Dan Neafus: Fulldome Immersion



Co-founder of IMERSA, has hosted numerous international fulldome summits and is considered a pioneer in the field of immersive & experiential arts & technology. He strives for the synergetic convergence of the fulldome experience, VR, immersive cinema, science, education, culture and performance art.

Charlie Morrow: You have agreed to be part of this project called immerse! because you are, if anybody is, Mr. immerse! [laughter] Not just because you work with immersivity, but it's a force that you've been reckoning with for a very long time. For my project, which is a combination of a boo, a podcast [series] and an online educational resource, I'm doing a series of interviews with my collaborators and other people in the field and asking two questions: one question is what is your practice and involvement with immersivity in the present

time? And the other is, since we have a timeline, the inspiration for the structure comes from Ka Chun's analysis and description of immersivity prior to computers and so that has a nice timeline in it. So I've asked everybody whom I've interviewed to give me a timeline of either where they started from and how they got to where they are or where they are going backwards

Dan Neafus: Oh, great, I'm a kind of a linear and chronological kind of guy. So we might start with the start.

Charlie Morrow: That would be terrific. So, tell me, where did it all begin?

Dan Neafus: That's an interesting question. In terms of personal inspiration and really understanding the relationship between advanced audio-video and the audience, I will flash back quite a ways to the early 1970s; in that period there was a lot going on with music and visuals and rock and roll and such. I was interested in photography back in those days, but at a very early stage, through witnessing some concerts, I think a few years after that, it would have been a little later in the 70s, I saw Genesis and a few other shows. I actually saw Jethro Tull, I believe in '72. But the piece that was sticking in my mind all these years is the relationship between the performer, the audience, the video, and the audio. I call it a dance between them to where there's somebody or groups of people involved in choreographing the relationship and the timing of those things. And when done well, it's captivating.

And that form of immersivity is as much about both the really high level of performance, but also the coordination choreography between the light and the sound, what you're seeing, what you're hearing, what you're feeling that moves your mind to a different realm. Now, admittedly, back in those days, there was some chemical enhancement to my memories, but the piece that I carry with me today is that you don't need mind-altering drugs or experiences to have your mind altered and move into another state. And that's the piece that I really like. So, through the years, in both my study and in my curiosity and my hobbies, anything related to those types of experiences - advanced music, dimensional, sound photography, 3D photography, immersive photography, performance arts visiting the Pink Floyd traveling tour in quad, i think that was in the 1980s. Anything on that list got my interest and I've been fortunate through that time also find ways to make a living in photography in the early days, doing band rock and roll reinforcement. My wife and I managed a company, Unique Light Sound, Inc., where we provided a number of staging, light, and sound environments. And this would be in the 1980s. In those days the idea of immersive entertainment was a pretty new and fresh kind of idea. We developed quite a portfolio and reputation in the Denver area and I actually made a living out of it that was pretty decent. Projecting light and sound and using pre-digital technologies to create entire audio and video environments for large groups. Concurrent with that I was learning and working in the planetarium, which in those days from 1980 all the way up until 2000, was in an analog realm. We didn't really have that much of a digital opportunity. So, I cut my teeth on all of the related analog technologies, everything from slide projection to 2-channel, 4-channel sound, multichannel sound systems, the mixing of the audio and the tech involvement, all of those pieces. So, from that outline I give you nearly 40 years worth of curiosity and experimentation – I'm kind of addicted to this stuff.

Charlie Morrow: That's marvelous to follow that through. It seems like your understanding of immersivity specifically is the layering of media in order to create a coherent and powerful experience where people attend an event of one sort or another in person. Because they get something unique in that space that they couldn't get accepted in a similar space.

Dan Neafus: I'll emphasize again to that when we look at this overall and pragmatically, it's much about moving away from the space and the tech and in my mind moving much more towards the coordination and performance aspect. The whole phrasing and idea of immersivity aspect goes all the way back to storytelling and campfires. Certainly we all have memories of simply the oral painting a picture in your mind and moving into that imaginary space. This is just as powerful a memory in an impactful experience as the high-tech of today and, say, a VR headset. So, the piece that's key in this really comes back to the story and the technique, and is naturally more of where my focus is.

Charlie Morrow: Well, thank you for sharing that. I think in your contemporary practice you have been interested in educating people and building community and that's, I think, a very unique role that you've played for the world and in stimulating Imersa – through Imersa. I wonder if you could speak a little to that and your hopes for that.

Dan Neafus: I'd be happy to. My work with an organization that we set up now 10 years ago and goes by the acronym or Imersa, I. M. E. R. S. A., which is a condensed version of Immersive Media, Entertainment, Research, Science, and Art.

This came about while I was attending a fulldome video festival; it was about 14, 15 years ago, where there was a gathering of very early experimental artists playing with the digital dome and the fulldome environment down in Albuquerque and David Binding was the pioneer pushing this and getting it together. I realized that there was an international community of folks who were experimenting with imagery and sound on the dome beyond what I had ever seen or even imagined before. His efforts as well as others to put together a gathering and an early the festival to compare the short films was really the pioneering effort that opened the door to many, many other festivals and things that have followed that. But for me personally, I recognized a couple of things; one was that the need for sharing knowledge and professional development was expanding exponentially and that the technologies, the techniques were moving so quickly that very few people really understood what was possible and what was there. And I wanted to play a role in not only trying to understand it better myself, but come up with a mechanism for others to be aware of what was possible in these environments.

The second part that was really kind of the a-ha moment, if you will, a producer by the name of Robin Sip, who has put together many, many wonderful, fulldome films posed the question: has anybody bothered to write down any of this stuff in terms of technique and standards and formats. And the rest in among the group and the rest of the room there was no response. And what it revealed was that there was a lot of very exciting, independent and ad hoc effort. But many people working independently rather than working together. And I set out with the help of several other people to try to codify some of this work and to see if we perhaps could form an organization or website or some kind of a mechanism to, at the very least, share the stories and the information, but hopefully move forward some good decisions about processes and techniques and we're still working on this. It is not an easy task. But IMERSA today has held annual summits for the past 10 years and have expanded to international meetings and groups, trying to pull people together. We did an IMERSA day in the Czech Republic this year, exploring some ideas in Japan and Canada.

The idea is the more international this conversation, the more depth we add to the techniques and the skill set and the expanding community. The two things that are really our goal, one of them is to push our counterparts as much as possible to raise the bar in both their production technique, but also the audience experience component to really focus on what people are experiencing in the dome and to have that be something positive and, at the very least, that they want to experience again, and at the very best, it's a life changing moment for them like it was for me decades ago.

Playlist immerse! Podcast 14 Dan Neafus Playlist

Co-founder of IMERSA & Co-Producer of numerous award-winning fulldome productions

Interview by Charlie Morrow
Incidental sound samples used & mangled

24H 48 Demo 1-2 • Charlie Morrow & Maija-Leena *Remes* The Bug Thwap • Flink Boyd Hairless Sorrow • Jenny Säs Pissed • Tether O'Bull

Train [19th-century narrow gauge] • Charlie Morrow & Hugues de la Plaza The Wayward Narrow • Flink Boyd

Secreted Trace Wave • Flink Boyd & b/art & Charlie Morrow

Wave Music VII for 30 Harps • Charlie Morrow

Mixed & collaged by bart plantenga, mastered by Sean McCann

And kind of pushing and exemplifying and sharing examples of that at these different gatherings and meetings that we do? The second piece is the codifying of the process. We have several different committees and teams working together to establish – I'll use the word standards, but it's really a best practice about how to use and share the technology the most efficiently.

And I'll address that a little bit more in a moment, but at this point there's a varying number of folks in the

community between our social network and our active network, somewhere around a thousand people generally involved in communicating in these things regularly to a variety of different Facebook groups and website groups and independent meetings. We try to cross-connect and cross-pollinate all of those conversations as much as we can.

Charlie Morrow: Well, that's a very clear explanation. Thank you, I appreciate being able to talk to you about all of this.

Dan Neafus: Oh, you're most welcome on that. Happy to answer any other questions ...

Charlie Morrow: I think you covered most of what I intended, giving me the building block I need since I'm building a series of interviews that cover different aspects of it. I think that you were very clear and I very much applaud your conciseness.

Dan Neafus: I appreciate that since it was working without good notes. It was a bit off the top of my head, so that's good news. Thanks.

Charlie Morrow: It sounded very natural. And so I wish you wish you wish you a good weekend.

Dan Neafus: Likewise to you Charlie, thanks for the opportunity.