



PLAYING WITH JUDAISM IN THE DIGITAL AGE

(Begin audio)

HOLO: Welcome to the College Commons Bully Pulpit Podcast, Torah With a Point of View. Produced by the Hebrew Union College Jewish Institute of Religion, America's first Jewish institution of higher learning. My name is Joshua Holo, your host, and Dean of the Jack H. Skirball campus in Los Angeles. You've tuned into a Bully Pulpit special series for Symposium 1, which the Hebrew Union College convened in New York City in November of 2016.

Symposium 1 was organized around the theme of crafting Jewish life in a complex religious landscape. We at the Bully Pulpit had the privilege of interviewing some of the outstanding thinkers who participated in Symposium 1. And we think you'll enjoy the conversation.

Today I look forward to an exciting conversation with Rabbi Owen Gottlieb, Ph.D. who is Assistant Professor of Interactive Games and Media at Rochester Institute of Technology. He's also the Founder and lead researcher of the Initiative in Religion Culture and Policy at the Rochester Institute of Technology's Magic Center, which is the Institute's state of the art laboratory and game studio. And in 2010, Rabbi Gottlieb founded Converjent, Jewish games for learning. Owen, can I call you Owen?

GOTTLIEB: Yes, certainly.

HOLO: It's great to have you. Thank you for...

GOTTLIEB: Boker tov.

HOLO: Boker or. It's good to have you.

HOLO: I'd like to begin big and then bring the conversation down to your expertise and really your very fascinating projects. But starting big, I want to talk to you about technology and learning.

GOTTLIEB: I think the first important thing to think about technology is that it's agnostic. It's neither good nor bad. This is Cransberg, Melvin Cransberg's notion, the first principle of technology, it's neither good nor bad, nor – nor is it neutral. And it depends about how you're going to employ it. So usually when I think about educational technology I think mostly about media in terms of what's the content and how is the content available in ways that are related to the affordances of the media. Because if we don't, one, match the affordance, what the media allows you to do...

HOLO: What does affordance mean?

GOTTLIEB: An affordance is what an object, or in this case media, will allow you to do with it. And so each media tends to have a set of affordances that are unique or special to that. That they do better than other kinds of media. So for example, if you're looking at manuscripts they're going to have certain affordances. If you're looking at a codex that's going to have certain affordances. And a video game is going to have certain affordances. And they're different. So I think technology is the tool and media is the way in which content uses that tool. It's also very hard to create good media so, you know, we have to remember this is not a silver bullet. It's not easy. But if we leverage the affordances of the – the medium in particular, I think we have a much better chance of reaching our – our teaching and learning goals.

HOLO: I find that technology not – not technology philosophically speaking which fire and the wheel are also technology, I mean specifically digital media, because it's big and ubiquitous sometimes, even among very thoughtful teachers, promotes the opposite of your prescription for best use. We mistake the tool for the work. The nature of the medium, in its shiny and newness, and its attractiveness, I'm a guy who loves technology, can promote that mistake. Do you think that's an accurate read of a lot of us?

GOTTLIEB: Sure. I think it's what all the researchers tell us also in education and technology. I think the danger in popular culture is the over-evangelization of technology as, you know, this notion of the silver bullet as opposed to thinking about really how does this medium work. And so part of that is to say, you know, if someone's in a classroom maybe they are not the best situated to come across what are the affordances or how to use it because, of course, the job of the classroom teacher is always beset by not having enough time. And so how do we help people to prepare and to use that? And I think part of that is also literacy of the people who are going to use technology and media. To what extent can we assist people in becoming a little more literate in, you know, my specialties in video games? How many video games are you playing?

I came out of a film background among – among other backgrounds like software, and I'm usually amazed that people who are thinking about using games, I say, "Well what games are you playing or have you played?" And they say, "Oh, I don't really play games." To me that's similar to saying you're never going to teach with cinema but you'd never watch the movie.

HOLO: Or teach with books and you've never read.

GOTTLIEB: Or you didn't read, right. So yeah, I think we have to kind of be neither over-evangelizing, nor ignore all the great possibilities because then we'll miss all the affordances. And – and we'll miss the opportunities. And if we hadn't taken advantage of the printing press that would have been really sad for our people I think.

HOLO: I think it would help if we institutionally didn't think of technology as a tool for efficiency. You haven't mentioned efficiency once. You're talking about affordances and leverage and tools being really well used for great ends. None of which saves you time necessarily.

GOTTLIEB: There's the scale issue. So, for example, certain technologies will scale much more easily, assuming that the content is focused and well put together. The ability to reach one, like this podcast, you can reach many, many more people very quickly. I tend not to think about that as the most exciting as a teacher, but as someone who wants to, you know, spread knowledge, spreadable media. That's very exciting.

HOLO: Right. And there is an efficiency built into that. I see that. I see that. I was thinking from the teacher's perspective of the work of preparing.

GOTTLIEB: But I mean if we can use, you know, if we're able to, uh, to send out a game that everyone can download, then all of that knowledge would go into preparation if it's packaged in a way where you've worked with classroom teachers to say is it prepared for someone to unpack? It's not easy. And I think that the danger is people think it's easy. You put it in a box. You ship it through – through the digital pipe and it's done. And that – that really doesn't take into account what teaching and learning really needs to do either in the production of the media, the use of technology, or the spread. You can spread things that are no good and no one's going to use them. I mean they won't really spread. You can put them in the pipeline but no one's going to pick them up.

So looking to the research and learning is really key. So, whether that's in the learning sciences or in curriculum and instruction, or teaching and learning, and design because design is a very big part of that. Not just design for learning but also media design. So there are many disciplines that go into – into this kind of work.

HOLO: Jewish Time Jump is a game that opens up a window into which of the realms of learning that you're interested in?

GOTTLIEB: So Jewish Time Jump is probably better understood in the early days of Convergence starting around 2010 and then it becomes the subject of my dissertation.

HOLO: Okay.

GOTTLIEB: So in 2010, I'm on my way to NYU just after getting ordination at HUC, and I wanted to find a way to start making innovations on the ground in digital media and games for learning. How could I bring the most cutting edge media to Jewish education in innovative ways? And really try to push the boundaries.

And Jewish Time Jump New York came out of things I was learning at conferences from scholars like Curt Squire and Jim Matthews at University of Wisconsin Madison. And they had started to really push the boundaries, along with colleagues like Art Clopfer at MIT, of using handheld devices, uh, mobile devices for what's called mobile augmented reality gaming.

So nowadays we're a little more familiar with it because people have seen Pokémon Go. But how could you use geolocation and the tool set on your phone to allow learners to have highly interactive place based experiences? And I was really looking for – for a connection point between Jewish studies and games for learning.

2007 sees a reemergence of games and simulations in education. And it was a big deal in the '60s and '70s, paper based gaming, role playing simulations. And then a reemergence comes out of, kind of shifts in digital media to say where are young people learning? Well they're learning all kinds of complex systems inside of video games. And I was saying, okay, where does Jewish studies come in?

When I saw what Jim Matthews and Curt Squire were doing with a documentary, a situated documentary called Dow Day which had to do with protests in the late 1960s, uh, on the campus of UW Madison when Dow Chemical comes to visit and starts to recruit, and there are tremendous protests, and there's conflict with the police. And they created a game, Jim's game Dow Day, in which the player plays a reporter on the scene and is interviewing people from various perspectives during this. And through that process comes to understand the history, specifically situated on the campus. So you're at a certain geolocation, you get media from that time period, and now you're learning history through active investigation on the situated location that it actually happened. And this was very exciting to me.

And I saw the first opening for Jewish studies there, uh, because I was thinking about Talmud or I was thinking about mishnars, I was thinking about Hebrew language there was not a bridge that made a lot of sense. But when I saw this I said there's a direct bridge to Jewish history. So I saw great history teaching going on, deeply informed by civic and democratic educational goals, deeply informed by place based learning and community based learning, history and documentary. And I have former history in working in documentary as well. And so I said I can start working on that today and work on the – the kind of cutting edge scholarship research and design that's being done and build the first Jewish digital learning game that is incorporating all of the kinds of pedagogical and research elements that I knew I would have to do. So when I saw what they were doing I ended up collaborating a great deal with, uh, with these scholars.

HOLO: On Dow Day.

GOTTLIEB: No, on Jewish Time Jump. Dow Day had already completed. So and then that was a process of about three years to put together Jewish Time Jump, which was released in May of 2013. And then, you know, we were actually nominated for Games for Change Most Innovative Game that year. So that's in the secular world. So my goal was always to say it's got to be of the quality that the secular world is going to respond to it. But it was a story that takes place in 1909 right out from where we are now.

HOLO: Right, a few blocks from here.

GOTTLIEB: Washington Square Park. It's a time travel story so, you know, the report – I use the same idea of the reporter that comes out of Dow Day but I made it a time traveling reporter so I could jump between periods of time. I also have an affinity for time travel stories and science fiction and so I started to wrap history, documentary through this kind of science fiction wrapper.

So in Jewish Time Jump, New York is on the eve of the uprising of 20,000 - the largest women-

led strike in U.S. history. And it's a situated documentary. It takes place onsite and it's a documentary about women's history, Jewish history, labor history, immigrant history. So learners play time travelers and when they land they're on location in Washington Square Park. About 30,000 shirtwaist workers came out into the streets protesting everything from low wages to mistreatment on the job. Learners get that media live onsite triggered by their GPS location. They interact with many, many characters ranging from manufacturers, bosses to labor organizers, to a variety of citizens of different ethnicities, Jewish, Irish, Italian. They learn about advocacy based organizing. Players will eventually jump to the time of the triangle shirtwaist factory fire.

So spoiler alert, if you're listening, you know, skip ahead in the podcast.

So they're onsite for the fire. So, you know, most of the unions after the uprising of 20,000, uh, uh, most of the factories became unionized with only a handful remaining. But of those remaining one was the triangle shirtwaist factory fire which was the largest factory. About 144 young women, mostly young women, mostly Jewish and Italian, perished in that fire. And it changes labor laws in this country forever. And we really think about what are the connections of that history and how can we make those connections for learners today.

So, for example, we tie together the labor practices that go into making the iPhones and tablets that they're playing on, which are sites of labor dispute. And we tie together, you know, recent factory, at the time of the creation of the game, recent factory crash in Bangladesh. So how can we think about history today and what it means today? Locally there are still sweatshops in New York City. How can we think about history globally? That there are connections and trends and what, uh, authors Barton and Levstik kind of call enduring themes in history.

So this was a process of trying to make something media rich, exciting that people could connect to that's kind of like making a living using them outside. And we were able to do that because of the new technologies that were being experimented with at MIT and Wisconsin Madison. I came out of that with a deeper understanding of the creation of complex digital interactive media. We had a team of about 30 people working on that. Five historians, five archival researchers, teams of engineers, illustrators, sound designers, editors.

HOLO: It feels like filmmaking in the breadth and depth of the necessary collaborations to make it work.

GOTTLIEB: Filmmaking plus software development and all of the extra things. So maybe an entire additional set of industry focuses that go into game making and game design. So whereas we – we had to write the script for the documentary, you also have to then design the interactions of the game as well. Learned a lot in that process.

So we got the first, I think, Jewish video game out there that was working with complex pedagogical pursuit. And so that's kind of what I'm very proud of in particular with Jewish Time Jump. That's the subject of my dissertation. I was doing design based research about how do we advance learning theory through that.

So we were doing a great deal of data gathering and analysis. And then every time we would iterate or change the software and take it back into the field with learners before we released it, we were also developing learning theory. And we found some interesting things out about how to open people up to points of view that they might not previously been open to. And that had to do with how we had characters respond back to biases that players were showing. If you didn't want to listen to a boss, what are ways in which we could eventually find that learners would be able to articulate a perspective of a factory owner that – that they had very large issues with.

HOLO: They were antagonistic.

GOTTLIEB: That they were antagonistic to. And so we found that there were ways in which we could have those owners express the same type of bias back to the player and suddenly players are now articulating the other perspective. So the goal of design based research, from a scholarly research perspective, is how do we change learning theory. How do we make, you know, small advancements in learning theory through the iterative design of an artifact like a video game?

So this is very exciting research for me. And there are a number of projects that we're working on at RIT at the Initiative in Religion, Culture, and Policy. But the one that I kind of want to concentrate on today is called Lost and Found.

So Lost and Found is a strategy game. And I was looking for connections between rabbinic literature and game systems the whole time. And had been percolating this notion that games are, one, they're rule based systems. And what are games really good at? So we know games are really good at teaching problem solving. And they're very good at modeling of complex systems. And that goes into what we were working on in the history project because what type of problem do you have to solve? Well you have to solve a history inquiry problem. So what type of problem would I want to solve with rabbinic literature? And what I started to look at was the Mishneh Torah. So I said I want a system of laws...

HOLO: Mishneh Torah is the compilation of laws by Moses Maimonides.

GOTTLIEB: Right. Created – it's – he's writing in the 1170 to 1180 in Fustat, Old Cairo and that's where the strategy game is set. So what we've been working on for about three years now is a tabletop strategy card game. You may have seen young people playing Magic the Gathering, or maybe youth played Settlers of Catan. So both kind of Euro games systems and card systems that require things like resource management.

We took a section in particular from Mishneh Torah that deals with lost and found objects. Now why did I look at Mishneh Torah? There were a number of reasons why particularly I looked at Mishneh Torah. One, what Maimonides was doing with Mishneh Torah was taking all of the learning that comes out of the Mishneh and the commentaries that become the Talmud and all of the discussions, and then again trying to say how could he bring a system where people could understand how they could apply Jewish law to their daily lives? And so we once again get a crystallization of sets of rules in Mishneh Torah. And I needed a set of rules to work with that did not require hours and hours of Talmudic debate, but I could say here's a rule system that we can start to think about.

HOLO: There's some mirroring going on in your project and his project. There's an artificial limitation of the variables, which is what he did and what he was criticized for in his day because it's an innovation to do that. And then to present it in a way that you can then do something with which I hear you doing with your work. Is that a fair thing to say that there's this mirroring?

GOTTLIEB: Yeah, I try not to compare myself to Maimonides, but I think some of the goals are similar. Because the more I learn about Maimonides the more mind-blowing it is that, you know, any individual one of his achievements are – are pretty breathtaking. But, yeah, I had to make limits because, you know, a game has a limited set of time. You can't debate the law forever so how could I get a crystalized set of laws. And even we use some responses back to Maimonides when we're trying to figure out the case structure for this game.

There were other reasons about thinking about Fustat in 12th Century as well. And those had to do with the interactions with the the Muslim population. So what are the relationships between say the Mishneh Torah and the juris primer (*ph*) or al-Hadayah, and what's the discussion going back and forth as Maimonides is learning from great Muslim scholars like Averroes and al-Ghazali? And how is Maimonides' work then influencing Muslim culture?

So when I was looking at this game I wasn't just looking at it from a perspective like Jewish Time Jump of primarily thinking about Jewish history, although that game was focused on how can I make a game that would be open to anybody even though it came from a particular story that was focused on Jewish figures. But now I'm actually working at RCP on a much wider perspective of comparative religion in the wider sense. So I wanted to be able to expand this game to start thinking about the juris primer and al-Hadayah but starting with Mishneh Torah as the core. So I collaborate with Muslim scholars, Jewish scholars, along with all the designers, and engineers, and graphic designers, and sound designers along the way.

So we were then funded about a year ago by the National Endowment for the Humanities to make a digital prototype of a game. And so we premiered, actually, the digital prototype at the 50th anniversary of the National Endowment for the Humanities in September. And so we now have a working mobile phone version of this game, which is teaching medieval religious legal systems. It's dealing in particular with what anthropologists would call the prosocial aspects of religious law. So we hear a lot about oh this medieval religious legal system is terrible. Or this religious legal system is bad. And – and we have to understand these things, one, in context. Where are they? What are we talking about? What's the cultural milieu because religious law also have tremendous prosocial aspects. Holding communities together. Helping communities be more sustainable.

HOLO: Promoting business and interchange both internally and externally.

GOTTLIEB: Right. And one of the problems that we see dealt with a lot in religious codes, in particular I'm thinking of Talmud, which isn't a code but dealing with problems or tragedies of the commons. If we don't care for the non-individually used communal resources, we will destroy our community. And really they're dealing with these types of questions. For example, if I don't return your animal, your cow, your ox that's taking your property to the market, are you

going to return mine? What are the norms that the religious law holds that are, in many ways, to a much higher standard than we would hold today? And what might we learn from those about community sustainability?

And so the questions that we pose in the current version of the game, because right we're always iterating the game, have to do how do you balance your family needs with your communal needs? How do you deal with limited resources while addressing cases that come from the law in terms of lost objects, lost animals?

HOLO: So can you describe an aspect of that game, a moment in that game that would illustrate precisely this point of what we call prosocial legal norms?

GOTTLIEB: Sure. So part of the game is you have to balance your family and communal needs. So you have certain cards that you have to fulfill and so you have to usually work as a – as almost like a village. So if you have five players sitting around a table everyone has limited resources, but in order to win the game you have to make sure that the elements – you know, we took from Talmud, what are the 10 elements of a town that would merit a Torah scholar as key elements that a town would need. Maimonides actually alters this one of them. He adds clean water. So you've got to get clean water for your town. And you have got to pool your resources to get that.

At the same time, we took what are the responsibilities of a Jewish family from a parent to a child? You have to teach the law. Ideally they be- they go to Chuppah. They find a partner. You have to teach them to swim. So we took those and then we – you have to balance those. Along the way things happen in the community. Someone loses their animal. Someone's honey jar cracks and you have to determine how are you going to decide to assist that person or not. Are you going to follow what the law suggests? Are you going to break the law? And what are the consequences of that across the table if you don't help your neighbor out?

HOLO: This is a mobile game?

GOTTLIEB: So it's a tabletop strategy card game. And we also have a mobile version prototype that we've just built.

HOLO: But the mobile version is independent of the table top. Meaning you don't need the table top stuff to do the mobile version?

GOTTLIEB: Correct. For those who play these types of games like Settlers of Catan or Agricola, there are mobile versions of these games. And so you can either play with a networked version or an artificial intelligence.

HOLO: But the mechanics of the game are either the same or very similar.

GOTTLIEB: Almost identical in this version.

HOLO: So there are these cards you get. They have certain benefits and values and they can be

mitigated or advanced depending on the way you play them. And this all appears on the screen or on the table top in this case.

GOTTLIEB: Exactly.

HOLO: The mechanics of the game are very different from what you experience in Time Jump.

GOTTLIEB: Oh yeah.

HOLO: The lessons you learned about Time Jump. The one I'm picking up on, as a very compelling one is in Time Jump you developed a way to change the perspective of the player because of the interactions as you designed them. And the success of the design in helping change the perspective of the player then becomes part of the educational conversation at large about how do we change the perspective of students. How do we bring students to learn something new by adopting new perspectives? And that's, of course, any teacher knows that's an important thing. And you were able to wrangle the medium, this digital medium, to help advance that educational goal and become part of the educational conversation. Did I hear you right?

GOTTLIEB: I think so. I think you're seeing a through line in the notion of design based research. So when I now am working in Lost and Found and we're doing play tests and we're taking the game out with learners and gathering data, again we're looking for what are we going to learn about learning in the process. Both advancing the game system towards the learning goals to bring our learners closer to it, and then what learning theory will we be able to draw out of it.

Now I suspect it's going to be different than Jewish Time Jump, but what we're starting to see now is we have some very early preliminary data about teaching law and teaching rhetoric. So as the game shifts and changes, how are we going to move it closer to the goals about when we teach Mishneh Torah, for example, or al-Hadayah the Juris Primer, how do we reach those learning goals better? Because it's very hard to create an artifact or a system to reach those learning goals. So we always start with the learning goal and design back. But it's never a straight road to get there. Kind of like finding the sculpture inside of a block of marble.

So for example, one of the things that's really key in – in Lost and Found is the historical and cultural milieu. So all of the graphic design and illustration for the project is very carefully researched. So, for example, working with Dr. Philip Ackerman-Lieberman at Vanderbilt to say when we create the honey jug, what is the right kind of honey jug? When we look at coinage from the period and a dinar, what a dinar actually looked like. And is Maimonides referring to a dinar of 1170, 1180? Maybe. But he might also be referring to one from 250 in Palestine, or he might be referring to a Talmudic in Babylon.

So, for example, in our 3-dinar card, you see with writing around it, three type of dinarine from each of the periods. And so there's also a passive learning in the historical milieu through the design and illustration. Every card back is based on architecture from Old Cairo Fustat in 12th Century. So you start to get the feel of the period that, oh by the way, Jews wore turbans back then. So there's different ways of teaching and learning and we're trying to embed them

throughout the game play and the system but also passive learning in terms of how it looks and feels. The digital version has a score that I'm very proud of that is actually ethnomusicologically correct for the period, performed by a master oudist, and composed by a wonderful composer name Shogi Hayes(*ph*). So when you play the game you're also immersing in the accurate music of the period with seeing the architecture at the same time. So there are many different kind of learning angles in this case.

HOLO: It's big. Right, but what I'm struck by your work here is not just the sophistication of the media and the sophistication of the educational goals working backwards, et cetera, but the sheer ambition of what you're trying to cover in a single game. I mean you spoke about appreciating the prosocial values of a rules based system rather than viewing it just as restrictions. That's a deeply emotional and cognitive thing that you want to convey. It's ambitious. You have an ambitious set of goals. And now you just added to that by telling me you have all these passive goals, these light motifs effectively, which are also very demanding. I mean you have to hire a composer and an oudist. I mean that reflects back on the highly, highly collaborative and multi- multi, uh, disciplinary nature of the medium. And then there was another primary learning goal which is also huge, which is some sense of the fertility of the interreligious experience. So what strikes me about your ambition, aside from it being dauntingly attractive and - and really impressive.

GOTTLIEB: Or crazy.

HOLO: Yeah, or crazy. Is, maybe this is me, maybe it's generational, I don't know, but whenever there's an immersive video game, in my case it's the shoot 'em up of my son which has no learning goals as far as I can tell.

GOTTLIEB: Aiming probably.

HOLO: Yeah, right. Aiming, right. Right. Dexterity and...

GOTTLIEB: Visual acuity actually. You'll find good visual acuity comes out of those.

HOLO: But they're deeply immersive. Uh, there's - there's music. There's interpersonal relating. There is very sophisticated graphics, et cetera. I'm struck by two contradictory things. One is the possibilities of the motions of the characters. In this case, it's all about motion because it's a shoot 'em up game. Is seemingly, on the one hand, infinite. I mean an X and Y with an upward thrust of the joystick and a right left, you know, trigger thing can - does this kind of jump or whatever. And that - that's - on the one hand it seems arbitrary, which I understand because there's - you've just got to mix and match to come up with a very, you know - on the other hand it seems almost infinite to the non-native - in other words, these moves and these - they seem dizzyingly infinite. So that's one thing. The contradictory part of it is that the interactions of more stra- of these games and strategy games where you go into a fantasy world and you have relatively long dialogue boxes and you engage with people to find things or to go in a direction. I don't know what those games are called, if there's a term for those kinds of, uh, like, uh...

GOTTLIEB: RTS? I'm not sure.

HOLO: I don't know what that means.

GOTTLIEB: Real time strategy, maybe?

HOLO: Yeah, that might be it.

GOTTLIEB: I mean there's so many genres of video games.

HOLO: The thing that I'm struck with there is the utter limitedness and the – the – the – I can't get past the artificial limitedness of the human interaction component because I know that there's only so much code that a person can write and that the character with whom I'm interacting can only really respond in finite ways. And I'm constantly aware of that. Not just because I'm a curmudgeonly 45-year-old, but also because I actually feel it as a player that there's really only four choices here. So I'm struck by these two things. On the one hand, kind of overwhelming infinitude of options for certain types of interactions or actions. And on the other hand, the stuff I'm really interested in which is the human interaction, a limitedness to the point of it making me uninterested. Is my reaction at all meaningful to your of thinking?

GOTTLIEB: There are important reactions. If we were, for a moment, to go back to the affordances question, you know, what affordances of a genre might allow us to match the learning goals. So maybe, right, a first-person shooter may not be the best way to reach the kind of learning goals we're looking to learn. But if you take say a first-person shooter, at first you would think, okay, no possibility of learning in that. What are you learning? Well if you want to learn aiming and you want to get really good visual acuity, fine, right. There are good studies that say that you're going to actually improve your visual acuity in – in a first-person shooter. Then you can look at games that push the genre even for a first-person shooter.

If you were to think about something like a Portal or a Portal 2. So, this is a game in which you have a gun but the gun opens up a portal in the wall and you decide where the entry of the portal is and where the exit of the portal is. And then the physics engine will actually duplicate physics. So if I put a hole in the floor and I put a hole in the ceiling, and I put them slightly off pace I can push myself through the floor and drop through the ceiling and move to my left. And the whole game is built of puzzles of this.

And so you can use a system like that to teach physics. And it actually is not as limited as it first appears to be because someone has figured out the affordances of that genre to use them for alternate goals. Now those designers are not, I don't think, necessarily start at thinking about physics but they started thinking about interesting puzzles. So for one is to say I don't think genres are as limited as they may first appear.

And the other thing is to think of if you are in a genre that has certain limits and you want to use it, how could you use those affordances? So thinking about limited choices of interaction was the other example that you gave. And one of my favorite game companies is Tell-tale games and they make pretty sprawling narratives. You know, they work with HBO. And there are limited

choices, kind of like if you think about a choose your own adventure book. But they figured out ways to push the mechanics of the adventure game to new levels.

So, for example, you interact with a character, you only have four choices to make. One is to never say anything, and that will have consequences as well. But characters – you'll be notified that characters will remember what you said to them and there are choice and decision points. So they've actually been able to push the genre of the adventure game, in my opinion, to new heights and levels by making certain small changes in the genre where you can actually get very interesting contemplative interactions, complex interactions with characters inside of a series like the Walking Dead video Tell-tale game. So again, they're pushing that boundary.

So part of the excitement is how can we push the boundary of the genre? How can we learn from the people who are pushing the genres in the major game companies from a learning perspective? And then try to use those or build on those to reach our learning goals. So, you know, it may be choosing a different genre. You know, the genre of Words with Friends that brings grandparents and grandchildren together playing word games together, having a certain type of interaction.

So I think because games are so wide, we don't always think about the kinds of games that may give us the most opportunity. Another example is the Sims which is often used in games in learning circles. It's kind of an open sandbox. You can build and talk and interact. And it's incredibly successful. I like to think about Flow and a Flower from a spiritual perspective which are very meditative games. So the more I think we immerse or learn about or become literate in game culture, I think the possibilities open up. But it, you know, it takes a lot of work to try and think what those connections are.

HOLO: Clearly. It takes a lot of work. This goes back to our original conversation that these tools are very productive and they require a lot of work. It's amazing all the incredible thinking and working you're doing. When can we expect to see the game out?

GOTTLIEB: So that's a part of what this process is, right. We've just built the prototype. We're hoping to release a version of the card game I would say in the next year to year and a half. And we will see what happens with the prototype. It's important that there's support for these. You know, we've been very blessed that the National Endowment for the Humanities recognized the value of this project and we're at the prototype stage there. So to now move to a game that gets distributed is a whole other set of challenges and work that the team's excited about.

So I'm not sure when the digital version of this will come out. And the game that you see that will come out in the boxed edition may be very different than what we have now because we want to incorporate everything we're learning about how people are learning, and that may mean changes in game mechanics. It may mean that strategy shifts to rhetorical structure. Part of what I'm doing as a scholar is not just designing and releasing games which is key, but also what are the learnings that we can come at. And then I share that with the community so the people working in this area can say, "Ah-hah! Okay, he pushed the boundary here," I hope, right, in small ways. And then we can incorporate it.

HOLO: Ultimately, your applications and your learning about the applications could perhaps be summed up in the following way. You are learning about how digital learning can now be integrated into the way we understand learning at all.

GOTTLIEB: So in creating Jewish Time Jump New York I was learning through the doctoral studies how to do what's called design based research, this iterative process of going out into the field with an artifact, in this case digital game, gathering data, analyzing that data as - as learners playing the field. And then iterating and changing the software as we go so we're searching in design based research for both making the design object closer to the learning goals and also what are we learning about learning in the process.

And so that's where - really where I cut my teeth in terms of doing design based research. I'd done iterative software development. I'd done kind of development of different film making techniques. So now going - coming into Lost and Found and the project that - at - at - at RIT, at the religion, culture and policy - that the initiative in religion, culture and policy at RIT already hitting the ground running, being familiar with this design based research methodology having a sense of, uh, how to start with learning goals and work backwards. So I really had spent about five years working in that prior.

So my hope is that what I learn as a scholar design researcher moves us much, uh, maybe not faster but with a more informed sense of - of - of how to develop, uh, those elements. So in a way resting on more in Jewish Time Jump my filmmaking background now I, uh, uh, I feel like I'm a more mature scholar than I was during the doctoral, uh, program.

HOLO: Ultimately, your applications and your learning about the applications could perhaps be summed up in the following way. You are - you are learning about how digital learning can now be integrated into the way we understand learning at all.

GOTTLIEB: Technology is always going to change. So how can we look at the underlying learning principles from the digital, from technology? And really, I'm always looking back to John Dewey in terms of experiential education. So what are the - what are the things we can learn about how digital media helps us get closer to the original Deweyian goals of having a rich, exciting, involved experiential education?

HOLO: Participatory. Right.

GOTTLIEB: Participatory. So I think, hopefully, what we learn now will, you know, when we start moving more into the hollow lens and mixed reality, and really virtual reality and mixed reality is the next wave, when we're there what we learn about learning will now translate over because we're not so concerned about the shell or the particular technology but how people learn in these different media settings.

HOLO: That's very clear that this iterative process is central to your endeavor for which we're grateful because I know we'll be the beneficiaries of it. So thank you.

GOTTLIEB: That's my hope.

HOLO: Thank you very much for your work and for the conversation. It's really been a pleasure.

GOTTLIEB: Thank you. Great to talk to you.

HOLO: You've been listening to the College Commons Bully Pulpit Podcast, produced by the Hebrew Union College Jewish Institute of Religion. We hope you enjoyed this podcast, and please join us again at collegecommons.huc.edu.

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