercial

promotion that is attracting enormous revenue figures. In Miami, you have Super Blue, the new

immersive museum there. Paris, Milan, other cities, they're all coming. They're even making an

immersive installation on the International Space Station in Houston so that you can walk through

the space station in virtual reality.

So I want to just mention here a concept called transparency, which is not defined traditionally here,

but is the abandoning of the visual rectangles that we are accustomed to our devices so that we are

fully encircled by the reality. Transparency. And inevitably, the movement now is moving away from

devices into immersive experiences. Selfie museums, I don't need to tell you how many of these there are around the world. They're all over the place. And basically, they're places where you go to memorialize, to take photographs, share them on social media, and they're really museum experiences designed for sharing.

Those of you who aren't aware of Meow Wolf, you need to know about it, their original facility in Santa Fe. It's an artist co-op. Brilliant people doing amazing work. Incredibly imaginative, experiential installation work. And they now have facilities in Denver, Las Vegas, and Wash-ington, D.C. And they are an artist — they are fundamentally an artist co-op, which is wonder-ful. It's so nice to see artists benefiting financially from this creativity.

Okay, digital cultural centers are coming up all over the world. We found them — Montreal for some reason is a hub for all this activity. There's one in Montreal, there's one in Barcelona and Milan. And you can read about more of them if you want, you know? So let's get to performing arts. So what is happening in the performing arts on this spectrum from transport to presence? And it's hard to imagine, the technology has evolved so quickly so fast, what was possible even five years ago is totally different than what is possible now.

It's a very fast moving space. But we're seeing the progressive integration of immersive tech-nologies in performing arts experiences. And I just like — read this list of experiences, and un-derstand the complexity of this space. Passive hybrid experiences, analog passive experiences. You know, there are immersive experiences that use no technology, and there are immersive experiences that use bleeding edge technology. So immersive experience is not just about tech-nology, but then there's all the augmented reality, the mixed reality, the hyper reality experi-ences. The sound — audio installation, immersive audio installations.

And there's so much creative territory here. It's bewildering to try to even make sense of it, which is what we've been trying to do for the last six years. Like and this just peeves me to no end. Like why didn't one of you figure out that going out to Walmart and buying LED candles and lighting 500 of them in a nice venue, and hiring some artists — you know, these people are making tens of millions of dollars on candle light concerts. I wish you had that revenue.

Seriously. We are asleep at the wheel. For what reason, I don't understand. This is the most rudimentary format adjustment. It's lighting candles. They're not even real. You can reuse them. And it's all sorts of cheesy music, I shall not — I should not judge what some people appreciate for, you know, music. But it's not sophisticated music. And this company called Fever is mak-ing a killing. In 91 cities — 90 cities. I can't log into Facebook without seeing one of their ads.

So don't tell me that immersive experiences are technologically unfeasible. This is the simplest, simplest — so on a more serious note, is Vince Ford here in the room? I just want to acknowledge you. Hi. Thank you Vince for your experiment. Vince did a wonderful experiment with a recording of Scheherazade with Osmo Vanska [?] for the Curtis Orchestra, and he took the recording and made an immersive space. It's in a kind of a smallish room with multiple screens, and then the sort of pillar in the middle with the conductor, right? And you can see around it. And I'm sure there was a gorgeous audio installation in the room so you could truly appreciate that.

I think I have — let me just see if I have — I don't know if that video is going to play or not. Probably not. But it's a very nice experiment. So you know, okay, what's breakthrough about this for me is that now you're telling the people that it's like sitting on stage with the orchestra. Okay, I can't get that in a regular concert hall. It's value — I want to actually know what it's like to be on stage during a concert.

And this is approximating that, like it's a first step towards that. So it's wonderful. Vince, congratulations on that wonderful experiment.

All sorts of interesting visualization work going on with music. I don't know what videos are going to be available to me, but these are two player pianos. The men you see are sitting at computers doing live digital video effects to the music. And there's this crazy experiment in France called Super Bien, where they hired an orchestra, they built a dome, they put projectors around the dome, and they had the computers linked to the microphones so there was some — ostensibly some live interaction between the visualizations and the music.

And honestly, this is just like — this is just to me like digital artists having fun. Like, look at the pretty pictures. Look at the pretty shape. You remember the early Windows screensavers? Like you would open up your computer and it's like spirograph in motion? You're old enough to know what that means. Like, we're in this stage of visualizations where it's like everyone's just going, oh, how cool is that? It's so pretty. But the artistry, the work we have to do as a sector to collaborate with digital artists, to create visualizations that actually link to the music, and work together with it to create a unified work of art.

There is so much work to do. We're developing the technologies now, but they don't know how to do that artistic part. And I think maybe we do. There's all sorts of other new technologies, passive hybrid experiences. Great example here, this is a theater organization. This is a real ac-tor interacting with a hologram. And you get the general sense. So much potential. Another ex-ample of a passive hybrid experience with live interaction, this is a dance company, where they're sort of experimenting with realtime sort of enhancement of movement. And that's the artist right there, doing live effects, and creating this possibility for artists — art interaction.

So what we're seeing here is a multiplication of the stimuli of all kinds of entertainment experi-ences. Obviously, hopefully most of you know about Punch Drunk's production of Sleep No More, which I think is still running in New York. This was one of the early immersive experi-ences. It was not active, it was — you know, the audience wandered around. It was called promenade theater. They could go into whatever rooms and see parts of the play, and based on where they went every experience was different, and people would come back multiple times to have a different experience. Very, very popular. And thing to know about Punch Drunk is they have —

FEMALE VOICE: So, do you want to — ?

ALAN: Excuse me. Is they've just made a partnership with Niantic, the company that makes Pokemon Go. So you have a theater company partnering with a gaming company to develop the next generation of interactive, immersive theatrical experiences in London. So watch for them. My favorite example of one is Secret Cinema in London. It's coming to the US. They recreate famous scenes from classic films, and sell tickets, and people come in costumes to reenact a famous scene from a movie. And they're selling tens of thousands of tickets, and their new fi-nancial partner is Disney. Okay, Disney is understanding this is a way of leveraging our assets to create a new downstream revenue. And this is so much fun.

[MUSIC]

ALAN: So they have like handlers, they have people barking and telling people where to go and what to do. They have professional actors playing the lead roles. And it's all in a very immer-sive — you know, it's in a set design, it's a giant warehouse where they have huge set pieces.

[MUSIC]

ALAN: These are audience members.

[MUSIC]

ALAN: Okay, I wish we could watch more of that. So audiences are becoming active creators, this is already happening. And we need new kinds of stories. I'm going to pass through the Roy-al Shakespeare Company's work. Royal Opera House produced an immersive hyperreality ex-perience on the stage of the Royal Opera House. Other kinds of augmented reality shows.

But I'm going to stop here and show you this, because it's breathtaking. Sir Simon Rattle was hooked up with motion sensor technology, and was filmed conducting. Please, please. Allow me to show this to you. Oh, maybe I'm not going to. Oh, this just makes me sick to my stomach. It's the wifi. Wifi signal in here. So essentially an animation artist has taken the movement of his hands while he's conducted and abstracted it into digital art, and made an original work of digi-tal art based on the movements of Sir Simon Rattle when he's conducting, and it's gorgeous.

And this is — the reason I show it to you is it's an example of animation art that is inherently linked to the music. It's not some artist having fun, it's — I mean, it is an artist having a lot of fun, but it's Sir

Simon Rattle driving the movement, and the art. And it's just stunning. So syn-chronization, visualization. There's so much to be done. You've heard about the hologram tours. There was an early one for Michael Jackson, there's a later one for Maria Callas.

And you know, it's an actress who was filmed using the hologram technology, and she's sing-ing, but you're actually hearing Maria Callas's voice, right? Because of course they don't have video of Maria Callas, right? So it's an actress. But it's a digital avatar, it's a hologram on stage. And it's just actually stunning, because you start to believe that it's real. And then of course you know about these guys, they're just brilliant, right? You know, they turned down a deal 20 years ago to tour for a billion dollars, and now what they've done is they've had their reunion, and they built a 3,000 seat hall in London, which is open. It's open like two weeks ago.

And they spent a couple months in a studio with motion capture, and they created three-dimensional recordings of themselves performing their songs, but as younger artists. So when they were younger. So it's the real artists making the recordings. So you buy a ticket, you go to the show, you see a live band and the performers on stage are avatars, digital avatars of the per-formers. And this has sold out now for months.

So what's happening here, folks, is — this makes me nervous and maybe some of you too. It's like, so the performer actually now is not live. The public is accepting a digital facsimile of a live performer as a legitimate entertainment experience. This is a paradigm shift. So imagine if we were to film soloists with motion capture technology, and we were able to show them per-forming with great audio as avatars in small spaces. Imagine the educational opportunities, to show people if we had recordings of Vladimir Horowitz or Pablo Casals. Like who these artists were.

You know, don't laugh at this technology. There is amazing work to be done if we can harness the artistic possibilities. And so this is not like — this is heralding the end of tours because it won't be necessary to tour because you'll have the digital program available whenever you want, wherever you want it. This is the motion sensor studio called Meta Stage. I think it's in San Francisco, where they film actors and actresses. There's a wonderful video here of this ac-tress I won't show you.

And then finally, I kind of wanted to circle all the way around to audio. You know, to sound ex-periences, and what is happening now in the technology. Maybe some of you are aware of this, because we work in the — we all work in the audio business, right? On some level. But immer-sive sound experiences actually have been around for a while. They're becoming more and more sophisticated. You know, whereas surround sound used to be left and right, now it is front and back, and it is floor to ceiling.

So the company called Genelac [?] makes great technology that allows this to happen. And es-sentially, I mean, there's a video here of this guy, and it talks about the technology, and the miking of the orchestra. You know, it's sort of a whole tower of microphones at different heights. And I think what we're headed —

MALE VOICE: Once you've experienced immersive audio, then coming back to stereo is real-ly, really difficult. By adding the third dimension of the soundscape, it — the emotional impact to the listener was increased tenfolds. The shape and design of this room is slightly different from the configurations you make for a traditional stereo work. In the sense that you not only have the symmetry left right, but you also have to consider your front to back, and floor to ceil-ing in quite a different way from what we're used to. Not only in surround, but it actually adds to the full surround and extends to —

ALAN: So —

MALE VOICE: — recording, which complements the musical work and the instrumentation. I take the configuration of the speakers for immersive that you see around us here, shrink that down into miniature microphone area with exact same time of arrival and directionality.

[MUSIC]

MALE VOICE: And that area of microphones takes a center stage at the recording venue.

ALAN: There, you see the microphone stack.

MALE VOICE: Then, all the musicians or voices in the ensemble is arranged physically around that microphone area.

ALAN: Okay, so I'm not here to advocate for any technology. There's a number of firms doing immersive audio. And it's really — you know, the London Symphony has re-released some of their classics collection with 3D audio. And we're also seeing the rise of audio installations. This one is at the Rossini Museum in Pesaro, Italy. It's actually a purpose built room for an im-mersive audio experience. The visual is secondary.

So you know, I'm thinking — you know, how many of you have black box spaces in your facili-ty or community? Some of you hopefully. Why aren't we simulcasting concerts to black box spaces using 3D cameras hanging over the orchestra, and immersive audio? Simultaneous — you know, forgive me for mentioning collective bargaining agreements, but I don't think we're paying anyone any more for this. It's local. It's not a recording.

But our artists deserve all the rights and revenues that they deserve. I don't mean to diminish that in any way. But my point is that there are technological possibilities to create a second ex-perience in an adjacent space, or even across town, of the same concert being played in a con-ventional hall in an immersive format. Where you're projecting on four walls, you have an im-mersive audio installation, you can walk around the room and hear the different sections, you can see the face of the conductor, and have a superior audio experience, as if you were standing on the stage in the orchestra.

Like, we should be doing that tomorrow. The motion capture technologies offer an abundance of opportunities for us. So I just wanted to close, you know, we're trying to make sense of this. This is an overwhelming territory of artistic possibilities, because there's so many formats and technologies that could be brought to bear on classical music experiences, making them immer-sive. And we're working, you know, trying to simplify this, to feel like how can we even talk about this.

You know, because what's happening is people are coming to me saying, "Oh, I've got a great idea for an educational experience that's immersive!" And I'm like, great, you know? But we have to do product development work. And we need to do it now. The marketplace for immer-sive experiences is here now. And what we can add to this is artistic integrity. These cheesy candle light concerts drive me insane, right? Like we can create superb, emotionally moving programs in immersive formats that do not diminish but only enhance our mission. And that is our challenge.

The marketplace is here, the real question is, what are we going to do, you know? This oppor-tunity is staring us in the face. And how many of you — honestly, the irony is not lost on me that Susan Nelson was to be talking in this room about capitalization and the need for more sus-tainable business models with enhanced revenue. Like, where are you going to find new earned revenue?

The opportunity here for new earned revenue is extraordinary. Go buy a box of LED candles, you know? Shocking. So in sum, we actually have three audiences to think about. We have the physical audience, the digital audience, and the fidget-al audience, right? Which is the mer-gence, the metaverse, the bringing together of physical spaces with virtual. I think there's enormous potential just with simple digital programming.

I had a run-in with an artistic director recently, that tends to happen more and more often, an opera company. And you know, you do four productions a season, it's really not enough for your community to cultivate an interest in opera. Would you consider curating a digital series? Hang a screen in your opera house, invite people down, and show them opening night at the Par-is Opera, or La Scala. And welcome them, and great them in person, and explain why you think it's worthwhile, and charge ten or twenty dollars, you know? Oh, I would never do that, it's not my work.

I see the world through the eyes of audiences, and that's unfortunate, because audiences are hungry to learn more, and see experiences from around the world. And standing between your audience and that possibility, just digital content, there's so much. Bringing forward great digi-tal content, and doing the audience development work, we can finally now do audience devel-opment work because we have access to this wonderful worldwide body of digital content. Like, let's do it.

So my parting thoughts for you, and I'm going to stay and take some comments. I know we're supposed to end right now, we had a late start, maybe we could stay five or ten minutes, is like now is happening. This is the time now. Commercial producers are eating your lunch with cheesy promotions, where you can create excellent, artistically fantastic programs. So we have a year or two to figure this out, honestly, or it's over. Where is the investment going to come? We've got to spend R&D money. And this is the most difficult thing I run into, is everyone — like what we all do really well is season planning.

Like we know how to do that. We got four concerts or eight or twelve or twenty, you know? We do three each, and we work that all out on our matrix, and we do season planning. But we really don't know how to do product development. It's a different muscle. We're not talking about — we're talking about developing programs for a new audience. And trying to overlay that on sea-son — subscription seasons is paralyzing, because your subscribers don't necessarily want to see visualizations.

Some of them are supportive and some of them are not. So we need to figure out how to do this R&D. I honestly don't think that this is necessarily that capital intensive. Find a warehouse, just put up enough technology so you can experiment, do a lot of experiments at low risk. You don't have to do it perfect the first time, folks. That's not how product development happens.

And collaboration. I just want to say, we have to collaborate, right? There is no reason why con-sortia of orchestras can't co-develop these experiences together and then all of them can learn from the experience and do whatever they feel is appropriate in their own communities. If every orchestra tries to do the R&D independently, we will never make it. So my challenge is not just to you, but to the funders, the foundation funders, to invest in collaborative R&D to develop the next generation of experiences for audiences. Thank you so much.

Okay, let's just have a few comments and questions. If you have to leave, leave. But please, go ahead and speak up.

FEMALE VOICE: I'm with the Louisville Orchestra, we just did this.

ALAN: Great.

FEMALE VOICE: We just commissioned a holographic presentation of a cello concerto from Adam Schoenberg and [UNINTEL] we performed it at the end of May.

ALAN: You commissioned a holographic presentation of a cello?

FEMALE VOICE: Yeah, a cello —

ALAN: Cellist.

FEMALE VOICE: A dual cello concerto.

ALAN: Fantastic.

FEMALE VOICE: They had a battle. The AI produced holographic cello played against the live cellist.

ALAN: Dueling hologram and live. Cool!

FEMALE VOICE: It was amazing.

ALAN: Did your audience respond to that?

FEMALE VOICE: Yeah, they were thrilled. We worked really hard to get the technology [UN-INTEL] into the [UNINTEL] —

[OVERTALK]

ALAN: Awesome.

FEMALE VOICE: Gave away a crap ton of tickets.

ALAN: And now you own the recording?

FEMALE VOICE: Yes.

ALAN: I mean, this is the other thing, is like if we — if you all can develop some of these pro-grams, you can own intellectual property that you can then license and exploit financially and artistically. Fantastic. Any other comments or questions? Yes.

FEMALE VOICE: You know, I just came back from a week at Disney World, and it was a sen-sory overload in many respects. After doing some rides, I felt [UNINTEL] too intense, that I'd like to go [UNINTEL]. How do you balance sensory overload for the audience or being mindful of autistic audience members or [UNINTEL]?

[OVERTALK]

ALAN: Yeah, sure. Yeah, sensory diversity is a big issue. The question was, how do you man-age sort of sensory overload. And I think the answer is that there's a generational shift happen-ing as to people's desire for multi-sensory stimulation. There are lots and lots of people out there who really dislike visual stimulation of any kind with their audio experience. And then there's a larger generation coming who expects visual stimulation. So we're going to have to navigate this sensitively, and respect that we have an audience segment that does not want visu-al or immersive experience. And accept that the next generation is going to embrace that. So quite simply, it's product diversification.

Yes, any other questions or comments before we go? I hope this is the beginning of a longer conversation. If — I think I'm going to start a new kind of newsletter, just about immersive ex-periences. If you're interested in kind of learning more, leave your business card up here. I'll sign you up. We're going to try to develop research, a study of current and non-audiences around interest and preferences around immersive programming in the next six months or so. So anyway, thank you all so much. Have a wonderful day.