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Meet Our Museum Podcast: The First Video Game

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Audio-only Podcast online at: http://americanhistory.si.edu/thinkfinity/podcast/videogames.mp3
Enhanced Podcast online at: http://americanhistory.si.edu/thinkfinity/podcast/videogames.m4a

Codes:

MR = Matt Ringelstetter

PF = Petrina Foti

" " =interrupting, pause

[ ] = not speaker's words

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MR = Video and computer games have become so commonplace in our society it's hard to imagine a world without them. In this month's episode of History Explorer we'll be hearing from Petrina Foti, curator at the National Museum of American History (NMAH) who has studied the history of video and computer games. Within the museum's collection are the papers and objects that Ralph Baer, creator of the first home video game system, used to develop his inventions. Patrina talks about Baer's Brown Box the prototype for the Magnavox Odyssey which hit stores in 1972. A precursor to Pong, Atari, Nintendo and all the rest, Baer's system was truly innovative for its time. Patrina will also cover what sort of questions and research went into studying objects such as the video game collection and how a single object can be interpreted in multiple ways.

PF = I'm Petrina Foti. I've been with the museum since 2006. I have worked in a couple of different offices in the museum, but the longest has been in the Computers Collection which I've worked for four years. I have just recently

moved to the division of Home and Community Life. Just to begin about the history of video games. It sort of starts with Ralph Baer and if you don't know who Ralph Baer is he's considered to be the father of the video game. He was a German Jew whose family escaped right before Kristallnacht. His family was really lucky that they had already family living in the United States, so they were able to come here. He was a young man at the time just a teenager and first thing he did was he got his radio engineer license and just as he was trying to figure out what's next, he got drafted into the Army. He served in World War II. Afterwards, on the GI Bill, he went back and he got his television engineering degree; an actual degree in television engineering. Televisions were a new product and very complicated back then. He had a long career as an engineer but in the late 1960s he's working for an engineering company called Sanders and even though this had nothing to do with television, he happened to be thinking about TVs and came up with the idea of video games. This was in the 60s and the next day he went into work and he sat down and he wrote out a four-page memo detailing the idea and as many ways it could be applied as possible and he and a colleague put together the first test unit; TV game unit one. It is vacuum tubes and transistors and it was just a put-together test unit that was meant to say, okay, look, we can in fact move a dot on the screen and that's all it did. They weren't trying to reinvent the technology at this point, they just used what they knew was gonna work. And once they proved that yes, we can do it, then they went back and Ralph Baer assembled a team of two guys; Bill Harrison and Bill Rausch, and then they started progressively complicated TV game units. The result was the Brown Box which is about TV game unit seven and the Brown Box looks a lot like what you see today; console, two controllers, you could play multiple games by depending on where you put the switches and the switches you use these index cards that had little dots on them so that's how you knew which switches need to be up and which switch needed to be down and when you look at them and you go, ooh, the very first video games. That prototype was licensed to Magnavox which released the Brown Box as the Magnavox Odyssey in 1972. Normally when people think about the first video game, they immediately say Pong, Nolan Bushnell and Atari, and that's who they think of. In fact, Odyssey

beat Pong to the market by a few months. Pong debuted in 1972 as well but Odyssey came out first. In fact, Nolan Bushnell had seen Odyssey being demoed at a trade show and thought hey, this makes a really great arcade game. Odyssey for a variety of reasons was not as successful as you might have expected it to be. However, Pong was this runaway success but it was only when it tried to enter the home Atari made a deal with Sears to release these home versions of Pong and then suddenly Magnavox said, no we have the license, so it was start of a series of court cases.

MR = Now when you first kind of met this collection and were introduced to it could you describe that and how you started forming your research and started looking at these objects.

PF = Yeah, I probably should bring up the fact that I had no basis in computer history or computers at all. I was the classic person who would smack my monitor and think that would actually do something to fix my computer. I was a librarian and so I had this librarian brain and could sort and organize things and David Allison hired me anyways. His response was, when I admitted no background in computer history, was it's okay, you'll learn. Fortunately the first objects that I had to work with or accession were Ralph Baer's and I knew something about video game history already. I had lived a lot of it I had played the NAS so it didn't take a lot of extra work for me to play catch-up. So, the very first time, the very first project got brought into the storage area and the storage area is filled with these boxes that the papers and the video cassettes and the actual prototypes are in, so the first thing I had to do was open up the boxes and take everything out and check them off against the list. I worked in a library for four or five years at this point, and so I was used to doing stuff like that; opening boxes, check the purchase order, did this come in, did this come in and so that's what I was doing and the first thing that I realized was that we've got things that are not on the list and there's stuff that didn't come and David just laughed and said, "Well, welcome to museum work." It's not always so straight forward but that was the first thing and then we did some background research just by

listening to Ralph Baer talk or doing some of the books and did some basic research to just catalog and to understand what object was which and Ralph Baer had written a book and he talks about each of the objects and that was invaluable and just reading what he was talking about and then looking and saying okay, so this is this object, this is what this was used for, and this is how it was used. A few years later, I was preparing a web group which requires a lot more writing and a lot more research so yes, I turned to Ralph Baer's book. I also went down to the archive center because they conducted an oral history with him. So I listened to all that oral history and I took plenty of notes and then I started consulting secondary sources because it's one thing to talk about the objects for your own purposes to understand what they are from the inventor then you have to have a broader context, you have to read what other people were saying about it, and there are some books devoted to video game history; not many, not a lot to choose from and each had their own flaws but a lot of them were based on their own interviews from the early days and were pretty consistent. So I could check those outside sources and just listen to what other people's perspectives in this early story was.

MR = But when it came to these video game objects, which specific sources do you think yielded the best data?

PF = It's, like I said, it's not like I had a lot to choose from. For early video game history obviously Ralph Baer's book, anything that Ralph Baer wrote or conducted was extremely helpful. The flip side of it, of course, of his book was that he was an engineer so when he's talking about these objects he's using specific language and he's getting into details that maybe the lay person doesn't necessarily understand or even need to know. So there was this bit of reading it and then having to absorb it. Sometimes I'd be reading whole passages two or three times just to make sure I really was understanding what he was saying and then I had to turn around and be able to not only understand it but I had to be able to explain it to another audience who does not come from an engineering background. I found that a lot of times when I was writing about computer

history I was very aware of a dual audience almost. There's the general public who may not have a lot of background knowledge about this and so you have to get that level right but then you also have to make sure that it's technically right even if you're talking very generally, in general terms, you have to make sure you're using the right language because there's a whole community out there of people who do understand computers who do understand the technical side of things and if you're too general and you're just to the point that you've lost actually what had happened. Not to get off the topic of video games, but a good example is I wrote a blog post about Y2K. Explaining Y2K gets really, really complicated just because it gets into program languages and things like that but so how do you explain it in a way that's not confusing that really gets into the heart of what it does. In the end, you just have to say well, really what the problem was that 00 does not consecutively follow 99 and that's the root of the problem which people who don't understand computers could understand that could grasp that but people who do understand computers could say yes, that's true but...and then you say, yes, I understand the but.

MR = So creating this historical interpretation is really striking a balance that the entire audience is going to be able to comprehend.

PF = Right you have to be able to make sure that you are correct technically that you haven't gone so far into the general that you aren't saying anything at all at the same time you can't go so deeply into the specific that you lose the main part of your audience.

MR = So, how do you feel the story of Ralph Baer and the video game fit into maybe a larger context of American History.

PF = I think there are a lot of different ways it fits in and it also depends upon who you're asking. Obviously if you talk to the Lemelson Center, the first thing they'll say is invention; it fits into the story of invention. If you talk to somebody, say, in Art and Culture or Health and Community Life, they might say it's part of

our everyday lives, it shapes our popular culture, it's how people entertained themselves and then from a technical standpoint it changes the way that people approach computers. One of the first things people did was play games. When the PC came out and it was reaching people used it for specific purposes for accounting practices and things like that but before you knew it they were playing games and think about your own memories. When we got our first computer, Mom said, "Now you can write your papers and things like that." What did we do? We were all playing games.

MR = It was a game machine.

PF = It was. It was. Even the math programs that my brothers were supposed to use, they were games.

MR = They had spelling, learning how to type, things like that?

PF = They were all in the forms of games. Games became an education tool. They're still being taught that video games are still being referred to as educational tools. Even from the very beginning I think that was their contribution.

MR = So it sounds like, as with a lot of objects, there's a lot of different stories that can be told from one single object.

PF = Right. You can. When I was in graduate school we had this one assignment; take an object and describe it in as many ways and from as many different perspectives as possible. I chose the Brown Box because I was working here at the time as well and you know I took it from an invention standpoint, a history standpoint, you could take if from a pastime standpoint. I've heard people in this museum go on about the fact that Ralph Baer chose to cover the Brown Box in wood grain vinyl, fake wood grain, and what does that mean and

what does it mean that they're trying to make something high-tech look natural, so you can. I've seen it being interpreted in many different ways.

MR = Thanks to Petrina Foti for taking the time to speak with us. For the History Explorer Podcast this is Matt Ringlestetter. Join us again next month as we take another look at what goes on behind the scenes here at the National Museum of American History. Music by Two Pole. Hear more on freemusicarchives.org. Podcast made possible by a grant from the Verizon Foundation.