RICKI GOLDMAN: I was lying on my stomach on my carpet in our living room in Winnipeg, Manitoba in case some of you don't know where Winnipeg is. It was a cold autumn day with no leaves left on the trees, a black and white screen was flickering, rabbit ears with silver balls on the end. I was very young and it was late, and for some reason no one told me to go to bed. I watched people in long lines beside a huge dugout. It looked so cold and gray but no one was wearing any clothes. The people were like skeletons hardly recognizable in gender and age, just bags of bones. The machine, many machine guns, bodies falling in the neatly layered pits. Men in uniforms left standing. From 1942 to 1945 there were many stories of the killings of millions by the Nazis. No one paid much attention or did much to bomb the train tracks leading to the concentration tracks. In fact, no one could imagine the scope, the horror. Well, some could, of course. No matter how many people told the stories of torture and gas chambers, it just seemed impossible. Even years later it seemed impossible. But seeing the video made it real. Seeing this documentary film on television, on a flickering television in 1950-something made it real. How odd saying that film made it real. The film was evidence of a story that nobody believed. And in recent times in prisons, very
recent times, perpetrators continue to document their atrocities. And we never believe the reports until we see the evidence. Video as evidence or video as story?

And so unlike the personal stories we heard yesterday from our colleagues, my first formative story is one of the story of viewing. And this traumatic viewing is what compelled me to use a porta pack to make videos for public broadcasting in the 1970s and, of course, to film encounter groups, liberation groups, range of social issues and children in daycares and people's favorite songs in the street. Don't ask. Actually, I had to stop it because carrying 60 pounds of porta pack was just too much for me at that time. That's how much all this stuff weighed. I use video because I have to. I do it because I have no choice. I do it because I think, and maybe it's naïve, it may make the world a better place. It may make education a better place if people see what happens when a system treats people unfairly. And in schools we see inequity every day. And for this, I'll refer you to Ray McDermott and Shelly Goldman's new article in the forthcoming book that Roy Sharon, Brigid Baron and myself are editing. It's an amazing article about inequity. We see it in access and what people learn, and the resources they have, and the ways they're treated because of their difference. We all
remember the video we saw as African-American children were denied access to schools in the 1960s and how some girls and boys walked into schools in defiance. We remember watching Martin Luther King speak to us. We remember seeing the assassinations of JFK and Bobby. We were there. We were, weren't we?

We also use video -- I use video in my research because I'm a person who listens more closely behind the lens of a camera. For those of you who know me, probably I am a kind of vivacious but actually shy person. Some people don't know that. But behind a camera I'm very safe. And I do it because I'm constructing a world. I am interpreting the moment I turn the camera on to shoot and I'm maybe even interpreting before that moment. And my video are my data. They are not made data by post video interpretations. They are data because I interpret what I see as I shoot. I frame, I situate, I watch closely, I select. I construct a story knowing what I see is only one perspective, my perspective. However, one could argue in a socially constructed mindfulness, each one of you and all of your works or all of the readings that I read and all my experiences actually shape, and there is a deeper level of collaboration going on. But knowing what I see, I have to take responsibility for that one perspective. And if I
want to find the thematic patterns through the data, I have to share my viewing with others to code the data one could say. That provides an inter-subjective viewing. That's a word that Dan Suthers is talking about these days in CSCL and what I have called configurational validity in an article I wrote in 1995. I don't always know the story as I'm shooting. Sometimes a story never evolves, and I sit with my hundreds of hours of videotapes in multiple formats that are now defunct with no players to even see them again. And actually last week, my very last video disc player died, and it was very sad for me. But I'm a really patient researcher when I hold a camera. I hear and I see the story, and I wait for that aha moment when a young boy will say to me that science becomes a friend when you get to know it. And he destroys everything I possibly know about how kids learn because I think boys aren't relational learners. And in front of two other boys he says that, and he says that with the camera on and I can share that with all my colleagues. And I won't show you that data cause so many in the room have seen that data so many times.

And indeed there are many of these kind of aha moments, but sometimes it takes me three years to find out and sometimes in what I now call design experiments in an article I wrote in 2004 in the Cambridge Journal of
Education, it's about a design ethnography where it only took me three months. And you can do different kinds of ethnographies that are not just longitudinal, and you can use video that are maybe 30 hours of video. It all depends on what you're studying. It isn't a matter of how much. It isn't a matter of the extent of it. It isn't even a matter of how much analysis. It's a matter of what it is that you're saying and how you use that to contextualize and expand upon the story that you're telling. The point is as Hayden White and other postmoderns say facts mean nothing outside of narrative. It is narrative that makes meaning. So why video? And that's the name of my talk.

Why video?

So why video? Because video is the construction of narrative, and video is evidence, evidence that is affected by the perspectives of the people shooting the video and also affected by where the camera is placed and how it is held. The back of the room, that's a story. They might not think of that as a story. That is that. And it might be that, you know, we don’t think of that as the best story, but yet it might be the best story we have for figuring out what to do with what is needed for this particular event. Evidence is constructed by the meaning attributed to it and by the videographer and by those who
view the video, those who construct new video from the chunks, a kind of electronic video mixing like the kids are doing, you know, with lots of different sounds layered and everything else. So why video research? Because as researchers or as kids or as teachers using video, we become authors describing our lives. Video is the diary of yesteryear. It is one of the tools in every small device one wants to own these days. Cellphones, iPods, handhelds, we want to see and we want to share what we see with others all the time, in fact. So let me just leave the discursive narrative for a second, maybe a little bit more and, notice, no POWERPoints. It's just going to be you, me, the microphone, the podium, this room, the camera at the back, and your eyes and ears and your personal lenses through which you construct meaning. And I guess I want to sort of mention that if we want to understand what makes good use of video in the study of learning we need to create a flexible, open framework that can bring together various epistemological perspectives and that have emerged over the past decades as researchers in ethnography, symbiotics, cognitive science, related disciplines have started to use digital video as a research environment. And as Brigid and others of us have been investigating, there are many, many, there's over a hundred years of the use of visual media,
maybe more than that if you want to go back to the earlier, you know, colonialists who traveled in Africa and all different places taking pictures that we saw in National Geographic and the National Geographic Magazines. Most of them didn't have clothing on the upper part of their body if they were female. But we know that, in fact, all the fields are using this in medical research and whatever else. So we do need this convergence as you were saying. And the framework I'm proposing for this kind of convergence is what I've been calling, well, in different iterations for many years. I started with thinking about perspectives and multiple perspectives and moved to something called the points of viewing theory and to have perspectivity technologies but it's usually about perspective. And the perspective framework is this derivative, and it maintains a video. And when I say video now, and by the way, let me just phrase this, and I don't really mean just video. I mean video based technologies and I mean iPods and handhelds and all the different kinds of technologies that are emerging cause I imagine that even though right now, we're talking about how we understand the qualities to assess perhaps future grants and things like that, how do we make those kinds of assessments, we have to understand that as we're talking, we're talking about a
technology that's a very old technology. As much as we'd like to sort of it's digital and it's a little bit easier now, but it's an old technology and those technologies will change and at least the ways in which we access that technology will change.

So let me go back to this perspective framework. The one thing it doesn't do is it does not support the unfair or unethical use of surveillance video to frame or freeze learners' knowledge production in their continually evolving performance. And I have to say that I try in my own work and I recommend when I teach video ethnography courses which I've done for about 15 years now that people do very handheld research, that there's always approvals, that there are always people who can say at any point take it off. I don't want it up anymore. Now, it's 20 years ago. I don't want to see that video anymore. There has to be some real consensual basis. So I think the ethical aspects of using it are very important. So as those of us who use video in our research are aware, video is a very good record of what happened, but like most media forms it's always an incomplete story subject to misrepresentation. Some of these problems can be overcome by using these multiple perspectives and by using analysis technologies to build these valid accounts from emerging
patterns. However, even with the best possible video analysis technologies, video data will always be subject to misinterpretation and bias. So I don’t think you can try to find unbiased viewpoints. What you can do, however, is through these multiple perspectives and these layering and building this kind of configuration, you can come up with agreements, negotiable agreements that help to bring down the bias. But then you could apply that to any possible media form. You can do that with text, too, because when we write a text, it's also a social construction of what we see at that particular event. So the trick is to accept and appreciate that we are always subject to personal framing of what we experience, and we can expand on the viability of the video records by sharing those viewpoints and interpretations. And we also have to design tools that not only shed light on what learners are doing but also upon what we are doing as learning researchers in the practice of using video. That is we need to reflect upon the reflections of our framing in a reflexive and in a much more critical way than we have done to now.

So I'm going to show you some of the work that I've been doing because my work has three major areas. One, it's been kind of a theoretical, epistemological search for meaning I guess. And Jay and I often talk about
this. My latest excursion into the wilds of epistemology has been to look at the notion of representation. And that's the chapter I'm writing for this book. And whether or not there ever is a representation of something and how we create these meaningful representations of our experiences in school. And the other is methodological, and in training about, yeah. Actually, I think I just started. No, I didn't. No, I didn't.

ROY PEA: (Inaudible) time.

RICKI GOLDMAN: Within my time I -- I just didn't. I did. I've got my watch here. So the other one is methodological. And one of the things that I've always had the most fun in doing is working with doctors students and masters students and getting them to form these digital video ethnographies. And on the table you'll find, I've left something for you on the table, and it's a list of the qualities that together with my students we've come up with over the years. I'm sorry, some of you -- I'm not sure if that table had any cause there wasn't anybody sitting there yesterday. But you might share them and that's fine, too. There should be several on your table here. And the idea was to try to come up with some way of saying, okay, when my students create these works for their dissertations, as part of their dissertations or in a classroom, how do we
evaluate the quality. So for me, it was the eliciting of the value of these videos. And I built upon Jerome Bruener's ten notions of the narrative but changed them significantly and including you'll notice Ivan Ilyich and Clifford Gertz and Mary Catherine Bates and all my people who I love to read so much. So I'm passing that out as my answer to -- or not as an answer to but as the way that I have built ways to elicit the value of the works that are being done. Now, I want to a little bit in just the last remaining few tiny minutes just sort of -- oh, can you pull that down? Just some of the technologies that I've been working on. There was a research lab that I ran at the University of British Columbia for about ten years. And we had many different kinds of projects that emerged there and different kinds of tools that we built starting with something from my doctoral dissertation which was learning constellations circa 1987 to constellations to web constellations, and then it sort of culminated in this book in some way that I wrote in 1998. And it was a way in which you could participate. You could read the book and then you could just go to any page number that you selected. We can just go there to this one. Actually, that's not the one I want to go to. I want to go to this next one. And so people who read the book -- and so again
it's narrative. It's narrative and evidence together. And so you could hear somebody talking.

JOHN: It's like it must have been like a real, real smart person. Like it's amazing how many things we can make and how many things we do, (inaudible) we have.

RICKI GOLDMAN: I have a million hours of John. The idea is that John, this was one of maybe I don't know how many hundreds of hours after three years of being in this school. But it was an interactive way to work with the book and with the video data and to involve the community in that. The tool that I'm working on mostly now, and it's a pretty old version. One minute. I'm not going to go into anything more. It's free. It's open to use. I have terabytes of space, and you just send me e-mail and I'll let you have access to it. And what you do is you just enter into -- oops, sorry. Here. Just go into Orion and you have already logged in I guess. Have I logged in? And I guess I'll log out and log in. And I'm just going to -- I'm not even going to work through all the different pieces of software. I'm just going to tell, describe what it does. On the left hand side what you see is very easy. You will just import stars. They come in here. This is your whole list of all of the video that you can put up. You can cluster them into constellations, into groupings so
you can compare different kinds of situations at the same point. There is a favorite part actually, let's say on the baby elephants movie is the adding of descriptions. So you can add descriptors so you can do some coding, and you can tear off any of these descriptors. Anything you can tear off. That's not important. But let me just show you this part. This is the most important part, and in the new version, this will be built up quite a bit. Anything, see, Sean is one of the users, Ricki is another of the users. And these are the different codes that we've been using, and you can change those codes quite easily. Now, you can say what is one, two, three, four, five, six, seven, eight, nine, ten mean. Well, it means what that group of researchers would like it would mean. And in the next iteration you will be able to transfer it out and send it into different Excel spreadsheets and actually have that data available. So it's a kind of coding but it can be a coding that is both qualitative and quantitative. So quizitive I call it.

So in closing I guess what I want to say is that we really have to think about what's happening in the future. Young people are really making this stuff. We need tools that are simple for them to use as well in their analysis of the video. And I guess the main theme was that
evidence and narrative really are two parts of the same thing.