

## A Half-Century of Hypertext: "Living e-Lit"

Inaugural Center for Digital Narrative Lecture, Robert Arellano on 31st of August 2023.

Read more at the CDN website: <https://www.uib.no/en/cdn/167030/cdn-inaugural-lecture-half-century-hypertext>

00:00:00

**Scott Rettberg:** It's a real pleasure. We did just kick off the Center for Digital Narrative. And our initial focus is on electronic literature from which we emerged. So I'm very happy to have someone who's been crucial to the history of electronic literature,

00:00:34

and specifically hypertext, Robert Arellano. So while completing his terminal degree in the Brown Graduate Writing Program in 1994, Robert Arellano submitted the first all digital master's thesis in the history of the 250 year old university. Arellano created the Internet's original interactive novel, the first hypertext novel on the web, Sunshine 69. Let's see a light-hearted man who's got a history of 50 years of hypertext for us.

00:01:12

Welcome, Robert Arellano.

**Robert Arellano:** Thank you, Dr. Rettberg and Vice Dean Hjortland, and to the faculty here and their chair and all of the students. I'm really grateful for this opportunity to speak with you on a half century of hypertext. Well, we got a lot of time to cover.

00:01:43

It might be helpful setting up hypertext in juxtaposition to a concept that dates back a little more than 50 years, in fact, 50 times 50, a concept of narrative from 25 centuries ago, variously termed Aristotelian narrative, traditional narrative, or, and I have my students to thank for this, regular storytelling. This model follows a line.

00:02:14

Hypertext narrative in contrast, here's my simple definition. The composition is nonlinear and therefore the experience is interactive. And that goes for any number of interfaces. Once you start looking for it, you begin seeing it everywhere, specifically hypertext narrative, though in fiction genres. I love this Wikipedia article, which by the way, we may, we just might have prolific Wikipedia and Dr. Jill Rettberg to thank for portions of this.

00:02:48

It relies on familiar terms like writing and reading. Here and elsewhere, the experience of hypertext literature is also like likened to a kind of co-creation since the audience is engaged in a way that determines paths and affects outcome. So one analogy I might offer is that while Aristotelian narrative, that model is two-dimensional, hypertext is 3D narrative.

00:03:19

And our friend, Robert Coover, who I'll introduce better as we will be hearing more from him later, likened it in a lecture at Georgia Tech to exploring a new country. And I like to stretch that analogy by comparing the experience of traditional narrative with listening to a guide on a tour bus while reading hypertext is getting on a train, getting off a train in an unfamiliar city and wandering down each alleyway that catches your interest. So it's more like backpacking.

00:03:50

In theory, this is great, but for most of literary history on the media of books, scrolls and codices, et cetera, there's really only two ways to go, left to right, or in the case of manga, right to left and top to bottom. Paper by nature is usually 2D. As for the tools of hypertext and the ideas that gave us our first interface, like a lot of people throughout the 90s and early 2000s, I accepted the story of Vannevar Bush's concept

00:04:21

for the Memex, a hypertext-like device, models for which were published in The Atlantic in 1945, his article, as we may think. But over the past decade, researchers like Alex Wright, who's head of user experience at Google News, wrote essays like The Secret History of Hypertext, which was also published in The Atlantic, showing how the conventional history of computing leaves out some key thinkers. One of them was the Belgian Paul Outlet, who in 1934 laid out a plan for a global network

00:04:56

of electric telescopes that would allow anyone in the world to access to a vast library of books, articles, photographs, audio recordings and films. And this was a long time in the making, this idea, and as early as 1895, he launched, at least conceptually, a project called the Universal Bibliography, an ambitious plan of cataloging all the world's published information, which he never finished.

00:05:26

So since I subtitled this talk Living E-Lit, it only makes sense I should keep it lively with a few stories. Join me in a journey through the cave of time. You are hiking in Snake Canyon when you find yourself lost in a strange, dimly lit cave of time. Gradually, you can make out two passageway. One curves downward to the right, the other leads upward to the left. It occurs to you that the one leading down may go to the past and the one leading up may go to the future.

00:05:57

If you take the left branch, turn to page 20, right branch 61, outside 21. Which way will you choose? Be careful in the cave of time, you might meet up with a hungry Tyrannosaurus Rex or be lured aboard an alien spaceship. Will you become trapped in time? Anyone recognize this? It's from my own time yellowed copy of the very first Choose Your Own Adventure book, The Cave of Time by Edward Packard.

00:06:27

And in 1979, I couldn't get enough. I was hooked on fantastical narratives addressed to the second person, you. You're the star, 40 thrilling endings. What happens next in the story? It all depends on the choices you make. How does the story end? Only you can find out. And the best part is that you can keep reading and rereading until you've had not one, but many incredibly daring experiences. The way I see it, I began working on today's presentation when I was nine years old.

00:07:01

There were eventually 184 Choose Your Own Adventure titles in 38 languages by 30 authors. And in the first 20 years, the original series sold more than 250 million copies. And every one of them came with a warning. As you follow along, every now and then you'll be asked to make a choice. Your choice may lead to success or disaster. A different story. Welcome brave adventurers to the world of Rissa Aylford, one of Blackmore's more important

00:07:34

leaders who's been carried off by the eccentric monks of the swamp. The king of Blackmore dispatches a small band of bold adventurers to the rescue. Deep into the great dismal swamp, they must go far from sunlight and sanity. There to seek and save the captive Baroness from the sinister Temple of the Frog. Recognize. Dungeons and Dragons, a role playing game originally designed by Gary Gygax and Dave Arneson was first published in 1974. That dungeon master set up was from the Temple of the Frog, released in 1986.

00:08:09

And the interactive narrative model was designed to be experienced collectively in this case, composed collaboratively. We might say more aligned with the oral tradition. Okay, one last story for now, this time beginning at the end, or one of many possible endings. Does anyone recognize this one? It's a meme, I think, by now. Three years before D&D, three high school students named Don Rauch, Bill Heineman, and

00:08:42

Paul Dillenberger created a game to teach eighth grade school children about 19th century pioneer life called the Oregon Trail. And the version most folks know today, which you too may play on an emulator at [visitoregon.com](http://visitoregon.com), was coded by Rauch in 1974. And in 1978, John Cook had adapted the game as a download for the Apple II PC. But the first version coded in basic by high schoolers in 1971 had to be experienced on

00:09:15

microcomputers on a timeshare network that predated display screens with teletype and paper tape terminals. Before we leave behind the Oregon Trail, earlier this summer I met an Oregon artist and Hannes Kuh's tribal member, Sarah Systrom. And she told me about When Rivers Were Trails, which offers the perspective of what colonizers called Western expansion from an indigenous adventure game perspective. It was developed by Elizabeth LePonce and over 30 indigenous contributors in collaboration

00:09:50

with the Indian Land Tenure Foundation. Whether you want to try the free online version of Oregon Trail or Pick Up Rivers Were Trails on itch.io or both, I want to make sure you don't feel like you have to scramble for a pen or a browser right now. Because if something during this lecture interests you enough to follow up, I've made a web page with all of the links I found, and I'll pop that address up at the end. I started with these stories from the 1970s just to reflect on how much cultural production

00:10:20

in the early days of the past half century exhibited hypertextual tendencies, particularly in the area of children's literature and gameplay. Stories composed nonlinear and experienced as interactive without ever using the word hypertext. But enough fun and games. What about lit? And it's not to say games can't be literary, but where might we encounter antecedents to hypertext literature by writers who pay close attention to character development, descriptive

00:10:52

language, plot, and drama? We could point far back as Renaissance and Enlightenment writers like Lawrence Stern with *Tristan Shandy*, modernists such as Gertrude Stein and James Joyce, magic realists including Julio Cortazar and Isabella Allende, as well as on to Asia, Africa, the oral tradition. I remember my delights during a semester abroad in Africa, encountering *The Palm Wine Drinker* published in 1946 by Amos Tutuola, a Nigerian writing stories in English based on Yoruba

00:11:24

folk tales. Interesting little link here. Some of you might be familiar with the title of his follow-up novel, which inspired Brian Eno and David Byrne to name their first collaboration without the talking heads, *My Life in the Bush of Ghosts*. That too is a name, it's a Tutuola novel. James Joyce, Italo Calvino, Angela Carter, the list of writers gets wider the longer you look in the rear view mirror. I would refer the serious scholar to Dr. Rettberg's book, *Electronic Literature*, Chapter 3, Section 1, *Literary Antecedents to Hypertext*.

00:11:57

Warning, once you go reading down this rabbit hole, you may never wish to emerge. I almost called on Vladimir Nabokov, whose non-linear novel *Pale Fire* inspired the father of hypertext, Ted Nelson. More about him in a moment. But if I had to choose just one sorcerer, a troll man to channel here at the half century of hypertext, on the occasion inaugurating University of Bergen's newest center for research excellence, it would be one of the originators of Latin American magic realism,

00:12:31

el argentino Jorge Luis Borges. Yo me había preguntado de qué manera un libro puede ser infinito. No conjuntaré otro procedimiento que el de un volumen circulo, circular, un volumen cuya última página fuera idéntica a la primera, con posibilidad de continuar indefinidamente. That's from the Garden of Forking Paths, which would have been read by many English-speaking

00:13:05

audiences once it was translated for the New Directions Collection Labyrinths more than 20 years later, in 1962. It's now time to introduce you to Robert Coover, who himself has credited Cortázar with sparking his fascination for vanguard literature, but who employed Borges' labyrinth metaphor in his own first experiments a half century ago, before he had ever heard of the term hypertext. Coover an award-winning novelist, a respected scholar, and generous mentor to emerging artists

00:13:37

and writers, begins a recent autobiographical essay with Once Upon a Time. In that mythical epic known as the 60s, two or three years after the appearance of Julio Cortázar's influential nonlinear novel Hopscotch, I started playing around with edge-notch cards, imagining a labyrinthine novel made up of a thick deck of such cards, punched in such a way that readers could, choosing their own routes, needle out sequences all held together

00:14:09

in what now I would call a web work of nonlinear narrative. It was in effect a primitive hypertext system, but with its elaborate thesaurus and attendant mechanisms, the coding and punching became numbingly tedious. That word labyrinth pops up again and again. Coover was in Iowa City, and he wouldn't make it to Brown for another 13 years after he started this experiment. We see the date here as being in February of 1968.

00:14:42

But as luck in the labyrinth would have it, at the same time he is experimenting with nonlinear fiction on edge-notch cards, 2,000 kilometers away in Providence, Andreas Van Dam and Ted Nelson have been designing the first hypertext editing system for the computer. Nelson, referred to as the

father of hypertext, had coined the word in 1963 to mean non-sequential writing. The result, HES, or the Hypertext Editing System, pictured here running on an IBM 2250

00:15:18

display console before the invention of the mouse. So there's a light pen. Something I learned in my research just this week, within two years of its creation, HES traveled 380,000 kilometers away. In 1969, NASA, running it on an IBM 360 computer, created documentation for the Apollo missions using HES. Andy Van Dam, in a recent interview, said, microfilm of our documentation went to outer

00:15:48

space. I am still proud of that. Maybe it was this little moon rock of hypertext history that could have unconsciously inspired the cover of Dr. Rettberg's textbook. A year after HES, Van Dam and colleagues followed up with FRESS. Look at the advent of white on blue text and check it out. Multiple tiles, boxes or panes, they didn't call them windows yet, all on a single display

00:16:24

screen. FRESS was used for editing, reading, and making comparisons. It endured for more than a decade. In 1976, it was used by humanists to create a poetry textbook and linked corpus for students and instructors. That's arguably among the very first e-books. And it became a bridge to an even bigger development in the first half century of hypertext. But before that, we interrupt this software program to bring you a word from hardware.

00:16:56

Now you can, in your minds, cue Dvorak, New World Symphony. 1984. Now the year before the Mac, Apple had already introduced one of the first commercial PCs with a graphic user interface, GUI, GUI sometimes, the Lisa. There had been mouses, mice, before on multimillion dollar mainframes at research institutions,

00:17:29

but the Lisa introduced it in a personal computer on a commercial scale in 1983. In that same year, Steve Jobs came to Brown University with a deal. To seed the entire campus with this new system, he promised would revolutionize personal computing. He was working on creating an Apple

University consortium, and he wanted to let Brown be a founding member. Back to our software program in progress.

00:17:59

In a year of that Macification at Brown, Norman Meyerowitz, William Shipp, and Nancy Garrett and Karen Katelyn released Intermedia. It came in a box, and it ran on a Mac. Their department was called the Institute for Research in Information Scholarship, or IRIS. One of the first professors to adopt it was George Lando, whose Intermedia-born Victorian

00:18:29

web since migrating to the World Wide Web remains a treasure for readers and scholars of English literature. It's thanks to Lando, who passed away earlier this year, that I get to impose myself in the story of a half century of hypertext. Because by taking his Intermedia class my sophomore year at Brown, by the time I was a junior, I could lay claim to understanding something about hypertext, which came in handy when the Brown University Hypertext Fiction Workshops were born.

00:19:02

Robert Coover, again, writing in or speaking in a personal interview for the half century of hypertext, I saw on the very first day of the hypertext workshop that all resistance disappeared, and everyone was immediately writing new forms. Here's a blurry image of Bob Coover in the classroom. He remains to this day one of the most perspicacious proponents of hypertext's literary potential. But in 1991, he needed someone to help him learn Intermedia while offering Brown's first

00:19:33

Hypertext Fiction Workshop. And who do you think was on the mouse as his trusty teaching assistant? This guy. Another low-res photo from those days. But I lack an archival photography of the original workshop. I'll try to make up by preserving the work. Now I'd like to spend a good chunk of time in the 90s, not only because they're the glory days for Gen Xers such as myself, about which when you get us started we love to wax nostalgic, ad nauseum, and not only because those 10 years represented what Coover deemed the golden

00:20:07

age in that aforementioned lecture at Georgia Tech, himself looking back at a few years removed, but because that decade I think of as the halfway decade, and it functions as a fulcrum for our half century, there were some very important developments culminating in 99. One of the very first projects created with Intermedia was A Word for It by Andrew Sean Greer in that first workshop where I was the teaching assistant to Coover's professor.

00:20:40

And one of Intermedia's early navigational features was clickable image maps. So students naturally took to creating these as metaphors for exploring e-lit. You could imagine taking a forking path on the very first page, although some pages didn't offer more than one direction, and that too is an element of hypertext. And yet sometimes the text links would proliferate and you'd have to make a lot of choices along

00:21:11

the way of reading a project like Andrew Sean Greer's A Word for It. Then there was my old college roommate and musical collaborator Will Oldham, before he ever launched a musician career, with Riding. That too had a clickable image map, but this was a more novelistic approach. And don't go reaching for your eyeglasses, I don't expect you to read it all. Just kind of soak in the screen and juxtapose it with Greer's poetic fragments.

00:21:46

You can see how he was approaching it as a novelist would, with long passages and lots of text links. If we zoom in on the dialogue, we can hear the attention Oldham is devoting to regional dialect, invoking a neo-Gothic Americana that could be compared to William Faulkner or Flannery O'Connor. Another student, Alvin Liu, eschewed image mapping to instead enable navigation via data.

00:22:16

Bobby Doubleday was a baseball player who, by clicking on his stats, his hits and his batted runs in percentages and home runs, you could read the story of a young cub in the major leagues making his way up. It makes you feel so young when it snows in the north. Baseball begins in the south, in Winter Haven, in Scottsdale. The scene set aside for the moment is enacted elsewhere, a quick one-reeler summing the

00:22:51

coming attractions. Now, in the early 90s, an economic downturn led to Iris closing shop, and the Brown workshops had to wean ourselves off Intermedia. But thank the hypertext gods that Eastgate came along. J. David Bolter, John B. Smith, and Michael Joyce created Story Space, and it was kept going by Mark Bernstein, founder and chief scientist at Eastgate. The software, as well as their publication of a lot of early titles of original hypertext

00:23:22

literature, were instrumental during the 90s to the Brown workshop and beyond. Story Space didn't have the multi-user network of Intermedia, which loaned itself to more solitary compositions. Students in the 1990s really took to it, contributing dozens of early works to what Coover called the Golden Age. Mary Kim Arnold's *Lust* is made up of 38 nodes and 141 links, all emerging from a single

00:23:54

10-line poem at the top. I used Story Space to build *Altamont* in the shape of a bicycle, with the Story Space map feature, and I submitted this as Brown's first digital MFA. Version 2.0 became *Sunshine 69*, the first HTML novel on the web. And then the classic. We can call it that, right? 28 years? I think so. Shelley Jackson's *Patchwork Girl*, which I was reminded just this week was created not

00:24:28

originally in Robert Coover's workshop, although Shelley was a student of Coover's. It was in George Lando's theory course. During that decade, there was a lot of the hypertext fiction workshop in the news. A big turning point was Coover's front page article in the 1992 June 21st New York Times Book Review. The editors gave him four pages in the spread, as well as the cover. And it was exclusively to feature this new mode called hypertext literature.

00:25:05

Thus began the Brown University hypertext fiction workshops. He said, two spring semesters in, devoted as much to changing the reading habits as to the creation of new narratives. One of the elements of the workshop that was also written about in the Times, and I just happened to have a recording of Coover reading it himself, so again, you don't have to squint. I'll let him for about a minute speak about the hypertext hotel.

00:25:36

In addition to the individual fictions, which are more or less protected from tampering in the old proprietary way, we in the workshop have also played freely and often quite anarchically in a group fiction space called Hotel. Here writers are free to check in, to open up new rooms, new corridors, new intrigues, to unlink texts or create new links, to intrude upon or subvert the texts of others, to alter plot trajectories, manipulate time and space, to engage in dialogue through invented characters,

00:26:12

then kill off one another's characters, or even to sabotage the hotel's plumbing. Thus one day we might find a man and woman encountering each other in the hotel bar, working up some kind of sexual liaison, only to return a few days later and discover that one or both had sex changes. During one of my hypertext workshops, a certain reading tension was caused when we found that there was more than one bartender in our hotel.

00:26:42

Was this the same bar or not? One of the students, Alvin Lu again, responded by linking all the bartenders to room 666, which he called the production center, where some imprisoned alien monster was giving birth to full-grown bartenders on demand. This space of essentially anonymous text fragments remains online and each new set of workshop students is invited to check in there and continue the story of the hypertext hotel.

00:27:17

I would like to see it stay open for a century or two. Robert Cooper writing in 1992, and that photo is cribbed from when he spoke here in September of 2013, almost 15 years ago to the, or wait, was that 2013? 2008. So it's 15 years to the week, almost, in a keynote for the Electronic Literature in Europe conference. There's room 666. The hypertext hotel.

00:27:49

In its first iteration, which lasted for about 12 years, 1991 to 2003, it was intermedia and then ported to story space and then finally exported to HTML with a detour in there as a MOO, which is one of my favorite recursive acronyms. It's an acronym inside an acronym. A MOO is a MUD, which is a multi-user dungeon, object-oriented.

00:28:22

That was a lot of fun. We played around in a MOO, kind of like a chat room, but with simulated space, textualized spatial navigation. But its kind of final form that it settled down in was story space. The front desk could admit you to many levels, like the service directory, and from there to construction crews and into Coover's broom closet. More on the hotel in a moment.

00:28:54

Besides writing, we did a lot of reading. Standalone titles published by Eastgate on floppy disks. Every semester, as I began teaching the course while Coover was on sabbatical, I became a faculty member in 94, I assigned what I call an anti-book report, where students had to go out and find something that they wanted to make an argument about, exhibited hypertextual tendencies. And sometimes they would lean on a classic, like Michael Joyce's *Afternoon*, a story, but sometimes they would surprise me and go out and find something, sure a game, but sometimes

00:29:27

a theater piece, or some other artifact of interactivity that predated the computer. There was Stuart Malthrop's *Victory Garden*, which by the way also owes inspiration and the garden in the title to Borges' *Garden of Forking Paths*. And there was Jane Yellowlees Douglas' *I Have Said Nothing*, which won an award, I believe, that year, maybe one of the first yellow awards?

00:29:59

No, I'm mixing up my hypertexts. This handful of hypertext literature has not constituted a definitive reading list, nor is it representative of all the work we enjoyed, analyzed, and discussed in the original Brown workshops. For instance, we had an exclusive classmates copy of *Patchworker* a long before it was published by Eastgate. But again, for a comprehensive introduction to early e-lit, you know where to go.

00:30:30

And besides writing and reading, we fetid, we festivaled. A lot of festivals. Each of these was an encounter that had an element of hypertext to it, but specifically TP21CL, as we called it in 99, was a

really important occasion. And this is what rounds out our concentrated experience of the 90s and the half century of hypertext.

00:31:03

It's the reason the Electronic Literature Organization was born. And I can't underestimate or overstate the significance of this one. Because without the work of the ELO, which is, by the way, approaching its 25th anniversary, I hope we're going to do something special. I'm pretty sure most of us wouldn't be here, at least not in this role tonight. But to get to any birth, there's a story behind the story. And that's how it goes with ELO. I hope you'll find it as entertaining as I do.

00:31:38

Because among the visitors and guests at TP21CL were some folks who had driven from Chicago, where they had collaborated, begun a collaboration, on a hypertext called The Unknown. And I thought I already knew everybody in the hypertext world. This wasn't the first collaborative hypertext, but it's maybe one of the most prominent ones that really still resonates and is read in hypertext workshops.

00:32:15

It's a Picaresque on-the-road novel incorporating every lexical format of the age, from credit card statements and freshman compositions to typing tests, and it's documentary hypertext as performance-style writing. The co-authors slash characters seemingly lived this novel while writing it and fabulating it. Meanwhile, I'll channel myself a little bit more of Coover's writing from that recent

00:32:45

autobiographical essay. As the millennium began to turn, my friend Jeff Ballou recently retired as publisher of PC Magazine, with all his many tech industry connections, invited me to dinner in London, where we got up the idea of a conference at Brown on the new digital technology, one whose central aim was to bring e-writers and tech developers together for the first time. This became TP21CL, largely funded by tech companies, thanks to Jeff, held at Brown in April of 1999.

00:33:15

And you got that guy together with these, the authors of *The Unknown*, and Robert Coover, missing Frank Markhut. Among the invitees, this is Coover writing, was Scott Rettbert, who was there along with his co-authors to entertain us with readings from their funny award-winning hyperfiction, *The Unknown*. And at a lecture in the old Duke Ellington room in the Grad Center, Scott leaned over and asked me if it wasn't time to launch an organization of e-writers. A brief conversation with Jeff Ballou and the Electronic Literature Organization, which

00:33:45

has grown to be a vast international organization, was born here on Brown's campus, with Jeff as its first president and Scott its first managing director. And it's had its home at four different prestigious universities, and it continues to have the destination conference for practitioners and scholars of e-lit every year, and giving awards about which we'll hear more in a moment, too. A couple of years later, I moved on from Brown, and I left Coover safely ensconced in the

00:34:16

cave, a three-dimensional space where the user wore VR goggles and manipulated a wand. And there were authors creating hypertext in this space, including John Cayley, Talon Memet, William Gillespie, and others. I had heard *The Way Out West* calling me, and I always reckoned that I would get back to Brown and the Hypertext Hotel someday, but more about that in a bit. First, I spent seven years wandering in the desert.

00:34:54

It was interesting moving from a 13-year stint at Brown as the hypertext kid to a 10-year track appointment with quick promotions, up to chair of English, then director of cultural studies, finally associate dean of instruction for the University of New Mexico Taos branch. And while I might have kept hypertext on my radar, what UNM really needed at that time was a professor of freshman comp, and I was happy to do it. During those seven years, I got married, my wife and I had two kids, and restored a 200-year-old

00:35:29

Adobe home, and I wrote four novels. One of them was long-listed and then shortlisted for the Edgar Award, and another has had a recent resurgence because it's about the bomb, and there's a prominent canine character named Oppenheimer. For my own part as a working writer, I became hooked on noir, and while I never stopped writing or teaching hypertext, I own I Missed an Iolo Conference or two.

00:36:01

I'm fast-forwarding now a bit because fortunately I had the E-Lit collections, one and two, put together by lolo, one in 2006, another in 2011, to keep track of that decade in the desert. And by the way, there's been two more since then, but in volume one there were 60, in volume two, 63 works of electronic literature. You could browse them by author, title, keyword, and they're not just bookends for me, they're landmarks and they belong on everyone's shelf.

00:36:34

By late 2010, I'm ready to get back on the hypertext horse. I've gone to Oregon and built the Center for EMDA, Emerging Media Digital Arts, or we call it EMDA for short. They're really good days, and I was looking around for, say, an image that could convey what the essence of EMDA is to me now, 13 years in, and I found it in the voice of two students, Juan Quintero and Armando Ledesma.

00:37:06

So here's a half minute of how EMDA Center looked like. We took 350 and we walked in there and basically they were just like, whatever you want to create, go do it. Don't even think about limitations, just write down what you need and we can try to get you situated. And I just love that because they just give you the opportunity to create something instead of trying to give you a document to follow. I remember them walking in and saying, well, we're rappers, and we talked about rap videos,

00:37:37

a website, of course, audio production, social media, all of it digital. Fortunately, also, I had Dini Gregar to welcome me back into the fold now that I was back in a digital capacity. And I put that email up there just because I know there's others in the hall tonight who've experienced the thrill of being tapped to judge an ELO award, which by the way, besides now the Kuver and the Hales Award, there's also the Marjorie C. Luzbrink Career Achievement

00:38:08

Award and the Biennial Maverick Award. Not only that, there's a couple of people here who've won one of those awards, and I think even one person who's won two. So ask about those awards

sometimes, two people who've won two. That first year I volunteered on the panel might have been the easiest in the decade of the awards history because the winner, led by a team, including Jason Edward Lewis, was the Poetry for Excitable Mobile Media Project, or POEM.

00:38:39

The writing was interesting. The interface was exciting. With phrases that snaked across the surface at your touch, I might be able to get this to work. For full functionality, you downloaded the app from the App Store, but there was also a version built for large screens. When I talk about getting back on the Hypertext horse, I confess that I sometimes felt a little more like the rodeo clown because shortly after launching MDET, it seemed like my EU

00:39:12

was always in some kind of budget crisis or another. Heck, we even made the cover of Inside Higher Ed, and it made it a little hard to make the case for purchasing 20 or so copies of Story Space. And it was the Wild West. I had to choose my battles. I was about to give up on E-Lit when, fortunately, along comes a tumbleweed called Twine. According to Twine's website, you don't need to write any code to create a simple story with Twine. And it was true.

00:39:43

It was object-oriented. It looks a little like Story Space. And when you're ready, though, you can extend your Hypertext with variables, conditional logic, images, CSS, and JavaScript. Plus, it's very stable. I'm running it in the background right now. In 2012, Twine was still pretty obscure, and it almost didn't make it into the 20-teens when game designer and interface fiction writer named, interactive fiction writer named Anna Anthropy published Rise of the Video Game Zinesters, How Freaks, Normals, Amateurs,

00:40:15

Artists, Dreamers, Dropouts, Queers, Housewives, and People Like You are Taking Back an Art Form. More recently, we have Twining, Critical and Creative Approaches to Hypertext Narrative by our friends Anastasia Salter and Stuart Malthrop, which, by the way, you'll find free online as an e-book, and it's also around as a PDF. Anna Anthropy's book is partly credited with invigorating interest in Twine and inspiring artists like Porpentine charity, Hardscape, whose With Those We Love Alive, 2014, was

00:40:50

selected and curated in the 2017 Whitney Biennial of American Art. You play a traumatized inventor, fated to perform endless tasks for a cruel empress. Porpentine describes the story as a weird femme dark fantasy. It's also real world physically interactive. You got to take your designs that you were inspired to make from your choices and draw them on your physical body.

00:41:22

And then you were asked to send those in, photos to Anna Anthropy, who would share them on her Tumblr. So Twine was getting me pretty excited. I began teaching more hypertext fiction, and I decided to try to return to the Hypertext Hotel. I mosey on back to where I remember having left it, 404. It had survived through all those iterations in the 90s, and yet it fell to the relentless march of progress ignoring a simple backup.

00:41:53

I did find a few of the rooms in the Wayback Machine, but only the ones like at the top level that had been hit more than five times. A lot of them were just, hmm, sorry, Wayback Machine doesn't have that page archived. I was in a pickle, and those were some dark days. After four months and hundreds of emails, we found it.

00:42:31

It was on his old PowerBook that he didn't even have the password to. But we cracked into it, and we found the only surviving copy of the original Hypertext Hotel. It was a real knuckle biter. My students and I immediately went about breaking ground for construction of the Hypertext Hotel VR.

00:43:01

It's a collaboration between myself, Coover, Quinn Jacobus, and Andrew Masik, who coded a lot of the Unity. It was originally tethered to Unreal 4, and we debuted it at the Schneider Museum of Art in Ashland, Oregon less than a year later. You'll note that we borrowed the facade for the exterior view of the VR Hypertext Hotel from the Schneider Museum's beautiful architecture.

00:43:32

With a headset to explore the halls and a handset for navigation of different floors using the elevator, and the manager, Robert Coover, telling the stories of rooms in your earphones. Here's a brief demo. Welcome to the Hypertext Hotel. All newly elected members of the board of directors may read, write, and sleep over here, moving in wherever they feel most comfortable, the whole hotel at their disposal.

00:44:04

Guests too may range freely. This is not so much a friendly hotel as it is one without proper management, which is to say that within its rooms and corridors, virtually anything can happen. The hotel manager's office is designed to intimidate even before it is seen. Successive anti-rooms weary the visitor, each door a challenge, each receptionist more hostile than the last.

00:44:41

Basement There are storage rooms in the basement, laundry facilities, exposed plumbing and heating and air conditioning ducts, a furnace, a wine cellar, large freezers, junked coolers, and abandoned bicycles, an unvisited workroom, damp on the north side, heaps of bottles, broken furniture, dead TVs, vermin, insects, and perhaps other creatures as well.

00:45:15

Most if not all of that is original Robert Coover writing that has yet to be published. After some delays beginning in 2020, with last year's return from remote learning, a new batch of 3D students are helping update the Hypertext Hotel VR for Oculus 5. We're in the home stretch. I wanted to touch on some things besides the hotel that cropped up in the last decade or so that I see some pointers which will keep hypertext in the conversation for the next

00:45:48

50 years. Just for examples, whenever I peek over my son's shoulders on the Xbox, I see something like the wildly popular game Red Dead Redemption 2. It follows the adventures of an old western outlaw and the player can make decisions for the character to determine their morality and the way the story plays out. There's even books inside this world like the sporting goods and gun catalog that lead

00:46:18

to narrative that I would argue is a form of hypertext literature. And then pop interactive into your Netflix search and it comes up with dozens of titles that were authored to some extent with hypertext. And not just for children. Black Mirror in particular, Bandersnatch, is a branching story that the audience controls through prompts in their television remote. In 1984, a young programmer begins to question reality as he adapts a dark fantasy novel into a video game.

00:46:49

A mind bending tale with multiple endings is how Netflix promotes it. And then just one more example for now, Meow Wolf, which traces its origins back to 2008, but in 2016, this collective of Santa Fe, New Mexico artists opened their first permanent installation, the House of Eternal Return. 20,000 square foot exhibit featuring over 70 rooms of interactive hands-on art. Much of its narrative designed by artists from the Meow Wolf collective.

00:47:24

Visitors are invited to investigate the mystery of how a family disappeared, leaving their Victorian mansion abandoned. You find clues by reading their mail and opening up their appliances. Spoiler alert, the refrigerator is a portal to a different dimension, as is the washing machine. A hint provided by Meow Wolf, the family was performing a forbidden ritual. And in 2021, they opened up their second experience in Las Vegas, Nevada. Rapid fire after that same year, another in Denver, Colorado, and the fourth and fifth

00:48:00

are coming just this year. One last analogy. As the process of making a good film originates with a great screenwriter, so best practices in composing all kinds of interactive multimedia from games and apps and VR and the metaverse should begin with the writer of hypertext. My grads are getting jobs in these industries. Just last week, a former student who works for a game dev company with over 100 employees

00:48:31

messed me that they've recently begun scripting their world building and narrative design in Twine. Robert Coover and I never set out to generate dozens of great American hypertext novelists. In fact, Coover is quoted as saying, my feeling about the hypertext workshops is that their primary

proven benefit is to loosen up print writers. I'd like to take a moment now to visit those students from the golden age and ask, where are they now?

00:49:02

Mary Kim Arnold, who served as executive director of the Rhode Island Council on the Humanities and is on the Brown faculty, has won awards for essay and poetry like, in this case, *The Fish and the Dove*, poems that consider the history of occupation and legacy of the Korean War and the ways in which official and institutional language of war obfuscates lived experience. My old friend, college roommate, Will Oldham has re-christened himself Bonnie Prince Billy,

00:49:37

the most influential indie musician it's okay if many of you have never heard of. He actually headlined Oslo's Rockefeller Music Hall with Susanna as his supporting act and he's recorded and performed with Johnny Cash, Bjork, Nick Cave, PJ Harvey, Nine Inch Nails, Chris Varena, the list goes on. Shelly Jackson has written several books, but one that I love to tell people about and you can learn more about in the list of links I'm going to provide for you was called, as was not a book, it was called *Skin*, a project comprised of 2,095 words, a short story published

00:50:18

exclusively in tattoos, one word at a time on the skin of volunteers from around the world. Alvin Liu lives in San Francisco. Not only is he the novelist of *The Hell Screens*, which was one of my favorite novels of 2017, he's also got a day job, as he put it in email to me just this week, which was in 2019, he was appointed president and CEO of Kodansha USA Publishing.

00:50:51

They publish some of the most top selling manga titles of all time, like *Attack on Titan* with 114 million copies in circulation, and he's working on anime partnerships with Disney and other Hollywood studios. Andrew Sean Greer has published seven novels, including *Less*, which five years ago won the Pulitzer Prize. By the way, I learned how to pronounce that the hard way in a grad seminar when someone corrected me, it's Pulitzer.

00:51:24

If you get nothing out of my lecture today, but that, you'll be able to say Pulitzer. Andy, as we called him in the workshop, has joined the ranks of authors, including Toni Morrison and William Faulkner. Less than a year ago, his follow up novel was published. And last fall, he gave a radio interview where he talked about his formation as a writer. Less found it this week, too, thanks to my research residency here.

00:51:55

And then Robert Cooper was a highly experimental writer who would like write, he had one short story that was a deck of cards and you would just shuffle the cards any way you want. Our class was on, we used computers, they had just invented hypertext where you click on a word and it connects to another document. You might have done that in your life. This is the first time anyone ever did that. It's like, let's try to make stories that way. And yeah, Robert Cooper was like, always wore a black leather vest and aviator sunglasses

00:52:27

and seemed very serious, but he was very playful and incredibly supportive. And I just think from him, I learned like, do whatever you want, like, right. There's no one way to write. All of us are getting stuck in this particular writing mode and we have to break out of it, which I still think about, you know, and I still tell my students. I'm so grateful for the past few weeks here at University of Bergen. Meeting with you students has inspired me, as have encounters with faculty.

00:53:01

I made it to Media City where I recorded a forthcoming episode of Off Center, the CDN newly launched podcast, which by the way, subscribe. And I taught a workshop to 20 students and several faculty slash researchers who showed up voluntarily, even though classes hadn't started yet. We're adding a Bergen location to the Hypertext Hotel, which is now officially not just one, but an international chain of hypertext hotels.

00:53:33

I also got to attend the opening of the Chimera process, ultra large AI artworks, which is on display through September 12th at the Bibliothek, the main library created by Dr. Jason Nelson and Dr. Alinta Krauth in collaboration with AI. And it was just extraordinary. The art is displayed on screens with sound. There's text and you can come listen, watch and think about it. On my first day in Bergen, I was looking for Dr. Redberg's office and I walked down the

00:54:04

third floor halls and took a look at all the writers, artists and scholars who hang their hats here. Y'all are like a who's who of experimental and electronic literature. And the joke was on me. Dr. Redberg's office isn't even on the third floor. I later learned he's on the second floor. But I was grateful I had that chance because I got to pinch myself.

00:54:34

These names, many of you I'd met before, but that I got to spend this time with and who are all here together for a shared purpose really inspired me. One more door. Dr. Joseph Tabby, without whom there would be no electronic book review, the EBR, among many other things. But that's one that is a peer reviewed scholarly journal with emphasis on the digital. And it's been going strong since its founding 28 years ago by Dr. Tabby and Mark America,

00:55:05

a professor of distinction in the century and a half old University of Colorado. Incidentally, he's also creator of the 1997 E-Lit landmark, Grammatron, an online hybrid of hypertext narrative, HTML, net art and digitally expanded cinema, which was selected for the 2000 Whitney Biennial, that eight biennials earlier than Porpentine's Twine Project.

00:55:36

The EBR was one of the first to devote a lasting web presence to the discussion of literature, theory, criticism and the arts. It remains the most prestigious to do so. And thanks to Joe, it calls this school home. All of you connected to the Center for Digital Narrative, students, staff, faculty and colleagues. I want you to think of this word. There's been a lot of magic along the line. These first 50 odd years of hypertext. And I don't think we've even squeezed the last from the tube.

00:56:08

In fact, I think we've got a long, wide highway to go. That's why on Monday, when I got to teach my first dedicated hypertext hotel workshop in 25 years, I chose to lead with writing by a process I call generative with guided props, time surprises and a little trance like music to try to conjure the

hypertext magic. And I think it worked. It's alive. I think it worked for Martin, Francesco, Scott and others.

00:56:38

If only. We keep grasping for the right words to express this. And I was trying to find something inspirational to include with this magic moment when I glanced down and looked at Borges again. And the original magician of magic realism offered me these words. Then I reflected that everything happens to someone precisely, precisely now. Centuries of centuries and only in the present do things happen.

00:57:12

Most people in the air, on the ground and at sea and all that really is happening is happening to me. I was good enough, I thought, but then he added for good measure when I looked over at the following page. This web of time, the strands of which approach one another, bifurcate, intersect or ignore each other through the centuries embraces every possibility. We do not exist in most of them. In some you exist and not I. In others I do and you do not. And in others we both do. I look at my students and try to remember someone in here may be a future Pulitzer Prize

00:57:46

winner. There are students who will be long listed and shortlisted, maybe for a Nobel and others with quiet careers who will benefit from the experience and advance the form of hypertext. I look at my students and I think about the diversity that's implied by hypertext like twine, weird femme fantasies.

00:58:17

All of you connected to the Center for Digital Narrative, students, faculty, staff and colleagues across departments, I'd like to turn the mirror on you and ask in the year 2033, what are one or two things you hope to be able to say sustained you and the excellent research going on at the Center for Digital Narrative? What about the next half century of hypertext? What can you do to keep it lit? What can we do to keep it inclusive?

00:58:48

Drawing a diversity of new writers, young and old, from across an entire spectra of race, ethnicity, gender identity, religion or lack thereof, people with physical or cognitive disabilities, who are drawn to hypertext for its accessibility. My students more than ever are identifying with the affordances of hypertext to include more. And I wish for you is that you make good choices and may they more often than not, much more

00:59:26

rather, lead to success than disaster. For now, I'm just glad to say that we find ourselves together in this possibility. Thank you.