Die-Cast: A Tech-invested Immersive Performance Company for Tech-enabled Audiences

Brenna Geffers

Co-Founder, Die-Cast, Philadelphia

Anthony Crosby

Associate Artistic Director, Die-Cast, Philadelphia

Bruce D Campbell

Rhode Island School of Design, Providence

Francesca Samsel

University of Texas-Austin

This article presents an interview with two of the creative talents behind Die-Cast, an immersive performance company based in Philadelphia, USA, conducted by the IEEE CG&A *Art on Graphics* department via a Zoom video conference on August 12, 2024. The interview provides details about Die-Cast's artistic process and how they support a company manifesto of always meeting audiences where they want and need to be met, which includes both providing access in cyberspace as well as live performances in physical spaces. Since their stories are often larger than can be contained by a typical performance runtime, a novel characteristic of their live performance work is that audience members get to choose what to engage in or delegate that decision to provided tech support that then chooses the path to follow. Analogies regarding visualization approaches to complex phenomena exploration are implicit in discussion.



Figure 1 – Imagery from various Die-Cast immersive performances.

Brenna Geffer and Anthony Crosby are conceptual artists and a playwright/actor team collectively known as Die-Cast, an immersive performance company based in Philadelphia, USA. The IEEE CG&A *Art on Graphics* department editors Francesca Samsel and Bruce Campbell met with the Die-Cast team via Zoom on August 12,2024 for

a deep dive into how the Die-Cast team views their art and audience engagement. What follows is an edited version of that conversation.

Francesca: Hello Brenna and Anthony. This should be a challenging interview to convey in an article format, and yet your work is fascinating and relevant to our readership. Can we start out by having you describe your artistic practice to our readers?

Brenna G: Die-Cast is an immersive performance company, run as a creative collective. Our live performances vary widely in terms of how they are experienced, but we cater to a modern audience that values experience and liveness. The physical spaces in which we perform are an essential aspect of our performances' liveness and we focus on considering spaces to be as central as the texts. Over time, those physical spaces have extended into cyberspace and our audiences often access performances online.

Much of our work is commissioned by organizations, festivals, or communities—like colleges or universities—so we are typically building something that someone has asked us to build. We build by way of the collective intelligence of a group of artists, which offers a wider and deeper perspective—the resultant collaboration is then the culmination of a hive-mind.

F: I imagine that our readers are going to need some concrete examples. I like the idea of presenting how you have investigated technology and incorporated it into your performances, either as access points or as integral to the storylines. Can you start by describing the first tech-infused performance that comes to mind chronologically?

BG: Sure. Let's start with *Mad Deep Dish*. That was an online immersive performance created for the Philadelphia Fringe Festival in 2019. *Mad Deep* used automated chat bots to lead online visitors through a web of 45 videos and 75 chat conversations that centered around the dark world of online conspiracies.

F: Excellent. How did audience members access that online performance?

Anthony: We created an online experience that was reminiscent of Buzzfeed quizzes that were popular during 2016 and 2017. Do you remember those? You would answer a series of questions and find out what kind of cheese you were like? Well, for *Mad Deep Dish*, an online bot served up a quiz to help you figure out what kind of pizza you wanted to order: cheese, pepperoni, or mushroom (see Figure 2).

BG: Then based on the pizza type, you were put on a path of experiencing short video performances and text chat

conversations that followed a cheese, pepperoni, or mushroom path. As you watched the videos and conversations, the online bot checked in with you to confirm you wanted to stay on that path or choose a different one upon answering performance-related questions.

F: So, you would eventually experience all the content? Or just some of it?

BG: The idea, that is typical of our performances, is that you would experience a subset of the content, make notes, and then share your experience with others to find out more about the whole. The story was about a mother and daughter who get pulled deeper into conspiracies in a celestial horror genre–suggestive of R.W. Chambers or his admirer H.P. Lovecraft.



Figure 2 – *Mad Deep Dish* online, choosing a path of immersive performance by way of a pizza selection process.

Bruce C: Did the bots learn from audience choices in any way?

BG: No, the bots followed the same pre-determined script every time. That script was critical so there were many long days in front of a whiteboard with all of us figuring the flow out.

F: So, then the COVID pandemic hit and your experience with online audiences must have been useful? You were able to do two pieces during the heart of the pandemic. Can you share details about those with our readers?

BG: Sure. *Phyre* came out in 2020. That one used some bots but also replicated a Reddit style forum. You followed digital footprints provided through YouTube videos, Instagram photos, audio files, online quizzes, and TikTok clips to put together the story of people who were hiding in a pandemic but were also forming a cult.

F: You were looking at contemporary media formats online. Reddit is quite different from YouTube, and yet you brought in the different formats to deliver the performance.

BG: At our heart, we are still a site-specific responsive company. That means that the work we create is responsive to the venue that it is in. That extends for us into online spaces intellectually. Working in a gorgeous dilapidated hotel from the 1920s impacts a piece as much as doing it in online formats would impact it differently. In both cases, they are treated as authorial points of view for the audience.

F: That makes perfect sense in inviting immersion. We think of venue as a physical space, which is easy to understand. But the fact you are using Reddit as a location, and letting it inform the work is very interesting. How did the structure of Reddit, and how it works, impact the structure and the content? And, how did structure affect the second piece that you made?

BG: *Phyre* had many pieces of technology embedded into it. Anthony made some online quizzes. We provided online applications audience members could use to apply to be part of the cult. One chapter was only told through TikTok that you got to from one site. The pandemic allowed us to use many different types of interactive media, asynchronously. We never used Zoom where the actors were synchronous, but we have done something live synchronously online once.

F: You must have some people on your team who have deep technical expertise.

BG: Kind of. We have one guy who is a Google cybersecurity guy. Anthony?

A: Well, some of us don't even have phones half of the time. I mean, where is Steven? I cannot reach him. But, of course, a lot of us just grew up with this technology. It's just embedded in our beings at this point.

F: Do you want to discuss what followed *Phyre*?

BG: OK. After *Phyre* we did another bots-involved piece called *Temporary Occupancy*, which was supposed to be at Miami Art Week in May 2020. A friend of mine that I went to grad school with asked if we could make something in Partnership with Arts West Playhouse and Gallery in Seattle–based on what we started for the postponed art week.

As an audience participant joining the performance, a bot helped you choose a hotel room, but the hotel room was not an actual hotel room but the vicarious experience of whomever was in that hotel room. It was a peek into what you wanted to experience—anything from hooking up with someone to talking to a dead relative—from the mundane to the extraordinary.

We ended up going to Art Week when it rescheduled to December 2020 and did *Temporary Occupancy* live-ish. We went to the Betsy hotel in Miami Beach for two weeks. The piece had six performers, performing in the hallways and courtyard of the hotel, projected live onto a two-story exterior wall on Ocean Drive for 10 nights. The piece won the art week's \$20,000 Juried Grand Prize for its no vacancy initiative. We would perform it live by putting Open Broadcaster Software into the hotel's system and could run it across the whole hotel because the hotel was closed for guests.

F: A picture of that would be awesome (see Figure 3).



Figure 3 – *Temporary Occupancy*, an immersive performance, as projected live on a two-story external wall.

BG: After that we made a piece called *Dispatches From Gloria*, as part of Philadelphia Theater's Art Week, which was the only piece we made during the pandemic where there were live performers. Our audience accessed the performance on Discord. Discord has a live chat that comes across in a video style. There was a mix of live performances and pre-recorded performances. That was how Discord worked, so again the technology shaped the piece.

F: And how did that format of having live and pre-recorded components change the piece?

BG: It was more stressful because suddenly going live puts more stress on the technology, the actors, and the audience. It gained in its joy of liveness, but lost in its precision to deliver according to our planning. F: I am really interested that you are using a wide range of formats and platforms to create different work, and that those formats and platforms stand in for locations and structure. Is there one piece that addresses that in particular? In how it impacts your creative process and your audience's response to that work?

BG: Maybe *Inter Terrestrial? Inter Terrestrial* was a piece we were commissioned to make for an outdoor gallery in Connecticut. The piece has two components to it: it is an installation that lives in a physical shack in the woods. You could go into the shack in the woods, which is all decoupaged with images, and there was a video running. The video is the story of the person who lived in the shack (see Figure 4).

We all went up to Connecticut to do that. Anthony was a crow. It was about one person's relationship with a virus, with consideration as to whether humans are viruses or whether humans are viral to the environment?

We wrote it, filmed it, edited it, and installed it there. Then we came back and made a virtual reality version of it so that people who never went to the shack could still move through the piece, while maintaining the immersion. You could use your VR glasses and peripherals or your standard computer gamer skills to move around the space and choose which doors and portals you were going to experience.



Figure 4 – Inter Terrestrial, an immersive performance, as experienced via screens in a shack in the woods.

To make the VR version, we had to shoot the footage with a 360-degree camera that we could transfer over (see Figure 5). I think that might be the biggest way that using a platform to run on impacted how we made it.

A: I definitely think so.

F: Inter Terrestrial sounds a little closer to a traditional theater experience as I think of them. I'm curious what

feedback you get from audiences that show up, in person or via VR, and what that has told you about what works and what doesn't work as you go from there?

B: Each piece we have worked on has felt like a different audience, usually brought to us by whomever commissioned us. As a result, I don't know who our audience really is. When we see an audience in person, we can generally tell if they are having a good time. Otherwise, our best metric of success is if whomever brought us there to do the performance wants us back.



Figure 5 – *Inter Terrestrial*, an immersive performance, captured for extending via virtual reality access.

F: It's just that sometimes responses to work guide what you are going to do next, but not in your case. In your case, what got you moving in a direction to consider AI?

BG: I am going to let Anthony answer that one because *Planet of the Bored Apes* was his idea.

F: What was it that got you excited to make that piece? And who was your client?

A: This one was all us. There was no commission to seed it. The idea came about deep into the lockdowns when I had a lot of time on my hands, as we all did. I decided to marathon watch the original *Planet of the Apes* movies, and at the time the whole NFT craze had started. I didn't really understand what NFTs were and then I didn't really want to know. But I thought we could draw from something thereplanet of the apes—planet of the bored apes. I told Brenna about it and brought it up to the collective, but I think it was the resistance to learning about what an NFT was that drove

me, because it seemed that if I read more about NFTs I would get more depressed about what these things actually are. They felt like a kind of nothing. We took a long break from working on it. How long was it, Brenna?

BG: Until ChatGPT-3 came out.

A: That was November 2021, when ChatGPT 3 came out, and it became a post-Internet performance impulse. We realized that we could use technology to write the show.

F: So, you wanted to get away from being on the Internet.

BG: We were discussing it on our Discord channel and we asked, "can we do it in the Metaverse?" The idea of doing a Web 3.0 piece on the Internet felt like putting a hat on a hat. We said let's wait until we are effectively out of the pandemic so we can make this thing that is dependent on the Internet come alive.

F: What I see is a love-hate relationship with technology, and yet of the theater companies I have seen you guys seem to be pretty steeped in a wide range of technology. I get that because I work the same way. Anyway, I am interested in your thoughts on that.

A: I think we are satirical in how we do things. In order to effectively satirize something, you have to have a deep knowledge of it (see Figure 6). And then maybe a deep hatred results from that knowledge when the technology could be so damaging as in some of the technologies we look into.



Figure 6 – An image from the immersive performance scene satirizing a lost NFT in Planet of the Bored Apes.

F: I hear you saying the work highlights potential damage from AI on your field?

BG: I think it is just highlighting potential.

A: Yes, the potential good or bad is what we are looking at.

BG: You might say that we like looking into things that are not knowable. There are many authors of these pieces and they range from those who are more positive about these technologies to those who are less positive. They are all working from different perspectives on the same piece. We have one AI actor in *Planet of the Bored Apes* and the ensembles' response to that actor varies widely. Some people think he's cool and some think he's the worst.

F: So, it's a reflection of what is going on in the world today really.

BG: That's the great aspect of creating work collectively. The result is not from a single point of view.

BC: Are you using the content of the movies of the *Planet of The Apes* series in any way via the AI?

A: No. I think we just took the title and it became something else entirely.

BG: We never talk about the movies in the piece, but we had been talking about them before ChatGPT came along.

F: Can you give me an overview introduction to that piece? Tell me as if I have no idea what this work is about. What is it? How do you experience it? And what was the motivation for it?

A: I can talk about it. There have been three iterations of the *Bored Apes* piece. The most recent one is in the style of a presentation about the potential of disruptive technology at first. Then it derails as if the technology is disrupting the presentation, and then we split off into our traditional choose-your-path process, which then provides different stories. Then everyone meets back to experience a Tango that was choreographed by ChatGPT, Canva AI-generated video, and myself. The dance is interpreted by me.

F: Describe that to me.

A: OK. Brenna gave ChatGPT a prompt about dance and the AI chose Tango as the dance between a person and an AI (see Figure 7).

BG: AI generated the instructions for the steps and rhythm changes.

A: Brenna edited that a little bit, but I worked mostly with what ChatGPT gave her as words. Canva has this feature that generates four-second-long video, so I fed each line of the ChatGPT response into Canva and generated a bunch of videos. I then interpreted what Canva created into dance moves, or movement in general when you might not

consider some of it as dance. And I choreographed the dance that is performed as the AI-generated videos are being played behind the performers.

F: The audience sees the source material, and then the result.

A: Exactly.

BG: You are also hearing the ChatGPT text out loud...

A: ...and seeing what Canva generated from the ChatGPT. Then you see how the humans interpreted that.

F: That's really fascinating. That was at the Currents New Media Festival?

BG: Yes. That's what we were doing in Santa Fe last month.



Figure 7 – A visual image of the Bot Tango segment of the Planet of the Bored Apes immersive performance.

F: There is a lot of conversation in our community about AI as a black box, and what you are doing is showing iterations of that black box in application that speaks to how it works. Does that make sense?

BG: Yes. That is how the bot Tango is working. Each piece of the show is a different perspective on it, and for that one the joy was in seeing a triple exposure. I want to reiterate that the reason we were using ChatGPT in a collaborative piece is because that is how we work as human beings. We share writing prompts. I'll ask Anthony to write something, and he'll write it, and then I might give it to another actor to do a second draft and then Anthony might perform it. So how we work already is similar to a prompt-based edit of work where there isn't any one author who is considered the sole author. Folding ChatGPT into that process matched how we were treating each other already.

Before we used ChatGPT, our process of prompting and iterating was fast. By the time we started using ChatGPT, our process was going slower in terms of each response. An example might look a little boring because it would be a monologue, and then another monologue, and then that first monologue again.

F: Right. I understand what you are saying. Let it percolate and provide something when it hits you as appropriate (see Figure 8).

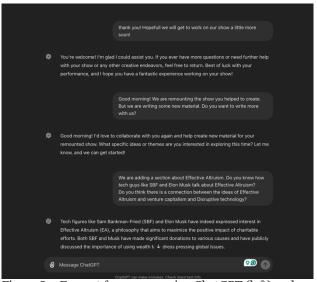


Figure 8 – Excerpt from an ongoing ChatGPT (left) and Die-Cast company member (right) chat as AI participates as a collaborator to create the *Planet of the Bored Apes* immersive performance.

BG: Note that we made sure that ChatGPT knew that it was writing performative text, and that the text would be shared. We asked ChatGPT for permission to edit its text and share with others, which is exactly what we would do with any human collaborator. Based on how ChatGPT responded, it all seemed very believable.

F: Our readership would benefit from seeing a performance in its entirety. We could focus on doing a deep dive on that piece and then expand out from that. It makes sense to focus on *Planet of the Bored Apes*, so as to make it clear your work is so multifaceted.

BG: Your readership might find Mitch's monologue interesting as he ruminates on AI (see https://vimeo.com/manage/videos/1002094200/privacy). We created it to match the exact timing of another monologue on effective altruism and its link to Crypto users so that the show kept it timing.

To hint at the diversity of content in our immersive performances, your readership might be interested in the audio of the final song from *Planet of the Bored Apes* version we did for New Jersey (see https://vimeo.com/900976606?share=copy). That's the same version in which Mitch's monologue

appears.

We can share some other sample online videos that represent the diversity we aspire to in our performances. There's one for Inter Terrestrial, commissioned by the I-Park Foundation, from both the physical installation and VR installation that could be accessed anywhere (see https://vimeo.com/766242515/7358465b85?share=copy).

There another sample from *Upon Reentry*, commissioned by Drexel University, of an autumn 2021 immersive performance and sound installation—though we haven't discussed that explicitly (see https://vimeo.com/894740506/23d81dc2de?share=copy).

BC: Great! Throughout this interview I've been thinking about how humans struggle with understanding complex phenomena, for example in the natural world, and how some in our community try to communicate in well-crafted pieces so as to hit upon entry points that engage people to stay the course in considering the phenomena. We want people to find a path through our various forms of communication materials that has some staying power, especially through the huge numbers of visualizations that people create and share through narrative. We can open ourselves to using technological assistance for people to follow useful paths toward understanding.

F: What Bruce is saying is that we see a choose-your-ownadventure across a wide variety of disciplines, and we see it

a lot in the sciences. Sixteen scientists trying to make sense of a phenomena and communicate well is the parallel to theater of some sort.

BG: That sounds relevant to our Die-Cast manifesto. We have witnessed sandbox gaming, social media, and other innovative web portals change how we interact. The concept of Open Worlds [1] is changing the way we learn. We believe that art should craft work that acknowledges these new interactions, which then drive insight and understanding.

People want to share their experiences, be it online or in person. Sharing experiences strengthens empathy. Our performances encourage audiences to experience the pieces individually with presence [2], and then we encourage an exchange between individuals in order to get a full understanding of the performance holistically. The formats we use for accessing performances are such that audience members must share their experiences with each other in order to understand the whole.

F: I hope our readers find your work motivation and process as relevant as we do.

BC: Yes. Thank you for sharing your artistic practice with

References:

- [1] https://www.wired.com/2015/12/open-world-games-2015/
- [2] https://www.huna.org/html/presence.html

About the Authors

Brenna Geffers is a Co-Founder of Die-Cast. She received her Masters of Fine Arts from Temple University.

Anthony Crosby is the Associate Artistic Director of Die-Cast. He is currently pursuing a Masters of Fine Arts from Sarah Lawrence University.

Bruce Campbell is a faculty member of Web Design + Interactivity at the Rhode Island School of Design. He received his PhD in Systems Engineering from the University of Washington. His research interests include ocean data visualization and procedural design. Contact him at bcampbel01@risd.edu.

Francesca Samsel is a research scientist at the Texas Advanced Computing Center at the University of Texas at Austin. Her work focuses on humanizing the communication of scientific climate data by integrating the languages of the arts and humanities. Contact her at fsamsel@tacc.utexas.edu.