This document contains the full text of the article and the appendix includes the transcripts of the videos.

Follow the Pathfinders: a Case Study Approach to Production, Use, and Readership on Scalar
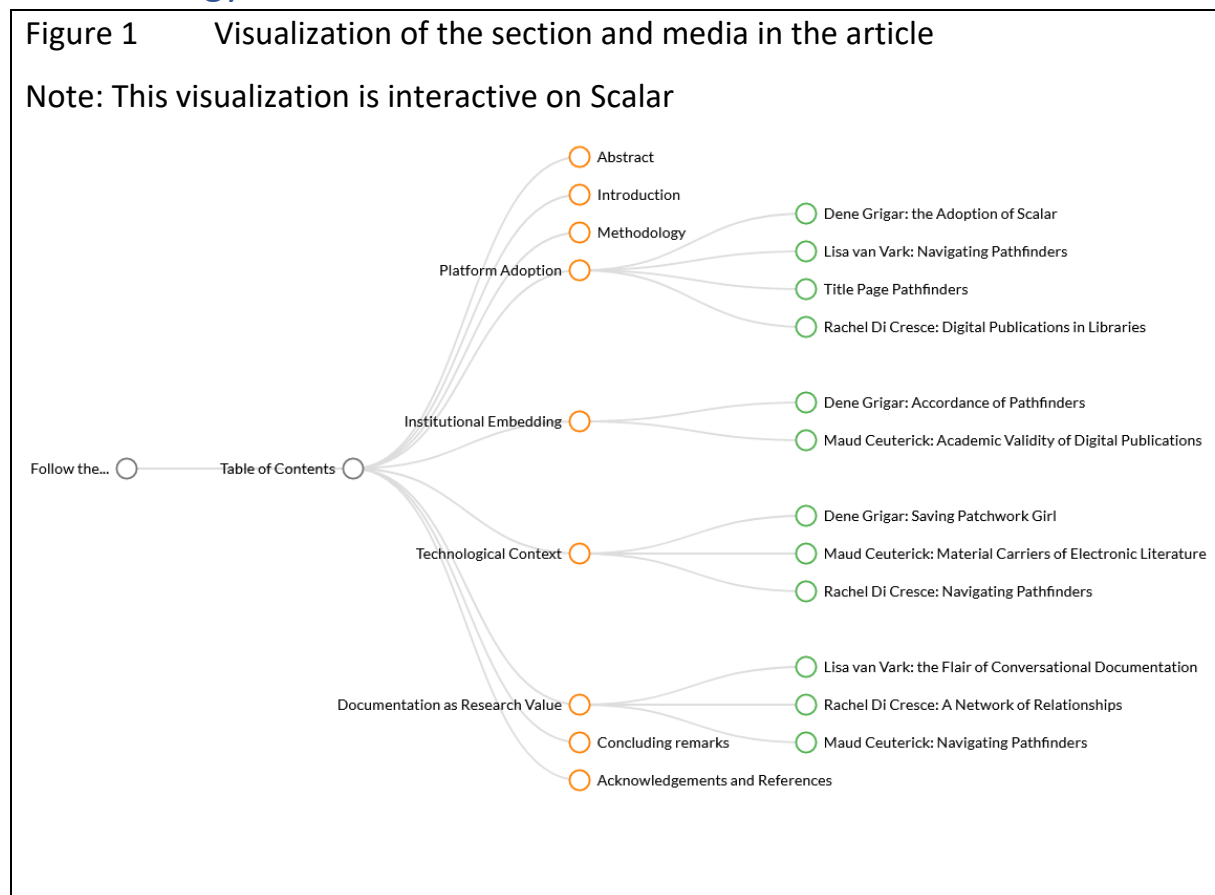
by Hannah Ackermans

Introduction

Right now, you are reading an academic article, peer-reviewed and published in *Hyperrhiz: New Media Cultures*. It is also a webpage produced in Scalar. How does it feel to read this on a webpage? Does it matter that it was done in Scalar, which is developed by the University of Southern California? Have you used Scalar before or is this your introduction to it? Are you reassured by the fact that it was published in *Hyperrhiz*? Do the paratexts of this article matter, whether you came from the journal's website or from a Google search?

All these elements might influence your expectations and evaluation of this article, before you even consider the content. Chances are that you have some experience with born-digital media in academia, whether it is reading academic blogposts or participating on social platforms used for conversations, self-presentation, and networking. All of these bring different affordances and challenges. [N. Katherine Hayles](#)' conception of "media specific analysis" has become a staple in the analysis of digital creative artifacts. Positing to "explore the dynamic interaction between the artifactual characteristics and the interpretation that materiality embodies" (72), Hayles uses media-specific analysis to interrogate the materiality of literary hypertext. But how are academic publications taking shape in born-digital formats? Although we tend to think about digital humanities as the application of quantitative methods to digitized material, other digital practices can impact scholarship considerably. There are a variety of born-digital platforms and publications which all require their own specific analysis. The 2013 born-digital book *[Pathfinders: Documenting the Experience of Early Electronic Literature](#)* (Grigar and Moulthrop) has become a canonical source in the field of electronic literature, which makes it especially fit for analyzing its production, circulation, and readership. The book was published on the platform Scalar and documents four classic works of electronic literature using a combination of what the authors have termed "Traversals", filmed interviews, and carefully described and photographed physical materials. Traversals are the method of filming authors who read their own work to provide context as well as readers going through the work while verbalizing their process of choices and interpretation. Afterwards, Moulthrop and Grigar also authored the print book *Traversals: The Use of Preservation for Early Electronic Writing* in 2017 which

connects strongly to *Pathfinders*. *Pathfinders* is positioned as a DH practice to "rescue" early works of electronic literature from both technological obsolescence and oblivion. They focus, then, on both the nature of the research subject and the research method. As such, the use of multimedia documentation is not decorative, but rather formative in the research project, which makes the born-digital publication necessary.

Methodology

Figure 1   Visualization of the section and media in the article

Note: This visualization is interactive on Scalar

Follow the Thing

In this article, I am presenting my case study research on *Pathfinders* as a way to understand the media-specificity of publishing and reading born-digital publications in academia. To get a well-rounded understanding of *Pathfinders*, I use a triangulation of methods called 'Follow the Thing', which I take from [Stephanie de Smale](#) who was inspired by Actor Network Theory, the Playful Mapping Collective, and Mike Craig and Ian Cook. The 'Follow the Thing' method is characterized by the researcher's consideration of the various stages of a research subject, following the 'thing' from conception to consumption. The stages in my 'thing' are Scalar, *Pathfinders* authorship, the *Pathfinders* book and *Pathfinders* readership. The 'Follow the Thing' method allows me to combine a central focus on 'the thing' with a necessary contextual approach. It is a continuous reminder to incorporate the various levels of production and consumption as manifested in the text. 'Follow the Thing'

can combine various methodologies, in my case including qualitative interviews, textual analysis, and literature research. From my research, I identified four themes that ran through each stage of 'following the thing': platform adoption, institutional embedding, the technological context, and documentation as a research value. In this thematic division, I draw on research from all the 'follow the thing' stages.

Traversals and interviews

This article is born-digital, as it was fitting to mimic the methodology of *Pathfinders* by doing Traversals and interviews in order to understand *Pathfinders*. During a Traversal, a participant (the work's author or a reader) is filmed while encountering the born-digital work while verbalizing their choices and interpretation of the work. Afterwards, the participant is interviewed about their experience with writing or reading the work. My first participant was Dene Grigar, one of the authors of *Pathfinders*. During the interview, Grigar mentioned that the number of hits on the Pathfinders webpage far exceeded the electronic literature community. For this reason, I chose reader participants with varying degrees of experience with electronic literature. Maud Ceuterick is a postdoc scholar in digital culture at the University of Bergen (Norway) with a background in film studies. Lisa van Vark has an academic background in comparative literary studies and currently works on the administrative staff of Utrecht University (The Netherlands). As the institutional embedding of the book was an emerging theme, I also opted for a Traversal with Rachel Di Cresce, a digital project librarian at the University of Toronto (Canada).

As I use the various Traversals and interviews throughout the article when they are relevant to the thematic structure, it is necessary to contextualize the method first. Due to COVID-19 restrictions, I opted for Zoom Traversals and interviews. Each participant received a protocol that outlined the structure of the Traversal ahead of their session. These protocols were adapted versions of the "Author's Traversal Protocol" and "Readers' Traversal Protocol" of *Pathfinders*. During the session, I introduced my research topic of born-digital academic platforms briefly. During the Traversals, the participants shared their screen while reading Pathfinders and narrated their choices, reactions, and reflections. Participants were free to set their own pace and read/watch the content they are interested in. After the Traversals, I interviewed the participants about their experience with the work and their ideas about born-digital publication.

Throughout this article, I include citations as well as various video fragments from the Traversals and interviews. The videos complement the article text by giving a richer representation of the experiences of *Pathfinders*.

Platform Adoption

The platform Scalar was developed at the University of Southern California specifically to accommodate humanities research. It has various features, including the options to create 'pathways' to encourage multilinear readings, hyperlinks to internal and external

Figure 2. Video "Rachel Di Cresce: Digital Publications in Libraries" In this video, Rachel Di Cresce outlines what it means for a librarian to have digital acquisitions in a collection.

content, a visualization tool for the various content types in each project, and embedded media pages containing source files and metadata. In the present article, I have opted for a linear path with videos and hyperlinks embedded. The hyperlinks are a means to provide easy access to context that an academic reader might find useful when doing any related research. At the same time, you can read this article without clicking on all these external hyperlinks to sources right away, just like you would not stop reading a print publication any time you came across a reference.

A small body of literature exists about Scalar. Some publications review the platform's various features, either singularly (Fenton) or in comparison to other platforms (Roman). Other publications concerned more widely with innovative academic publishing tools do not have full reviews but mention Scalar in passing (Davis et al., Dombrowski, Drucker, Green, Jones, Miller et al., and Morgan). Existing empirical studies of Scalar have been done within the context of digital pedagogy. Daniel G. Tracy and Elizabeth Massa Hoiem monitored students during a tutorial-based Scalar course in which students made both an individual and collaborative book project on Scalar. Scalar's learning curve was a main issue, but students successfully experimented with Scalar's features both on their own and as a group. In a separate study, Daniel G. Tracy follows faculty, staff, and graduate students about the benefits and challenges of incorporating Scalar in teaching. His article focused on platform usability and its intersection with writing expectations. Although several design and conceptual issues came up, Scalar was often regarded primarily as a gateway into digital publishing. Anita Say Chan and Harriett Green's study, again within digital pedagogy, combined Scalar with Easel.ly and Voyant visualization to layer various digital tools in coursework.

The platform choice and adoption present in existing literature also came up during the traversal and interview with Dene Grigar. Due to its use of video material, *Pathfinders* needed to be a born-digital publication. Grigar explains that a reason they chose Scalar was because it comes from a good university with good funding. When asked, librarian Rachel Di Cresce puts the longevity of a platform into perspective. Although it helps that a book is not on a proprietary platform or in a unique format, she points out that platforms "come and go every ten years" and therefore it cannot

relieve the "technical debt" of acquiring born-digital books. She explains that, as a librarian, she wants to be able to get digital publications down to their basic file form to ensure they can continue to exist without too much intervention. Grigar explains there were some setbacks with the software updates of Scalar, which led to repeating work when Scalar was in the process of releasing Scalar 2.0. Ultimately, however, Scalar 2.0 had more functionalities than the first edition, the most important of which, to Grigar, is that fact that it is responsive. In addition to this technical improvement that invites readership, Di Cresce also adds that libraries can play a role in making works known through course lists, LibGuides and exhibitions.

Figure 3   Video "Dene Grigar: the Adoption of Scalar" In this video, Dene Grigar describes the advantages and challenges during the process of publishing *Pathfinders* in Scalar.

Grigar also considers it a relatively intuitive platform, but now has trained Kathleen Zoller on her team to create the Scalar books. As a self-identified "metadata freak", Grigar appreciates Scalar's functionality to create URLs for each media item which includes lots of metadata and is findable on Google search, even though it takes a lot of time to produce those pages. A drawback was that she did not like any templates, so Will Luers was hired to design the book in CSS. A similar issue also came up in Tracy's study, as participants were disappointed that the out-of-the-box systems did not look as nice as the customized demo books. For reference, the present article does not have any custom CSS or JavaScript. You are reading on the out-of-the-box system, with the simple addition of the 'background' image you see at both sides of the page. This geometric design matches the background of the video thumbnails to create coherence within the article's design. Design is certainly an important element of a platform, as Grigar notes that a thing she and co-author Moulthrop liked about Scalar is "the way it looked bookish, we wanted it to be scholarly".

Bookishness

Figure 4   Screenshot of the title page of Pathfinders
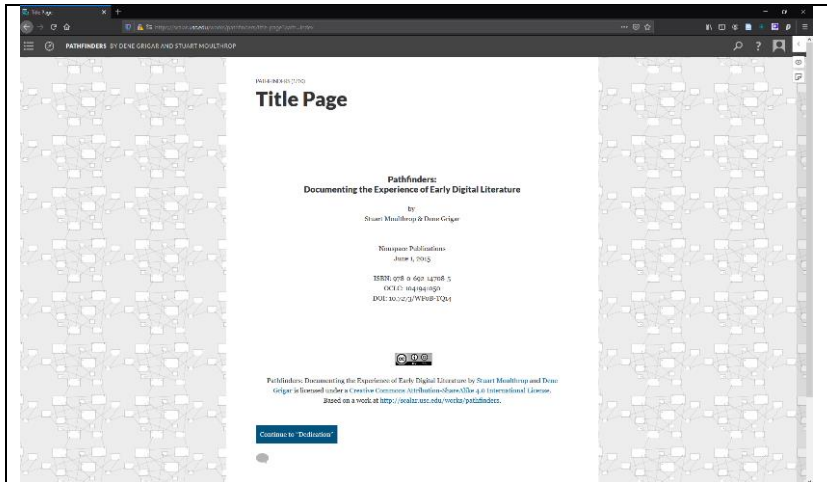
Although not a "fetishized focus on textuality and the book-bound reading object" as Pressman defined "bookishness", *Pathfinders* does remediate the physical book. As such, *Pathfinders* does contribute to "rethink[ing] the ways in which we relate to books as objects and media forms" (Pressman). This interpretation of bookishness is immediately clear in a media/textual analysis of the work. Despite the absence of "firm paratextual policies" in born-digital works (Desrochers and Tomaszek), the paratextual elements that are part of the book itself, termed "peritext" by Gerard Genette, emulate characteristics of a physical book. The book has a front page which one could compare with a book cover. The reader is then prompted to "Begin with 'Title Page'", which shows a familiar title page with all the elements you would expect on a title page, such as authors, publishers, date of publication and an ISBN. The path continues with a dedication page and then the Introduction. Starting at the introduction, the digital nature becomes clear with a video introduction to the project as well as a written introduction underneath. The introduction already includes various links to other pages and media and ends with a table of contents that gives the option to begin a new path about *Pathfinders* or to start with the first electronic literature work in the book, "Judy Malloy's Uncle Roger". Of course, the reader is not limited to these options, as a button in the top left corner of the website reveals the full table of contents of the book including all the works and subsections.

Figure 5   Video "Lisa van Vark: Navigating Pathfinders"
In this video, Lisa van Vark navigates *Pathfinders* for the first time, figuring out the book's navigation and engaging with the Scalar visualization tool.

Moreover, the Scalar search field indicates "Search this book…", which led reader participant Lisa van Vark to remark "It's nice that they call it a book". Van Vark has significant troubles navigating the work at first, referring to the book as "a maze" and exclaiming that "there are so many options", which reflects earlier findings about Scalar's initial learning curve. Van Vark is brought around, however, by the visualization tool. She reads the instructions and understands how the nodes relate to the pages she has visited. Still seeing it as a literal navigation, she explains that the tool helps her "visualize it, literally, to see where you are". The features of *Pathfinders* are adoptions of the Scalar format. To

readers unfamiliar with Scalar books, the differentiation between Scalar and its use by specific authors can be difficult. During the interview, Van Vark inaccurately considered the visualizations as part of *Pathfinders* specifically rather than the structure of Scalar, noting that she regarded Scalar in metaphorical sense as "the paper that the book was printed on". She further relates *Pathfinders* to physical books by saying that having the annotation and comment functions "brings the world … brings the context around the book into the book itself". Rather than a custom-made platform, *Pathfinders*' use of Scalar's features can serve as a blueprint for other research projects and other fields as well.

Deciding to write the present article using Scalar, then, was also a point of reflection. Do I want to risk the 'technical debt' that Di Cresce mentioned, in which software updates will inevitably bring about more work for the editors of the journal in the long-term? What features of Scalar will be key in the composition of the article? How familiar will my readers be with other Scalar books: will their prior experience ground them while reading this article, or alternatively, will the - to them - unfamiliar format aid reflection on the platform? The adoption of platform then, is essential for practical reasons on the levels of production, textual, and readership, but how is it regarded by the academic community?

Institutional Embedding

The reasons for choosing Scalar for *Pathfinders* included the institutional or academic context of picking a platform that was developed by a university and maintains a certain status among born-digital platform in academia. When asked about how the status of *Pathfinders* compared to the

Figure 6   Video "Dene Grigar: Accordance of Pathfinders"
In this video, Dene Grigar explains how *Pathfinders* circulates in academic spaces and gained respect over the years as a born-digital publication.

physical book *Traversals*, Grigar explains that having a book published by a high-standard academic press "has always been the brass ring for academics". *Pathfinders*, however, has also gained weight, or "accordance", in the electronic literature and DH field, as Grigar points out: "we accord respect, we accord authority" but "it was not automatically blessed with it" the way that a book from MIT Press, *Traversals*' publisher, is. The fact that the research is funded by National Endowment for the Humanities has helped the academic validity. Grigar notes that the book has "been indexed by a whole bunch of different organizations" and it has gotten almost 50.000 hits since its publication eight years ago. This is an upward spiral as the many hits has also led to *Pathfinders* ranking higher in Google's algorithm. When searching for the four works of electronic literature discussed in the books, *Pathfinders*' results are among the first, especially in the image section.

Figure 7   Video "Maud Ceuterick: Academic Validity of Digital Publications"
In this video, Maud Ceuterick contemplates how the medial form affects the role of born-digital publications in academia.

Prior experience with various born-digital publications also influences readership. Reader participant Maud Ceuterick explains that "I would never imagine myself reading a full website or not even a full webpage, well, yes, it depends on if it is a literal story or a story that has a start and an end, then yes, I would read it." When prompted to talk about *Pathfinders*' academic value, Ceuterick states that "I don't think that the format, I mean, the platform changes its validity for me". Coming from film studies, she compares *Pathfinders* to video essays which are increasingly seen as more valuable in film studies, but "the thing is, I haven't really seen, not yet, people referencing video essays as much for their academic content". A possible explanation Ceuterick offers is that video essays rely more on audience interpretations, unlike the conventions of academic articles which require the author to guide the reader more directly. When asked to imagine citing *Pathfinders*, she contemplates the different ways citation might be possible, as the work arguably contains specific pages and authors to be cited. As such, the media specificity is linked to the institutional embedding. Van Vark also reflects that she is afraid other people might not take it as seriously as a physical academic book as "a website often feels less of an authority", but that she considers the source more valuable because it gives more information. For evaluating the academic status, she would look at the authors, the publisher or owner, as well as privacy measures and validation for the interactive elements of Scalar such as the comment function. In her reflection on how to cite *Pathfinders*, she does not think "website" would be an apt description as a source, but "I'm not sure what MLA says about this". Both reader participants' responses, then, indicate a tension between media experience and perceived institutional authority.

And institutional embedding is not simply an attribute of circulation and readership either, but rather integral to the production from a project's inception. Grigar explains that the four electronic literature authors featured in *Pathfinders* were chosen for a mixture of personal, academic, and funding reasons. For every author, there needed to be a compelling reason why this author in particular needed to be included in the project. The dedication at the beginning of the book, "For Anne Balsamo, whose belief in this work made it possible", also reflects this element, as Anne Balsamo was the person to visit Grigar's lab and urged her to write a grant proposal to do something with the lab. This strong institutional genesis is important to Grigar as "this is all about story, this is about lore". Rather than detached observers, the authors are engaged members of the academic community. *Pathfinders* makes explicit the various steps in which the research project is contingent on academic and institutional embedding.

Accessibility

Using a born-digital platform with multimodal elements brings about issues when it comes to accessibility. Physical books have issues of accessibility in terms of assumed dexterity and vision– as [Richard H. Godden](#) remarks "a book sitting on my shelf might as well be a continent away" (93) – but I will focus specifically on access in born-digital publications. The Scalar feature of creating paths can contribute to accessibility as paths can divide a wealth of multimedia sources into less-overwhelming separate pages. This is one of the advantages of creating the present article as a Scalar path rather than one webpage with many videos on it.

When asked about accessibility features such as the lack of captions for the videos, Grigar readily agrees, explaining "we were planning to do transcripts, we just ran out of money". This is a familiar problem in academia, enhanced by Grigar's ethical rule that in her lab "nobody works for free". Di Cresce also questions the accessibility during her Traversal, but recognizes the labor involved in this as well. This is an issue within academic funding structures that should be addressed on a systemic funding level.

This lack of financial support affects both the accessibility for disabled people and the research itself. A transcript and captions of all the video content would make the videos more accessible to Deaf/HoH people, people for whom English is not their first language, as well as people who are new to the field and might not pick up on all the terminology and names in audio format. Additionally, transcripts would make citation more straightforward. In the case of *Pathfinders* it can be unclear during some of the Traversals whether the author/reader is reading out loud or giving their own comments. This alternation can be presented in transcripts. Especially for works that present significant parts of their sources in the form of video and audio fragments, other scholars and students get the opportunity to research the data from different perspectives, including researching the sources through discourse and linguistic analysis. As such, a transcript adds a layer of valuable information as well as ease. Accessibility should not be the sole task of individual research groups, but a sense of accountability shared with the platform and embedded media platforms to highlight accessibility features. The reason this responsibility can and must be shared has to do with the technological context.

Technological Context

Various elements of the technological configuration of *Pathfinders* have already come up throughout this article. Rather than a self-contained book, the media are embedded from different platforms such as Vimeo and SoundCloud. Di Cresce's initial navigation is a good example of the bricolage of media

Figure 8   Video "Rachel Di Cresce: Navigating Pathfinders" In this video, Rachel Di Cresce navigates *Pathfinders* for the first time, focusing on the various Scalar elements and *Pathfinders'* use of multimedia and hyperlinks.

included in the book. She investigates the book's pages and media files and determines that the videos are hosted on Vimeo. Additionally, she ends up on various external websites by using the hyperlinks, which allows her to see more information, but raises the issues of getting back to *Pathfinders* again when she leaves the book.

In the opposite direction, people can also encounter parts of the book outside the context of the book itself, for example because images show up prominently in search engine results. The whole work is published under the Creative Commons (Attribution Share-Alike) license and as such anyone can use the embedded media. Although all publishing scholars must engage with open access choices – whether it is picking an open access journal, having the institution or researcher pay for the open access rights, or accepting the article is limited in availability – the case of layered media in a born-digital project adds an urgency. When premium accounts on platforms are used to embed videos, these accounts can be linked to institutions or individual researchers. Although not the case for *Pathfinders* or the present article, neither of which use institutional subscriptions for video publication, this could affect the intellectual property if accounts become unavailable when subscriptions run out, for example when researchers switch institutions. Keeping a work alive, the main objective of the Pathfinders project, then, becomes increasingly urgent with layering and embedded media from different platforms and accounts. The *Pathfinders* book is, then, best understood through the concept of the "metainterface", which "concerns the ways in which the interface reflects new perspectives as well as new ways of perceiving, organizing, and thinking brought about by media technological changes" (Andersen and Pold 23). Christian Ulrik Andersen and Søren Bro Pold explain that

> One may argue that the layered structure of the computer (from assembly language to graphical user interface) makes any interface a metainterface, but what is specific about the current interface paradigm is the universally dispersed, omnipresent nature of this. As such, it is an interface to the many hidden interfaces and clouded exchanges of data and signals in a series of platforms that connect the everyday use of apps on a smartphone to large-scale, globally networked infrastructures. (10)

There is a plurality of interface layers available in *Pathfinders* which together affect the conception, media text, and readership of the book.This metainterface paradigm was not at hand when the four works of electronic literature in *Pathfinders* were created. In fact, Grigar and Moulthrop explain that "a Traversal must take place on equipment configured as closely as possible to the system used to create the work or on which the work might have been expected to reach its initial audience" (7). This type of fidelity no longer exists in the same way as pieces of media are often made specifically to function on many different machines. The responsiveness of Scalar 2 is a prime example. The embedded fidelity in the layered interface of *Pathfinders* creates a new type of source for reading electronic literature that provides a rich context for historical works while utilizing the contemporary characteristics of the metainterface.

Figure 9   Video "Dene Grigar: Saving Patchwork Girl"
Grigar recounts a story of Shelley Jackson's hesitation to participate in the project to demonstrate how the rescue mission brings up questions of the author's views on preservation.

The works discussed in *Pathfinders* were part of an explicit "rescue mission" to make the works available. Grigar recounts a story of Shelley Jackson's hesitation to participate in the project to demonstrate how the rescue mission brings up questions of the author's views on preservation. Regarding the videos as preservation assumes the videos have a certain status as a source. When asked if the project is a primary or secondary source, Grigar explains that it started out as being a secondary source, but over the years, the continuation and development of Traversals has "taken an art form in and of itself", explaining "I don't mean to step on the artist, but I think it has taken its own art form. It is performative art, and specifically the Traversal". When the work is potentially available, Grigar hopes that it will draw more readers to the original works. Ceuterick imagines that *Pathfinders* will be read both by researchers and by readers who want to know more about their favorite work, and she regards it a secondary source. I have also assigned the Traversals to students of electronic literature courses when the work was not readily available to them. This fits within the larger conversation in the field of electronic literature in which documentation of works becomes a primary source when works become unavailable. Van Vark comments: "I might prefer not to see it as primary/secondary at all, but if I had to choose one it would be primary". She regards as reading *Pathfinders* is "a hub, a sort of point where all things connect, can you then think of primary and secondary?" Di Cresce as well sees this combination, with the *Pathfinders* author Traversals and interviews as primary sources and the accompanying text as secondary. Through the variation in media, *Pathfinders* combines the clarity and systemic approach of a database with a cacophony of voices that give a mosaic impression of the works.

Documented Experience

In addition to the videos, *Pathfinders* contains pages of photographs of all the physical objects of works. These material carriers are essential to understand how people encountered the work when they were first created in their technological context. Each photograph is accompanied with an ekphratic description of the subject. Blind or low vision readers as well as younger (and future) scholars can benefit from the descriptions of the technologies. As a younger scholar myself, I value the descriptions of, for example, Hypercard, which which I do not have any experience.

When asked to look at the page "Photos of the Box, Floppy Disks, CD and Other Contents for John McDaid's *Uncle Buddy's Phantom House*[sic]" at the end of her Traversal, Ceuterick initially exclaimed:

> It's funny because I wouldn't expect that kind of documentation for an electronic literature work, but I guess there is a CD there but there is a whole lot of manuscript and handouts, and even a book, is it a book? It looks like a traditional book. I mean, it's a bit like music albums, they have also this documentation that we look at – well, when we had music CDs.

Seeing the page, then, immediately brought up surprise as well as her own memories with physical media carriers. While reading the introduction of the page, she stumbles upon the word "registration card". Surprised, she scrolls down though the images until she reaches a photo of a card that reads "Please Register Here" and she reads the accompanying text under the heading of "Registration Card, Back" to find out why it was used. When asked, she explains that the documentation is valuable to make it possible to "imagine the full experience". Van Vark is initially surprised by the details of the descriptions, such as the price tag on the box, but then reflects that "if the media also contributes, if that all makes up for the story and the work, then that does matter". Similar to Ceuterick, she says "it's nice that it's so detailed, like every step of the experience".

Figure 10   Video "Maud Ceuterick: Material Carriers of Electronic Literature"
In this video, Maud Ceuterick follows her curiosity in learning about the material carriers of pre-web electronic literature.

The four works were released in various versions due to artistic and technological updates. The authoritative version of Judy Malloy's *Uncle Roger*, the first case study in *Pathfinders*, was published on the WELL. Yet in total, there are six versions identified on *Pathfinders* which includes for example the web-based version still available today. Grigar explains that there was even an earlier physical version that

she identified after *Pathfinders* was published. On *Pathfinders*, the versioning is represented textually in lists on the pages of each work, but also made it into the video fragments in which we see Grigar asking the authors pointed questions about the exact versioning and volumes of the work, ending with "I just wanted to get that down and I definitely want it on video" in "Bly Interview, Part 6, "*We Descend*'s Impact"". This highlights that versioning the works is a research activity in itself.

The use of links and multimedia in the present article also demonstrates the functioning of the metainterface. For example, I chose YouTube as my video platform specifically to be able to add responsive closed captions, and I was lucky that Scalar embeds YouTube videos with the captions. My videos show a layer of documented experience with the *Pathfinders* book itself, highlighting the role of reader experience in academic texts. Additionally, I added external links when available for the ease of the interested reader. Together, the technological aspects of *Pathfinders* show that documentation is a research value.

Documentation as Research Value

In the *Traversals* book, Grigar and Moulthrop explain "We come at our work in digital preservation with the idea that 'nothing comes from nothing' (*ex nihilo, nihil fit*). Every artifact has a context: a past, present, and intended future [...]

Figure 11   Video "Rachel Di Cresce: A Network of Relationships"
Rachel Di Cresce reacts to the networked nature of *Pathfinders* from the perspectives of useability and representation of knowledge.

These innovations don't come from nowhere. Directly or indirectly, they belong to a history of artistic development" (229). Each artifact contains a whole process as well as that each artifact is but one step in a bigger process. Élika Ortega comments in her book review of Pathfinders that the learning process of the project is visible in the book. When I bring this up during the interview, Grigar explains that she always wants cameras and cables to be visible rather than hide the technical aspects of the work and as they are part of the reality of the process. The book, then, is the material manifestation of the culmination of all the research, including technical decisions and influences. Di Cresce notes that projects like *Pathfinders* demonstrate how much information there is around cultural objects that place it in contexts. This "web of material" can be hard to replicate. She later argues that Scalar effectively represents this complexity through the visualizations tool. She explains that humanities scholars "know that there is information all over the place that are all related to the same thing and you're going to make those connections". The visualizations tool as well as all the internal and external links to source material, then, represents thinking in networks and "new ways of navigating through it".

In Traversals, the authors explain that "we are haunted by a condition we call the

Sappho Syndrome: the disappearance of literary works to the extent that all that remains are fragments and references to them by others." (23). The *Pathfinders* book and all the Traversal practices afterwards can be understood as a way of countering this Sappho Syndrome, as Grigar exclaimsin our interview: "we don't know, we have no video capture of [Sappho] performing! But we do have video of Bill Bly performing *We Descend*".

Figure 12 Video "Lisa van Vark: The Flair of Conversational Documentation"
In this video, Lisa van Vark watches an interview fragment with Bill Bly (unfortunately, due to Zoom settings, that video's audio was not recorded) and speaks about the value of the conversational nature of the interview.

Some of the videos also go beyond just documenting the individual work and seem to document the early electronic literature community. This conversational style of hearing authors talk about their fellow writers gives an impression of the early community and in doing so aims to counter the pitfall of canonization through documentation. Although choices need to be made about which works to include, this informal approach resonates Grigar's adamance not to be elitist or a gatekeeper. Readers have varying responses to these videos. To Ceuterick this conversational nature does not add enough value. Because we have grown "used to content that moves fast and interviews and things that have a lot of content in a short period of time", she explains unless she "was a researcher really interested in that kind of work, I would probably not go through all the interviews". Van Vark has the opposite experience, reflecting on the "coziness" of the conversational videos, because "definitely, it gives you a sort of feel for a thing, sort of a context in a way, context by minor details that might not mean that much. Although, if you write a traditional book, I think you would not put this in, but it gives more flair, more, what do you say, it gives more character to what you are reading". Prior experiences with the medial modes, then, attach expectations to the types of information in the book. In *Pathfinders*, foregrounding the documentation process as a research value provides potential counter-narratives to the history of electronic literature by showing what might have been left out in other publications.

Although it has become a household name, *Pathfinders* is by no means an island. Since the book was published eight years ago, the *Pathfinders* methodology has become a pillar of its own. The Traversal practice combined with interviews has been developed further in the born-digital book series *Rebooting Electronic Literature: Documenting Pre-Web Digital Media*, by Dene Grigar et al on Scalar. The practice then transformed into live Traversals with an audience present, during various conferences. With the COVID-19 pandemic, the practice has turned digital, with public Traversals on Zoom in which anyone can join in the audience. Now that people cannot be brought into the lab to use the original machines, Grigar acts as the "secretary" who does what the artist asks. Grigar must wear a face mask at her

institution, but she keep her camera off in the recording to prevent it from being "marked" as a "COVID book". Overall, the practice now includes characterizing social and performative aspects that foreground the documentation process as an important research value.

When asked about the influence of the *Pathfinders*, Grigar tells that "just this week" someone had contacted her about doing a crawling of Turbulence and someone wanted to do an analysis of Flash. Élika Ortega is also doing research on the manual included in electronic literature works, as "the manuals tell a story" of what people's horizon of expectation was when the work was first published. The extensive, 'agnostic' approach to documenting seemingly minor details provides a wealth of sources for other researchers.

Analogies

Although my reader traversals show the readers' first encounter with *Pathfinders*, they naturally have prior media experience that they use as their lens to navigate and interpret the book. As a reader, Ceuterick situates *Pathfinders* as a DH project as it combines both digitized and born-digital

Figure 13   Video "Maud Ceuterick: Navigating Pathfinders" In this video, Maud Ceuterick navigates *Pathfinders* for the first time, making sense of the work in relation to prior experiences with different media.

materials. When watching the readers' Traversals, she assesses "so, it's a database, right, (…) that gathers experiences" and while watching a reader's Traversal she notes that it reminds her of the streaming platform Twitch. Although initially disappointed to not experience the original works by themselves, she thinks other fields could both take inspiration from both the structure of the work as well as the Traversal practice in which you can see other people experience artworks. Van Vark also makes various unprompted analogies throughout her reading, including that it is "like a hub", "like a maze", and "like a candy shop where you can just pick things and continue on exploring and reading". In addition to these analogies, the present article also provides a parallel for readers to make sense of the *Pathfinders* book through the Scalar platform and Traversal method. Additionally, my video documentation also situates this article in the context of COVID-19 restrictions as I visibly use Zoom rather than visiting the participants. These parallels in understanding the *Pathfinders* project reflect the main value of documentation, the storing of relevant information across various media.

Concluding remarks

Publishing academic work on born-digital platforms does not simply produce what could have been written on paper. Rather, the media specificity of works influences the production, text, and readership. While media specific analysis has become common place in various studies of creative digital artifacts, analysis of born-digital

academic publications could enhance the understanding of these particular texts as well as contribute to a more intricate application of media specificity. Academia's customs of producing and circulating knowledge include ways of writing, citing, reviewing, publishing and reading. Referencing styles, for example, can be interpreted as indicators of quality and use of jargon makes publications comprehensible to an in-crowd. As publication is a primary and principal mode through which scholars get to know each other's works and build their field, scrutiny of their medial mode is necessary to understand the field.

I have investigated the processes and influences of media specificity in the intellectual intervention of the book project *Pathfinders*. Rather than an isolation of the media-text itself, my contextual 'Follow the Thing' approach allows me to reflect on media specificity as implemented within a medial and academic network. A platform such as Scalar has various affordances to accommodate multimedial and multilinear research, allowing both authors and readers to familiarize themselves with a common structure of research and publication. At the same time, the users can choose which elements to adopt and appropriate to suit their needs and ideas. The institutional embedding influences how authors choose and approach their medial content as well as how the book is circulated and read. Readers consider academic validity through a combination of their evaluation of content and their other experiences with born-digital publications. What follows is the technological influence in the form of the "metainterface" which extends the book beyond one self-contained text. Readers can cross to relevant external websites using the hyperlinks or encounter elements of the work through other channels before entering the book. This inevitably leads to differences in interpretations by different readers, which is a practice that the explicit role of different platforms highlights and invites. The central focus on situational and networked documentation foregrounds the value of documentation and presentation of sources as research. The spontaneity and interpretation are integral parts of what is presented as a documentation of a work.

Just as *Pathfinders* represents, in Di Cresce's words, a "network of relationships", so the book's medial mode itself can only be understood within a network of relationships. Media specificity is deeply tied to production and use of platforms, the institutional embedding, the technological ecology, and the promotion of research values. To discover how a medial mode influences (academic) media-texts, follow the thing through every stage of its production and circulation.

Acknowledgements and References

Acknowledgements

References

Andersen, Christian Ulrik, and Søren Bro Pold. *The Metainterface: The Art of Platforms, Cities, and Clouds*. MIT Press, 2018.

Chan, Anita, and Harriett E. Green. "Practicing Collaborative Digital Pedagogy to Foster Digital Literacies in Humanities Classrooms." *Educause Review* (2014).

Davis, Dána-Ain, and Christa Craven. "Feminist Ethnography." *Companion to Feminist Studies* (2020): 281-299.

Desrochers, Nadine, and Patricia Tomaszek. "Bridging the Unknown: an Interdisciplinary Case Study of Paratext in Electronic Literature." *Examining Paratextual Theory and Its Applications in Digital Culture* (2014): 160-189.

Dombrowski, Quinn. "Drupal and Other Content Management Systems." *Doing Digital Humanities: Practice, Training, Research* (2016): 289-302.

Drucker, Johanna, and Patrik Svensson. "The Why and How of Middleware." *Digital Humanities Quarterly* 10.2 (2016).

Fenton, William. "Scalar". *PCMag*, May 30, 2013. Web. https://in.pcmag.com/web-publishing/73740/scalar

Genette, Gérard. *Paratexts: Thresholds of Interpretation.* Cambridge University Press, 1997.

Green, Harriett E. "Publishing Without Walls: Building a Collaboration to Support Digital Publishing at the University of Illinois." *Fire!!!* 3.2 (2017): 21-36.

Grigar, Dene M., and Stuart A. Moulthrop. *Pathfinders: Documenting the Experience of Early Digital Literature*. Nouspace Press, 2015. https://scalar.usc.edu/works/pathfinders/index

Grigar, Dene M., Nicholas Schiller, Mariah Gwin, Katie L. Price, Veronica Whitney. *Rebooting Electronic Literature: Documenting Pre-Web Born Digital Media Volume 1.* Nouspace Press, 2018. https://scalar.usc.edu/works/rebooting-electronic-literature/index

Hayles, N. Katherine. "Print is Flat, Code is Deep: The Importance of Media-Specific Analysis." *Poetics Today* 25.1 (2004): 67-90.

Jones, Jason. "There Are No New Directions in Annotations." *Web Writing: Why and How for Liberal Arts Teaching and Learning* (2014): 263-274.

Miller, C., Swift, A., Kramer, A., and Hackenberger, B. "Beyond the Sandbox: Student Scholarship, Digital Citizenship, and the Production of Knowledge" In A.S. Jackson, C. Pierard, and S.M. Schadl (Eds.), *Scholarship in the Sandbox: Academic Libraries as Laboratories, Forums, and Archives for Student Work* 2019, 291-329 doi:10.21221/S210.21221/S2

Morgan, Paige C. "The Consequences of Framing Digital Humanities Tools as Easy to Use." *College & Undergraduate Libraries* 25.3 (2018): 211-231.

Moulthrop, Stuart, and Dene Grigar. *Traversals: The Use of Preservation for Early Electronic Writing.* MIT Press, 2017.

Ortega, Élika. "Preservation Paths. A Review of Pathfinders: Documenting the Experience of Early Digital Literature by Dene Grigar and Stuart Moulthrop." *Digital Literary Studies* 1.1 (2016).

Pressman, Jessica. "The Aesthetic of Bookishness in Twenty-First-Century Literature" *Michigan Quarterly Review* 48.4 (2009).

Roman, Gretta Tritch. "Scalar and Omeka." Journal of the Society of Architectural Historians, 77.1 (2018): 122-123.

Smale, Stephanie de. *Ludic Memory Networks: Following Translations and Circulations of War Memory in Digital Popular Culture.* Diss. Utrecht University, 2019.

Tracy, Daniel G. "Assessing Digital Humanities Tools: Use of Scalar at a Research University." *portal: Libraries and the Academy* 16.1 (2016): 163-189.

Tracy, Daniel G., and Elizabeth Massa Hoiem. "Teaching Digital Humanities Tools at a Distance: A Librarian-Instructor Partnership Integrating Scalar into a Graduate Distance Course." *Association of College and Research Libraries* (2017).

Appendix

Figure 2   Video "Rachel Di Cresce: Digital Publications in Libraries"

RACHEL: So to me, I have no qualms with --, to me, it's like, yes, it's an academic output, therefore it's an academic, like, acquisition. It's a book, it's a whatever, however you want to call it, like, whatever you want to call, it's, like, still the thing. If you want to have an analog thing to call it, whatever, but it still is an academic work, it's just, I guess, which is not something we're used to seeing, but I don't think it changes this its status in any way. I think it creates potentially more work for us to deal with, but it's it's still an academic work.

HANNAH: Can you talk a bit more about what type of work it costs for you as a librarian?

R: Oh, well, it's technical debt to put it bluntly. I mean, you've taken something that currently works with current systems and all that kind of stuff, formats, and whatever, and you're taking on essentially a ticking time bomb, like at some point you you can't just it's not a book I think I have it I put on the shelf I can forget about it now, it's cataloged so it can be found, I don't have to worry. This is -- you're taking on, you're accepting something that you're gonna have to continually return to to ensure that you're still being able to provide access that it doesn't just forever have access it actually requires you to go back and to make sure that it's accessible and it's sort of useful and usable and findable and all those kinds of things because it's just not a guarantee, it's not as simple, I guess, as an analog object that you could just place a catalog put on your shelf and you like, we have it, it's there, it will always be there. I might digitize it and put that in something but, like, that'll also kind of always be there, even though it will require updates and things like that, but we kind of have a system for that that's fairly, fairly robust now. But, yeah, it just that would be the only, I think, the only thing I could think of is, yeah, you're just paying back technical debt every so often.

H: Do you think that like formal characteristics, like which platform it has and the fact that it has an ISBN, that that contributes to seeing how sturdy it will be?

R: I think that, yeah, how sturdy it will be? yes, yes and no, because we're not you know I can't tell if see the future. So yes and no, so I can say that, I can say that, how do I want to say this? So the way I would approach something is: can I get it down to its most basic file format that I know will live longer than a proprietary one or a special one. Now, if we're talking about these kinds of works that might not be possible because part of the thing might be the fact that it's a very specific format or a very specific software that needs to be used for it or whatever. My, yeah, my whole thing would be the concern would be how can we get it to the point where with minimal intervention it can carry forward into the future and I'm sort of not really swayed by platform. I'm not really swayed by that kind of stuff because those come and go every 10 years, let's say, and so the only things I would keep my eyes out for is that it's not a proprietary or like special format that doesn't really exist elsewhere and that I then would love it if the data and and everything I could be confident that I could move it in a lossless manner from one system to the next. That doesn't mean automatically but just that it would be less of a concern to do that. So something that was a little bit, that was a little bit more future proof. I use that lightly because *impossible* in a grand scheme of things but, yeah, I think so bad so I guess if it wasn't a platform that no one had ever heard of and nobody else ever uses then, yes, it would concern me, but just because it's in a big one that a lot of people use doesn't really mean that I'm gonna, it's gonna be easy for me to keep for a long time either so kind of I stay away from that sort of line of thinking.

H: Do you think in addition to like the very technical side of keeping things in circulation how do you see the role of libraries of keeping it in circulation in terms of

something that's published online is actually being read?

R: Like how to let people know about it or?

H: That people know that it exists but maybe also if we think back to Dene's way of like "it's a new acquisition at Stanford" that sort of grants authority

R: Sure, yeah.

H: In that way, libraries can play a role in institutional embedding of new forms.
R: Right, yes, of course, so, okay, so I'm not, like, I don't do liaison work or collection work, so some of this is gonna be talking out of school here because how I would imagine it being is that, people, we create, you know, we create course lists, we create, you know, libguides, all these different kinds of resources for students and teachers and like scholars alike to let them know the types of material that we have available at the library. I don't see why you wouldn't consider this an equal part, like, if it's there next to a manuscript, next to a, next to a video next to whatever, like, it's they're all considered academic, I think, to me the indication is these are all considered equally viable academic resources that you could use in your studies in your whatever, I think, if, What else you could also do would be if you have enough of these things as you get kind of more more of them you could also do things like: you have a permanent online presence of some sort: exhibit or whatever that is in which you catalog and and highlight these different types of academic materials that you have. So that it sort of gives credence again to the fact that they are academic materials. We have them, they're usable, we want you to use them, and I think you -- there is also, like, when you do that, there's interesting things can happen like they can often get paired with like analog objects and then you can have a sort of hybrid analog digital exhibit or analog digital collections that people can access in different ways and I think that, kind of, just seamlessly embeds them into the already, kind of, I guess, long-standing tradition of alike academic resources that we have at the library.

Figure 3   Video "Dene Grigar: the Adoption of Scalar"

HANNAH: How did you use Scalar's affordances and did you appropriate them for your needs?

DENE: So Scalar is an out-of-the-box easy, easy template, right. Anybody can figure it out pretty quickly. It's not as intuitive as WordPress, you can't just direct images. Every item that you put into the Scalar book is its own URL, right.

H: Yes

D: And it's totally searchable in Google which is why we're showing up so much in Google. And so findable, which is great. That's a sexy part of of Scalar, but it means you have to put metadata in for every object and that takes time and I'm a metadata freak, because it's a documentation thing, right.

H: yeah.

D: It tells the story, so it takes a lot of time to put an image in, you know, and all of that stuff. So I like that part of it but I don't like anything that's a template, designwise. So what we did is we brought in Will Luers to come in and create our own template, which is beautiful, right, he did a beautiful job in Pathfinders. So the CSS is all Will Luers, going in and hand-coding all that stuff and making it different. At the time Scalar 1 was prominent. When we started this project, Stuart [Moulthrop] and I, Scalar 1 is what we were imagining. Then Scalar 2 came out and that was a responsive Scalar. So just to tell the story, and I don't mean to despair Scalar but they were in the midst of implementing this Scalar 2 platform and it had bugs, so many bugs. And so I would spend all day long getting my stuff into the site and it looked really good, I go to bed at night and it looks so nice next morning I'd open up Scalar it's all gone.

H: Oof, yeah.

D: gone, everything, all the -- everything--, and then I was also, on top of CSS that Will was doing, I was hand-coding my own stuff, highlighting things, and adding pictures, and all, that was all gone.

H: Yeah, because you couldn't save it anywhere else.

D: It took Stuart and I twice the time to do that book because of that. That said, Scalar 2 is beautiful and I'm glad we put it in Scalar 2.

H: Do you have affordances that you lost from 1 to 2 or was it about doing it again?

D: More, we got more. This became responsive which was great. I mean that means it's going to be indexed by Google which was important because, you know, Google's not going to index things that are not responsive. It had more visualization tools but we didn't use them. But we liked the way it looked "bookish". We wanted to be scholarly, we wanted this to be a DH project because I do see e-lit as a component of DH.

H: yeah.

D: And this is the way to get this out to the DH community, right, and the book that James O'Sullivan and I have coming out in January is called "Electronic Literature as

Digital Humanities".

H: Yeah, I'm really looking forward to it.

D: Yeah, we're trying really hard to embrace that idea, so there was a lot of reasons why Scalar was used and it's a nice platform and now we've gotten so accustomed to it and I have trained a young woman Kathleen Zoller to be our Scalar expert, so she's doing all that. I mean we give her stuff and she just bops it in there and Holly [Slocum] now goes in and styles it for us.

H: Yeah.

D: So a different process now than we did with the Pathfinders project.

Figure 5   Video "Lisa van Vark: Navigating Pathfinders"

LISA: You can already sort of go to one of the four that they selected. Oh, this is difficult because will I watch a video or click on one of the four, I don't know. Let's see, maybe I can open this link in a new tab just to check it out, because it does sound quite mysterious "Phantom Fun House", mysterious and fun. This is a video, it's a, oh gosh, it's not a video, it's a media file but what can I do with this? Okay, let's go back then, oh no, let's see, no wait, okay, okay, I'll come back. Let's see, yeah, all right, let me just read the text, oh, oh my, oh, okay, oh, this is, it's like a maze, isn't it? All right, I've got two same tabs, let's see, just trying again. I've got the inkling suspicion I'm not very handy at this.

HANNAH: Are you nervous because this is recorded, or would you be nervous anyway?

L: Nervous anyway because there are so many options! Well, not so many, but, well quite, quite a lot, actually, but I do like it. It's like, it's like a candy shop where you can just pick things and continue on exploring and reading. Let's see. This is nice, that they tell you the formats that it was released on, oh but this is, what's this?

Oh, that's nice, it's also confusing, so many options, oh, that's nice. So it's like a a hub where a lot of information comes together, like an interview and a sound file of an interview with John McDaid. That's nice, that's really nice. But I think I'll go back, because now I'm sort of sidetracking I think, or maybe not, I don't know. Yeah, let's see what I can still read here, because I think this might be more of the same, let me check.

What source file, ah okay, let's see details. You can also click on this what's that then? Ah, that's, okay, sorry, let's see. Yeah, so this is quite similar to here the other one but maybe let's see how this looks like. Oh yeah, okay, Ooh. Right, that's nice. Didn't

expect that, All right, yeah, let me go back to the introduction question I'm still an introduction, it doesn't feel like it. That's nice, so that's cool.

So fun house is a novel including sound and printouts, maybe I should check it out later again. I didn't notice this before, I have no idea. Grid, path, media tags, let's see, oh. It's a sort of, what is it? Oh this is nice, I do not really understand this yet. Oh, let's see, I think this is an explanation about the "This visualization shows how content is interconnected in this work. Each circle represents a piece of content, color-coded by type." Oh, that's neat, "click and hold to drag. click any filled circle to reveal its connections; click again to hide them. Click the name of any item to navigate to it". Oh, Oh yeah, that's the page I viewed earlier. Oh that's nice, let's see, can I click on this? and then this links to that one again, maybe I should read it again. Oh yeah so the blue one was a filled circle and then it connects to, yeah, all right. Oh and then you were directed to this page or not... Ah, yeah, that's really nice, it's sort of a...Oh yep I do like this.

H: How do you see, how do you like feel this relates to the other options you've had where you could choose multiple things?

L: What do you mean?

H: You've looked at the contents in the left sidebar, you've come across pages where you got several options of where to go, this is again the same pages but visualized in a different way.

L: Yes, well, of course now you see what they can actually link to and when you're on the page itself and you only know when you click on on on the link that directs you to that page or when you look in the menu and then it sort of expands and then you see all the options. Now you see them almost in one glance, so it makes it more organic in a way of course you know when you're on the page you know that you're in a menu somewhere in a larger work but this for me it helps to visualize it literally to see where you are and also where you would like to go if you want to feel, if you want to see something related to what you're already reading. I think that's more intuitive to navigate to as opposed to when you're on the same page and then having to go back and forth. This also gives you more freedom to just, I think, to skip more easily between parts and not just pages that are directly related if that makes sense. So I think this this gives you more of the option to browse like you can browse in a bookshop, for example.

Figure 6   Video "Dene Grigar: Accordance of Pathfinders"

DENE: You know, it really did, kind of-- I've been, I had founded the lab in 2011 and I had all work sitting in there and I was in there doing all this work myself, but I didn't

know if other people would be interested in it. I really didn't think people would be interested in this stuff. I knew I was and I knew there were some people like from the hypertext days that were fascinated by it, which is what inspired me to start, you know, together anyway in a space but it was really kind of interesting to see the response we had to Pathfinders. We've had almost 50 000 hits.

HANNAH: Yes, so it's, like, way beyond our community.

D: Way beyond our community. And it's been indexed by, you know, a whole bunch of different organizations. It's sitting as a book in and it has been sitting, like, announced on Stanford University Library as a new acquisition. It was weird, you know, and so I think that that's an interesting thing, because it's an open access book, it's not by a press, although it was funded by NEH [National Endowment for the Humanities].

H: It has like an ISBN and everything I can imagine that makes it easier for places like libraries to, like, "take it seriously"

D: Yeah, haha.

H: But do you feel, because I also have the Traversals book here, do you feel like Pathfinders sort of has a different institutional status than Traversals because of the digital nature?

D: I don't know. I think the book has always been the brass ring for academics, right, and you know MIT press is probably the major press for our field. You know MIT press has a lot of weight toss right. So to have that on your resume, your CV, looks good.

H: Yeah.

D: But I think in our field, our DH, digital humanities, electronic literature field, I don't think it -- I think the Pathfinders project has gained some weight. It was not automatically blessed with it. Like MIT press book comes out: bam! I call it, the the term I use for it is not -- it's accordance, we accord respect, we accord authority of things and there's levels of accordances I call it. And so the book has an accordance that kind of precedes the accordance, that, kind of, goes beyond the accordance of digital objects right now still. There's accordances among books, so the MIT press is better than this press, or, you know, Routledge press is better than that press. So there's this continuum of, you know, tier one, tier two, tier three, tier four books. And there's universities that when they hire they look to see what tier your books and publications have been in, your index, you know, indexes, and they put numbers on this thing as if that really matters in some way, but you could -- you'd want to

quantify it, but what Pathfinders did so different, you know, it was, it came at the time when people were starting to think about open publishing open knowledge, knowledge base, and different ways of publishing information in it but it's a way that Stuart and I've been thinking about this forever, you know, it's not new for us, it was new for other people and so I think the Scalar platform was important too because that comes from you USC [University of Southern California] which is an important university. They are funded, Scalar's funded by everybody from [The Andrew W.] Mellon [Foundation] to NEH so that platform has been blessed by the money --by the funding gods, so it wasn't some arcane platform that we chose it wasn't on the web, for our book funded by NEH. So that helped a lot and, yeah, so there's a I think there's a bit of accordance to that.

Figure 7   Video "Maud Ceuterick: Academic Validity of Digital Publications"

HANNAH: If you compare this reading experience to, for example, a physical academic book ..? MAUD: Yeah, I guess the scrolling and the... the scrolling and the jumping over sections is definitely not the same, although I would also jump with a physical academic book, but I guess I would tend to read more full paragraphs and full sentences, and, yeah, and maybe even full chapters or or the full book if it was really interesting. But, yeah, in a website I guess I would never never imagine myself reading a full website, or not even a full web page, well yes, it depends, if it is a literal story or a story that starts that has a start and an end then yes I would read it. But if it's like this snippets of information then I would probably never read the whole thing unless I was passionate about it. But, yeah, but in this case, no, I would just do a bit like I did, like, just jump around and look for the information I'm interested in.
H: So it would be closer to your experiences with other electronic media than it would be with other academic books?
M: Yeah, yeah, definitely, yeah.
H: Do you feel like this type of book has the same, like, academic status as paper academic books?
M: Yeah, I mean I, I don't think that the support, the format, I mean, the platform changed its validity for me, but I guess, yeah, I guess you don't --it comes with, it comes with the idea when you create such a such a work, I guess it would come with the idea that the people would not experi-- that people that experienced it would not experience it in the same way. I would not watch it from the beginning to the end or look at it from the beginning to the end and they would adapt the format to people's experience I'm guessing. But I don't think that it reduces its value or its validity at all. It's the same, I mean in my field, I could compare this to a video essay for example, compared to a written essay. I mean I think that it was customary for people to not consider the video essay as such a, yeah, an academic work but now more and more I think that people consider it as valuable work. The thing is I haven't really seen, not yet, people referencing video essays as much for their academic content then, yeah,

then what they refer then when they refer to like an academic work, written, I mean, academic work so I don't know if it's because they consider it has less value or it is because maybe video essays rely as well a lot on the audience understanding on who watches and who interprets the work. I mean some of them are pretty straightforward and others rely a lot on the interpretation of the viewer, I mean, written academic work as well, but they give you a lot of, a lot of directions, so, yeah, you just don't get lost in the meaning, yeah.

H: If you were to cite Pathfinders how would you go about that?

M: I think you would be confused of how to cite it whether to cite the website as in, yeah, as a whole thing or to cite a page, a particular page, yeah. And also since there are there are works that are attributed to different people. For example, if you cite, if you cite an image, do you use, I guess, you would say the photographer or the, yeah, and then if, yeah, and the interviews, for example, it's --I guess you would have to cite them all separately rather than citing just the website unless --it depends what you're referring to, I guess if you refer to the whole website or not, yeah, I guess the same way as you would with a book in a way if you refer to a chapter or or to the whole book.

Figure 8   Video "Rachel Di Cresce: Navigating Pathfinders"

RACHEL: All right, I'm going to begin with the title page, it feels like that's what I should do. Okay. Okay, so it's only a page at a time. I'm just curious what the side buttons are doing. All right, I'm gonna continue to "Dedication", Okay, to the next page. All right. Interesting. Yeah, I noticed that there is -- There's a librarian in me that's happy, with all the the formats of metadata I can take, interesting, media file. Curious, huh, okay, so we're sitting on a video, cool, very cool. "Hypertext", "pre-web hypertext fiction and poetry". I like this "BAD" image. Huh, intricate structure. "long-form works". So if I hit.. just takes me back to that, okay, so if I hit the link it takes you back to the image, interesting. I don't know what I was expecting, but maybe, yeah, I don't know interesting.
[inaudible] Oh! Where did I end up? Where did I ... "Museum of Art holds a copy of the version", oh, okay. the MOMA. "Funders and collaborators"... that's curious, oh, you can comment. It's a cool collection of digital literature. Oh. "titles below", well you can like highlight and stuff. I'm curious, I don't know why for some reason when I see a list like this, I like immediately I want to like -- I want to go to this "The Perfect Couple", I want to see what that is, I'm curious. But I also find the, I guess, the font indicates something to me, like, I don't know, that either you could click on it or even that -- it's very much reminiscent of, like, if I like were to put code, to show a code sequence that, like, I would be in this writing. So I'm expecting, like, I can do something with this so I can take this somewhere. "End of path", okay, so I'm back

where -- I think I had this option on the last page too. Okay, I'm gonna go there. Very cool. Oh, it took me away, okay, should be very cool. I get to choose one and I want to choose one, I'm going to choose "The Party in the Woodside"[sic] because it's been far too long since I've been to a party, so I missed them so I'm gonna go there. Going with "food and drink". I already feel connected, "drank too much red wine". Kind of love that. Okay. I want to -- oh interesting, I'm not sure, like, okay. Oh, it's like I see, I'm thinking, it's taking the next words in a thing and you could link to a different part or something new and then "tan suits" because wasn't tan suits a thing before, I don't remember. "the house in woodside" So my only -- I'm wondering now that I'm here, how I get back to the other where I was before.

H: You're now in the original work that they linked to, the chapter that you were reading is about this book but it also links to the original.

R: Okay okay

H: I think the only way you can get back is to actually use the going back...

R: Okay. So, but I'm so deep in here! Okay.

H: It's interesting right there used to be, like, an embedded version so that you could always go back, but maybe not anymore.

R: I'm very partial to the, like, automatically opening up a new tab when you click on something, because I could never get back afterwards, and I get frustrated.

Figure 9   Video "Dene Grigar: Saving Patchwork Girl"

D: Lastly, let's go back over here, let's see what else. We put together a list of readings for people to go and look at other works that are interested in this to make this a scholarly kind of thing, right.

H: Yeah, but rather than like a work cited it is it's explicitly, like, for students.

D: Yeah, this will help you understand what we're trying to do. One cool story about Shelley Jackson and I'll get on the stop share. I went to get her from the airport and I live about seven minutes from the Portland airport across the river, so there's Portland, the Columbia river, and then Vancouver and so my house --I can literally see the river from my backyard and see the Portland Airport. I don't hear any planes because the planes go down the river so I never hear-- I don't have that the sound of an airport near me, I can see the airport lights, it's really quite beautiful at night. So I'm seven minutes from the airport, so I'm going over to get Shelley at the airport and pick her up. And I'm coming back over this long -- it's a long span bridge going over this river, you can see mount Hood, it's a gorgeous view and white mountain Hood,

it's just breathtaking. And I'm driving along my car and Shelley says "you know, I really don't want my work preserved". And this is after, you know, a year of getting all of this done, arranging for travel, I mean all of this stuff, getting the lab ready, because to get ready for these Traversals is not easy, it's not what like 'we're gonna do a Traversal today', it's like, it takes a lot of thought, thinking that goes in this, and training, and in the early days especially when people didn't know what the hell I was talking about, 'what is that?' Now the staff and everybody's pretty organized, we have a -- now we have a dedicated space for Traversals, an actual space, a studio, you know, but back in those days I have to rearrange the lab, you know, and move out chairs and all this stuff. So, I'm driving and she goes "I really don't want my work preserved", I just, I just, I wanted to go [turning car sound]. And I said "you know what" I very, very calmly I said "you know I'm happy to take you back to the airport". Totally get it, because I am trained in ephemeral studies, I totally get the notion of performance and ephemerality, and the beauty of death of things, there's a beauty in the death of things, I understand all that, "so I'm happy to take you back". She said "No, no, we're already, I'm already here let's do it." So we get to the lab, you know, and we're rehearsing and then the next day we start the Traversal and using the CD-ROM version for this. And so we had the CD-ROM and she was reading through it and finally she stops and she goes "Oh my god, this is -- my work has lasted, this work is still -- still makes sense, this is really good". You know, something to that effect, right. "My god, my work is well, it's not, it's not, it's not, it's not like it's dead, it's like, 'oh it's so passe', you know, it's like, it's relevant" and we're all saying there going "uh-huh, that's the point" and she says "this is -- I can't believe it" you know and then you know it was just really kind of I was like sure I mean it's, it's definitely, that's the point of this, this stuff is classic yeah this work is beautiful all of these works are beautiful and that's why we're trying to *save* it. Document it in some way, so that people know it existed and, you know, I think of Judy Malloy as a Sappho of our age and, you know, so I definitely wanted to save her.

Figure 10   Video "Maud Ceuterick: Material Carriers of Electronic Literature"

MAUD: So, so Uncle's Buddy's Phantom Fun House, okay, so it's, it's funny because I wouldn't expect that kind of documentation for an electronic literature work, well I guess there is a CD there but there is a whole lot of manuscript and handouts and and even a book. Is it a book? Yeah, it looks like a traditional book.

Yeah, I mean, it's a bit like music albums, I guess, they have also this kind of documentation that we would look at well -- when when we had music, yeah, CDs and we would look at the --and you could even sometimes find the lyrics of the songs, so I guess it's the idea, it's the same idea. But here there's a box I don't really --"artist box", okay, so it's not really a book, it's a box, "Inside", oh yeah, okay, it's a box with DC, Floppy disk... As you as you can see, I direct myself directly to images, I guess I'm

a bit of a lazy reader so instead of reading what's written here, I just go directly to the image and try to and go closer to the screen to see what's in the box rather than just reading what is in the box. "The box, when opened, reveals a variety of contents. The original 1992 version, shown here, included five" three halves [3 1/2"], I don't know how you pronounce this, or how you would say.. "floppy disks; two cassettes—one entitled "buddy newkirk Retribution" and the other entitled "art newkirk The Story of Emily and the Time Machine"; a letter from the editor of Vortex, "Chris;" a copy of a science fiction short story edited by Chris; a 12-page booklet providing background on the novel and directions for how to access it; a one-page installation guide; and registration card." Okay, what is the registration card for? " The CD version released in 1993 substituted one CD-ROM for the five floppy disks." Yeah, I wonder where you send this registration form or what is it for, maybe there is something about this.

Here. "Registration card. The back of the Registration Card provides the place for the user to write in information to register the product." Ah, why would you want to register the product? I mean not to copy it, is that it? "It is divided into four sections" Well. I don't know. "The first, located at the top of the card, are the words, "Please Register"." Or maybe to, yeah, maybe so they keep track of who has bought one of their works? I don't know. "There are four lines provided for the user to write in comments to Eastgate. The fourth section, located on the bottom [...] is a black box." "TALK TO US". Okay, "Tell us about how you use", ah yeah, okay, so I guess, I guess it's kind of a feedback, 'feedback card'. Yeah and the installation.
That's nice, well it looks really nice. Well, I mean it would be hard to use all those antiquities now, you would have to have an old computer to do that.

I might still have one at home in my parents place but I'm not sure...

HANNAH: if still works?
M: yeah I don't know.

H: Do you feel like it's adds a lot that you have this very specific -- like, all of the images with the descriptions as part of the documentation?
M: Well I guess it's nice because it gives you a context of how it was, of how it was presented, and how you would really experience it, rather than just work itself. Yeah, here you have the kind of full experience in a way or at least --you don't have the full experience, but you can imagine the full experience. Yeah, I mean it's a bit the same as if we were telling to people born now how we would experience music as teenagers and that you would go and buy a CD and then look at the, look at the documentation and those kind of things where now they probably don't do that anymore. So I guess it's, well, it's important for, yeah, archiving and also, it's nice to, yeah to remember the way it was experienced.
H: Yeah, because you started out saying, like, 'oh I didn't think there would be like the physical things in something that's electronic literature'.

M: Yeah, yeah, exactly. Yeah, no, I had no idea, especially, like, thinking that it was an electronic literature work. But of course, before internet, that's how it would be, it would be accessed. I completely get that now, that you would need a floppy disk for accessing it or CD rather than accessing it over the internet. Yeah.

Figure 11   Video "Rachel Di Cresce: A Network of Relationships"

RACHEL: It's one thing that I always notice about kind of the born-digital, or the even just the made-digital, is a lot of times there's just so much information that is related to to one another and it's not that easy or simple to indicate that, or like make that -- to really like replicate those relationships online. Like, it, it can become a little bit of a usability nightmare, things always kind of get buried or lost.

HANNAH: What do you mean by relationships? Like how the text...

R: the text, so relationship, so yeah like so we have, like, a lot of-- sure there's, in one way it's, like, okay all these, like, hyperlinks to like one thing to another but I meant more like 'relationships' like you have something, like one object or one, you know, art piece or something, like that, but there's so much information around that that helps you to understand it. And its sort of place and context and and you know with the, sort of, like, 'web of material' that it's like. It's, it's just difficult to, I think, lead someone through it in a really, like, I don't know, understandable manner. It's -- I find it can be very complex and doesn't always give you, sort of, a really good idea of like all of the information around this particular thing.

H: Do you think it's a useful way to present humanities research?

R: I think it is actually. And honestly, I know it wasn't part of the Pathfinders thing, but when I got into that, like, the big map that was like the nodes and the edges and how they all kind of like relate to one another, the visualization piece, I think that's very interesting in a very, a very useful, like -- I'm gonna click on it now just to see connections-- Like, that to me is really interesting, they had a "Path" one too which is pretty cool, like you can go through the paths, like I think that's really cool because you could probably harness it to help people understand, like, move through the database or move through the information .But it's also just visually appealing and to give an understanding of the breadth of what's going on and the connections, I think, in, like, people are now you know talking about 'linked data' and regardless of your feelings about the viability of that, it's like, this is an interesting way to, I think, visualize what I think we all intuitively do if you are a humanities scholar or anything like that, where, you know, that there's information all over the place that are all related to the same thing. You're going to make those connections, but it's hard to visualize that and I think this is a a really cool especially, I like that that they can, kind of, take the -- they then provide this sort of new entry point or new understanding of,

like, what content is actually in there and new ways of, like, navigating through it than traditional, like, when people would go to a page and, like, go on a search bar or use faceted searching or just kind of click through, like, a new interesting way to do that.

Figure 12   Video "Lisa van Vark: The Flair of Conversational Documentation"

LISA: "Bly walks through various artifacts found in The Bly Collection, such as software and catalogs. He gives a good explanation of the features of Storyspace and Tinderbox and an explanation of how they work." Right, let's see. yeah what shouldn't do with us. [no audio of video]

H: You can talk about it as you go if you have thoughts.

L: All right. The discussion turns itself into something completely different. So it *is* what people talk about, right, how much it costs at that moment! Why would that matter, though? It's a way of reminiscing, I guess, it's interesting how that works.

H: What is it like to listen to them reminisce as someone who doesn't know these people?

L: I don't know, it sounds like they're very cozy, like --I'll just pause it because I can't -- I don't know, it feels like you're... It does feel like you're part of it in a way, the way they talk about how much it costs and things like that it sort of gives you a certain coziness, like you're meeting old friends. Although you're not really -- though you don't really know what they're talking about, or who they talk about.

H: Do you feel like it adds things that you wouldn't have learned if it was a paper publication about the author, about the work, ?

L: Definitely, it gives you a sort of feel for a thing, a sort of context in a way, context by minor details that might not mean that much, although I mean, if you were to write a traditional book I think you would not put this in but it gives more flair, more ...what do you say... gives more character to what you are reading. It speaks to you more, or seeing in this case, so I do think it has added value for, yeah, the experience that you get when you're reading about the work, gives you more of the zeitgeist and what people think about, or what people, yeah, I don't know, for example, the demo. That it, I mean, that he really used the demo that much! It's nice to know the circumstances in which certain work was written or how people felt about something when they were writing, yeah.

Figure 13   Video "Maud Ceuterick: Navigating Pathfinders"

MAUD: So it's a database, right, it's a database that has, that, yeah, gathers experiences or does it also-- no, it also gathers some kind of literary content. "Artist

statement"..."artist statement"... "traversal"... Okay. So that's her playing her own game or reading her own text, right? Yeah, but then it means I can't experience the file itself or the text itself -- "Readers Traversal and interviews" "photos" "history", "essays", so it's kind of a, yeah, exhibition.

So that's a biography then okay, "source", no that's a an image. "Source file", no, so again it's an image, so yeah. I feel that I'm lost in or that I'm losing something.

HANNAH: What are you looking for?

M: I don't know, I was looking for something, something to read, something literary to read rather than a kind of meta statement or a database on the text itself.

H: Oh, yeah, it does not contain the actual works, yeah, the original ones, it is documentation in various forms.

M: Okay, so then I guess I can become, yeah, I can kind of familiarize myself with the work without experiencing it, is that it?

H: Yeah.

M: So, yeah, then I guess I'll go back to Judy Malloy. So that's a biography, but I'm more interested, I guess, on what she says about the work itself, so I'll click on "artist statement" instead. Oh that seems interesting "Intertwining elements of magic realism with silicon valley culture" -- oh did silicon valley already exist at that time? I guess, it did "and semiconductor industry lore, the three files of the pioneering electronic hyperfiction, Uncle Roger, originally appeared beginning in 1986 on Art Com Electronic Network on The WELL. In the 27 years since the work began, it has been authored as a social network intervention, with UNIX shell scripts; on floppy disk with BASIC; and on the World Wide Web with HTML." Okay. "In the spring of", so that's a bit more the technical things. I'm, kind of, more interested in the story itself or the the content of the work. So she was invited by a video and performance art curator, and "The Story", here: "I pictured a whole line of men in tan suits scampering around on a stage, singing 'The yield is down. I think we lost the process.' The chorus was 'We lost it in the submicron area,' which is what Jack said next."

Okay, I can't really decide if this is a poem or, yeah, I don't know I -- it makes me wonder what the work was really like and, and, and I, kind of, want to experience it but, "ACEN's host, The WELL was (and still is) a pioneering Northern California-based social media environment", okay, "which hosted digerati from all over the World," I don't know what digerati is, I feel a bit, haha, inadequate, I guess, "including Silicon Valley, where I had once lived. Thus, at the time that Uncle Roger was created, I was immersed in 1980's San Francisco Bay Area personal computer culture. With locations including a party in Woodside, a microelectronics lab, and an early corporate word-processing office, Uncle Roger, like the interface and the programs

with which it was created, is set in this era of transitioning computer culture. Events are observed by a narrator, who in telling the story intertwines elements of magic realism with Silicon Valley culture and semiconductor industry lore." Okay, so, "Files 1 and 2 are interactive hypertexts in which the reader actively follows chains of links through the narrative—either one link or combinations of links using the Boolean operator "and" " Yeah, "and then returns to the beginning to follow another link or combination of links." Okay, so, "The Three Files of Uncle Roger". Okay, "What I type on the keyboard appears in green on the screen which is called the monitor. When the screen is full, the letters scroll up somewhere inside the machine."

"The following background information [...] is from the packaging" Okay. "A Party in Woodside", so there are three -- yeah, okay, there are three files and I guess that one can click on those and experience them in different ways so, "During a long, mostly sleepless night after, a party is remembered fitfully, interspersed with dreams." oh that seems intersting. "Like a guest at a real party, you hear snatches of conversation and catch fleeting glimpses of both strangers and old friends. There are occurrences which you never observe. You meet people whom others may never meet. A fragmented, individual memory picture of the party emerges." Oh, that sounds cool.

"The Blue Notebook. In "The Blue Notebook," the story is continued by the narrator, Jenny. The narrative is framed by a formal birthday party for Tom Broadthrow at a hotel restaurant. Jenny's fragmented memories — a car trip with David, a visit to Jeff's company in San Jose, an encounter with Uncle Roger in the restaurant bathroom – weave in and out of the birthday party recollections. Some of the text is taken from Jenny's blue notebook where, as she she explains: "The things I wrote in the blue notebook didn't happen in exactly the way I wrote them.""Okay, but then why did she write them like that then? Yeah, I guess, yeah I guess she was kind of imagining or I guess that memory doesn't work in the linear way, in a linear way so you can't always remember what you what you do or see without transforming the events. I guess that's what she means. "Terminals. In January the narrator, Jenny, left the Broadthrow family and started working for a market research firm in San Francisco. As Jenny sits at her desk, memories of a Christmas party in Woodside, a trip back East for the Holidays and other things that happened come and go in her mind." Oh, that sounds, that sounds interesting, so I'm not sure how many parties there is in total, but several I guess and, yeah, and I wonder if this is maybe -- I didn't read the information up there enough, but I wonder if this is all text or if there are images as well, yeah. I don't know, I guess here maybe "The story is framed by a formal birthday party"

[inaudible] narratives well it says narratives but it could not be written but I guess it is written. It's "first told online" [inaudible] available -- okay, I guess, if I knew what the BASIC version is I would know if it is only written or if it is something else, haha, but

or maybe she writes it somewhere. But I guess I don't care enough to look for it so I'll just look for another work.

H: You, you can look for anything you want but you realize that this is not the only page about Uncle Roger?
M: Yeah.

H: So if you want you can also continue with this work but ultimately you can choose of course.

M: So, how do I go back to the to the main menu where I could choose "continue". Oh no then it takes me to the next step, yeah, to the video. Okay then I just do that, yeah, so the "interview sound file", "readers traversals and interviews". Okay, well I guess the only way that I "photos of the box and its content". I guess the way that I can, I'd like to go to the "Reader's Traversals" instead of Judy Malloy herself maybe, yeah, maybe, because then it would be more the experience of someone who hasn't experienced it before rather than someone making it and, then, yeah, I guess I'm more interested in the narrative itself than of how the artist made it or what did they think when they made it. So I can watch a bit of this,
EMBEDDED VIDEO: so I will start with the blue notebook,

M: Yeah, so I guess it's only, oh, yeah, I remember I read that in the text that it

EV: don't think - So it's only typing in the terminal right. - "outside the cafe in San Jose" I think there's a nice poetry in there you can hear the the assonance in that. "it was my day off. and I was writing in a blue notebook. It was a gray, overcast day - not quite warm enough to be sitting outside. the coffee was good. There was a jelly doughnut on a paper plate in front of me. I was writing about a trip I took with David last year" It seems to be an introduction, and a response to a memory. She's having her memory, so it's a memory inside of a memory. "The things I wrote in the blue notebook didn't happen in exactly the way I wrote them" so now she's revealing to us her incredibility as a as a reporter of her experiences. David's apartment" but now is the third screen with her remembering the memory "there's an apartment with one big room"

M: Yeah it's funny just kind of things of watching someone watching someone playing, it reminds me of Twitch, of the platform that people use now to watch other people play instead of playing themselves.

M: I don't know I mean it's interesting when you when you want to know something about a about a work that has disappeared I guess or that you can't experience yourself or if you want to know more or know other people's experience of it but I'd rather be able to experience it myself first. Yeah I mean I could definitely see how a

platform like this would be beneficial for other, well especially, I guess, for the, yeah, digital art or artworks I mean, there are some there are some art database that have that kind of, yeah, maintaining the documentation of the work but I kind of like the way that is that it is structured and and also that you can see people experience the work because especially in performance art and in gallery arts, if the artist didn't put it on their website and they didn't keep archiving it and the gallery didn't then it's completely lost. Sometimes that was the idea, that it would just last for a while and then it would be lost and that's it and that's how it is, But, but there are some catalogues, some art catalogues in a book forum so I guess it could also be a digital art catalog and where we could yeah see also people experiencing artworks in the gallery . I think that would be great actually.