

Transforming the Expression of Collective Memory in Sign Language

Deaf Studies Conference Transformations Proceedings

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Abstract

The impact on institutional and informational resources that form the infrastructure of Deaf Studies programs is tremendous. We believe that much has been accomplished with the transformation of knowledge regarding Deaf ways of living and learning. Even though the field of Deaf Studies is relatively new, one could consider it a vital instrument for transformation. We find it bothersome that we have not yet fully understood our own sign language, what it really is and where it comes from. I will share my experience of designing a massive online course (MOOC) with the goal of providing a resource not only for the field of Deaf Studies but for society as a whole to gain better understanding of sign language structure, learning and change. There is abundance of academic research addressing this important set of themes from different angles. I believe it is timely to reconsider the nature and dynamics of the conventional expression of our collective memory, the transmission and use of sign language. Because it is important to Deaf Studies to consider the design of its infrastructure, I will also share my thoughts on whether to sustain or transform our ways of transmitting, teaching and using sign language.

Keywords

Deaf studies, sign language, sign language education, collective memory, language transmission

Presentation Transcript:

(Slide 1)

I'll explain what the title means. First, "transforming" refers to the process of making a change, and in this case, I'll be talking about the transformation of ideas. Today, I'll be discussing how "the expression of collective memory in sign language" can change across time into something else- or, in other words, is transformed as it is passed on. But that isn't to say that the original versions are discarded- they can still be kept. As memories of multiple people are amassed, a collective memory is created- one that is rich and should be passed down. But- I also refer to "sign language" - does that mean the collective memory I've referred to regards the use of sign language? It certainly does, and it can even be passed down in sign language for the expression of ideas. So, I'll be discussing the transformation of our collective memory because this is typically done through in-person interactions, like the presentation I'm giving right now. Now, let's say I want to replace an in-person presentation with something more permanent; to document the expression of ideas.

(Slide 2)

When I refer to how a community passes on the expressions of our ideas through sign language, I don't just mean ASL. There are predecessors, as shown here. France served as a cradle for American Sign Language, which makes up a heritage many of you already know- but how much has the evolution of that heritage been examined in detail? Several aspects could be studied, three of which I've abbreviated as the fingerspelled letters "S-L-C," seen here in the illustration. I'll also address the challenges we face in the 21st century, especially those that come with new digital technologies.

(Slide 3)

I'll be talking about this online course, which is where both of these images come from. One topic of the course covers research on the Structure of sign language, which is the S. The L is for Learning - or, who learns and shares our collective memory? Who did the most recent generation learn from? Every generation contributes to our collective memory. Now, given that collective memories span generations, and extend back even to France, they don't remain the same over time; they change continuously, thus the C stands for Change. Even what you have learned is an altered version of what previous generations learned and used for expressing their thoughts. Understanding this collective history in all its iterations can help shed light on the facts of our sign language heritage. Yet, can we find evidence of past iterations? Throughout the presentation, I'll show you examples of how we have. If you're interested in seeing the course, you can go to this URL - I'll also display it again at the end of the talk. I'd suggest taking a picture of the slide and visiting the link because the course is free. If you'd like to take the course, you can also pay a nominal fee to get a certificate verifying that you've completed the course. It's a new format and is offered through EdX, which partners with colleges and universities. When I proposed the idea, I learned that EdX had requirements that I had to follow, plus I had to learn how to use their technology. That said, one good thing about the platform is that it supports video. Next, I'll show you what the video lectures look like.

(Slide 4)

A second way is that separation between the original context and subsequent transmission and reanalysis creates variation. The key point here is that signs change over time, so you have to see where it historically originated. The original form will eventually be transmitted to various places. When that happens, sign changes occur independently of change in other places, now that they're separate from the original context. This happens because the people in each community re-analyze the signs and alter how the sign is produced. I'll talk about this in more detail.

(Slide 5)

There are total of 20 hours of lecture sessions like this. There are also homework assignments and quizzes, so it takes additional time to read those and navigate through the course. When doing those activities, if you want to refer back to a lecture, you can use the transcript to return to that same point in the video. That interface is one of the EdX features I had to learn about as part of the course design and development. Now, here's what I'll cover in the rest of today's talk.

(Slide 6)

I'll explain each item briefly. We've already discussed the first item- the MOOC and its role in transforming how collective memory is transmitted. The course is the culmination of research done over my 40-year career, and is an effort to widely disseminate this knowledge. The clip of the video lecture I just showed raises the question of how collective memory has been passed down historically. The second point, the challenge of sustaining collective memory, is that what is passed down is incomplete; some information is simply lost to time. But every generation adds to what is passed on, thus creating a cycle of losing and rebuilding the memories of a community. That said, it's imperative that we minimize or prevent the losses as much as possible. As an example of what causes the loss of collective memory, in the early years of the formation of deaf communities many were preoccupied with having to follow hearing norms. Consequently, as deaf people increasingly focused on issues arising from hearing society, less attention was paid to their own needs and infrastructure. Eventually, the memories of those activities were forgotten and suppressed. That's a simplified version of the story, but we can stop those losses from continuing to happen by revitalizing and strengthening our collective memory. I did what I could to verify and preserve the collective memory that was shared with me, but when I made this information available in the MOOC, I ran into a problem: students were surprised to find that we have such an extensive history. As a part of transmitting this information in a visual modality (point three), my lectures span 20 hours, but many students expected much less information. Many eager students signed up, only to find out that the class was much more extensive than they thought it would be. That said, I had anticipated that students would come to the course with a small amount of information about Sign Language, so I used that as a starting point to incorporate new information. Overall, students were receptive and have learned a good deal. That's what I meant by "Getting students on the same page," in point 4. On point 5, EdX kept track of enrollment numbers and student performance, so I'll share that information with you near the end. Finally, if time permits, I'll share some future plans with you.

(Slide 7)

To truly understand our collective memory, we have to start with the cradles of Sign Language in America. There were a number of signing communities in existence all across the United States. I show this same slide in the course, allowing students to see that each community had their own history and collective memory. Note the timeline starting with Hartford, indicated in yellow. This was the very first school, and sent teaching apprentices to other states to form new schools. In the span of only 30 years, they very quickly established a total of 10 schools. This was part of an expansion plan that led to more cradles of sign language across the nation. The point is that one simple diagram like this can dramatically shift what we know about our history. Here's another one.

(Slide 8)

This map plots out the origins of Black ASL. Schools for Black students were formed after our Civil War, which occurred years after the Revolutionary War. The North and the South were divided on the issue of slavery. When it was abolished, states were faced with how to educate Black deaf people and ended up establishing separate schools. This resulted in dialects that differed from ASL, all of which can be traced back to these schools. I'll show you a few more examples- and in each case, pay close attention to the years and times listed on the slides, as they

mark the beginning of these communities' collective memories and histories. What is known about the preceding years is primarily a history of white deaf Americans. The history of the Black deaf community begins in the same years these schools were formed. Prior to the schools, there were certainly black deaf individuals, but the community formed as a result of the schools. This is an important history lesson to know and to understand how sign language and culture interact.

(Slide 9)

Now, what about sign language that predated America? This can be traced to the Paris School. It had long been believed that most deaf people were uneducable- until a public school for deaf students opened in Paris. Many know of the connection between the Paris school and the American school, but the system we're familiar with in America is not the only way to create sign language cradles. The Paris school had their own expansion plan, which led to the formation of many other schools throughout Europe. Thomas Gallaudet learned of this system in France and returned to America with a plan to create a similar network of sign language cradles. So, this approach was not unique to America- it was carried out in Europe first.

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The expansion plan also aimed to promote bilingualism and literary skills, as well as foster new knowledge about culture and sign language through activities such as expository storytelling and debates in sign. These activities had to be supported by an infrastructure that existed across the network of schools and extended into Deaf politics. Note the year: 1880. This convention could not have been held any earlier because until that time, the network was still being formed. You can already get a sense of how much work is involved in uncovering these layers of history, and how each new finding leads to more information, all of which could easily fill hours and hours of lecture.

(Slide 11)

This is not to say that America was unique in creating this network; other places around the world have their own histories and collective memories as well, some of which are not traced back to France. I wanted to explore our collective memory and history on a global scale. As you saw in Yutaka Osugi's presentation, there was a family-based signing community on an island off of mainland Japan whose language started to die with the elders of that community as the children were sent to school in Japan. That language is no longer used by a community, which is why it's indicated in red. Another now-extinct signing community is the one that existed on Martha's Vineyard. The red dot on the western side of the US represents a deaf Navajo family that I met some years back, and whose language is now endangered. Several deaf siblings in one generation created their own language that was used with younger generations of family members. But, when the government learned of the youngest generations of deaf children, they removed the children from the home and sent them to state schools. This resulted in the deaf children learning ASL, and not sharing the language of their deaf elders. These are examples of why our collective history should be preserved, partly to ensure that people from such communities have a sense of pride and so that their history is respected. But, the issue in trying to do this is that America has a national educational agenda with guidelines around text-based literacy, meaning that children from unique language backgrounds are faced with learning two

languages. Now, that said, there are other areas where new signed languages have emerged, indicated in green. The one on the left represents Nicaragua and the one on the right marks a Bedouin family that has passed on their language, Al-Sayyid Bedouin Sign Language. These cases allow us to see how familial signed languages and those used in schools, like the parallel emergence of ABSL and Israeli Sign Language, will influence each other. Centuries ago, the same dynamic existed in America. A number of emergent signed languages were in use at the time that French Sign Language was imported. Discussions around how much of our current language comes from LSF or from signing communities that predated the schools is certainly worthwhile, but my research and the rest of the talk will cover what happened over time. In discussions about the origins and influences of our signed languages, one thing I haven't seen discussed much is a stewardship plan or infrastructure for how we can strengthen and sustain our collective memory to preserve it for future generations. This is one aim of the MOOC; to offer information that will serve as food for thought and enrich your discussions on this important topic.

(Slide 12)

Now, how can we reframe collective memory within the nature of human language and culture? This issue is not unique to signed languages; many spoken languages have become endangered or extinct, and the revitalization efforts used in those situations might be applicable to signed languages as well. Another point is that with what we now know about the gestural roots of signed languages, researchers have begun to question whether gesture played a similar formative role in the evolution of spoken languages.

(Slide 13)

While our roadmap should certainly recognize the role of gesture in sign language, it should also clearly indicate that gesture and sign language are not the same, and in fact are quite different. Yet, sign languages did emerge from gestural roots. In order to show this relationship, I had to include it in the course.

(Slide 14)

Some say that gesturing is a natural occurrence, but it is not a hearing or deaf issue; the capacity to gesture exists in all humans. One way that we investigated this was to have hearing non-signers watch short clips of a person gesturing. I don't have time to play the original video, but I'm sure you can imagine the way hearing people typically gesture. I'd show them a clip like what you see here, but I didn't show them the signed version. We wanted to see whether hearing non-signers processed gesture in the right or left hemisphere, and found that they process it in the right hemisphere. That was to be expected because faces are processed in the right hemisphere, while speech is processed in the left hemisphere. Spatial information is also processed in the right hemisphere. So, we know these activation patterns are typical for non-signers, but what about signers' activation patterns? We also know that gestural strings are not bound by any grammar or rules when engaging in natural gestural discourse.

(Slide 15)

We know this because of the research I covered earlier. I'll recap those findings using videos like these of two different people, one signing and one gesturing. You can likely guess that the one on the left is gesturing, while the one on the right is signing for one the part of the video that they both watched, over here. They're referring to the bed, signed here in ASL. This is what signers did, while a non-signer gestured this. So, both watched the same stimuli and had to retell the event in sign language or in a string of gestures. We recorded their responses and used those video clips as stimuli in a neuroimaging study. We recorded brain activity of two participant groups. Signers would watch clips of either signers or gesturers, and non-signers watched the same stimulus material. We recorded the brain activity of each participant and found different activation patterns. Non-signers displayed right hemispheric activation for both types of stimuli, but signers had activation in the left hemisphere for both types. Now, this was surprising as it meant when signers perceive gesture, we still analyze it componentially by using the same linguistic layers to understand it. So, imagine that all this time we've had discussions comparing sign language and gesture when they're viewed and processed entirely differently.

(Slide 16)

Research shows that two hearing people of the same culture can understand each other through gesture, as shown by answers to comprehension questions. Now we turn to sign language- which hemisphere do you think it would be processed in? I am aware of how easy it is to assume that signers might rely on the right hemisphere because facial expression and space are also used in sign language.

(Slide 17)

So, I anticipated that even Deaf people viewing the MOOC would assume activation in the right hemisphere for signers because that's where faces and space are processed. I've included plenty of research in the MOOC indicating that spoken language is processed in the left hemisphere. Epistemology refers to the knowledge we learn as well as the knowledge we intuit, or gain from life experience. I've had exposure to Deaf community dialogues throughout my lifetime and thus reckoned the adverse potential from the ongoing dichotomy between folk introspections and neuroscience. So I prepared the lessons to help clarify how the Left Hemisphere Lateralization framework applies to both hearing speakers and deaf signers.

(Slide 18)

I considered how hearing people who learn sign language in classrooms often report that deaf people share information that contradicts what they've learned from textbooks, and that the way deaf people sign differs from what they've learned in class. I also considered how Deaf people would often report being criticized for how they sign and/or told that they sign incorrectly. So, I had to incorporate these realities into the MOOC design. It took me nearly two years to build a curriculum that would address the dilemmas faced by sign language users and by learners. Then, once I was done, EdX had to review and approve all the material before launching the course. Once the course was live, I knew I wouldn't be permitted to make any modifications, so I wanted to be as comprehensive as possible. I monitored student discussions, but decided not contribute to the discussions because they're solely text-based in the EdX platform.

I knew that this limitation could negatively influence deaf students' willingness to engage in discussions, so I required that video posts be an option. However, EdX couldn't support that functionality, so I decided not to participate in the discussions. Instead, I chose to track them, and take note of themes I learned a lot from the discussions, so once we archive the course at the end of the year, I'll make some edits, add new video lectures, then re-open the course.

(Slide 19)

Anyway- going back to the slide, these dilemmas around language variety are also faced by hearing people. I liken it to the biblical story of the Tower of Babel, where God cast multiple languages onto the world in order to create confusion so that they couldn't build a tower to heaven. In the same vein, a variety of sign systems have been cast into the deaf community to create confusion, and in turn prevent progress and unification. I drew this parallel to tap into a concept that students may have already been familiar with. Again, what is the answer to how a signer's mind processes information- whether they're deaf, or a hearing person who learned sign as an infant? I'll show you how we addressed this important question.

(Slide 20)

This diagram represents the range of how we communicate in the visual modality. If I come across a person who doesn't use ASL, I'd shift toward using more gestural depiction. Hearing non-signers don't realize that signers do gesture among ourselves when we don't share the same signed language- just as we communicate with hearing people through gesture. This means we are essentially multilingual; we use gesture, structured depiction, signed languages, and written forms of language- fingerspelling is arguably a part of this spectrum as well. All of these are forms of communication used in our modern, multilingual community. This was a key concept covered in the MOOC lectures. One other concept is "translanguaging." This is a new term that describes the communication options I just described. I'll include this in the next version of the course.

(Slide 21)

This concept extends to international contexts as well. Many deaf people in the US weren't familiar with international sign and the set of rules that have already been agreed upon among Europeans. Now, let's think back to when the international deaf community first formed. Deaf Americans did have connections to an international network because of our historical connection to France, but generally did not realize that many other sign language cradles existed across Europe. Just as the American deaf community had progressed in its own way, each of these communities had developed in their own ways as well. In the US, our growth primarily centered on the formation of state schools for the deaf. Teachers would leave the Hartford school, go to college, then go to a different town to establish a school. In each case, translanguaging would have occurred at each new location. So, this transformative process has been going on for 200 years.

(Slide 22)

Americans also adopted the same oratory traditions that had begun in Europe. Visitors who went to Europe decided that we had to replicate the same system that they saw in Europe- but remember that this predated film technology. Motion picture technology came much later- well beyond the import of LSF and the transformation into ASL. Nevertheless, these sign language traditions continued in a robust fashion for several decades without having filmed documentation. Next I'll show you the earliest film footage that we do have, which is from 100 years ago.

(Slide 23)

These photographs are of each person who appears in the NAD films. One essential transformation I had to make in the MOOC had to do with deciphering the age of the signers in these films, as there are cohort generations among the signers. Note that the first generation, which included Gallaudet and Laurent Clerc, aren't included here because they had already passed away before film technology was available. However, those pictured on the far left were in the second generation, meaning they grew up knowing people of the first generation. Having these second-generation signers on film is an integral part of preserving our collective memory. When I first watched these films, I didn't know who each person was, but was eventually able to identify them all.

(Slide 24)

[1913, Edward Allen Fay; Dom Pedro's visit to Gallaudet college]

So I telegraphed Dr. Gallaudet. Tomorrow morning at 7 o'clock, Dom Pedro will be coming to visit the college.

[1913, John B. Hotchkiss, Memories of Old Hartford]

Clerc shrugged and replied "Oh, I don't know, but I would like it to be there beside [Thomas] Gallaudet's, right there.

[1910, Edward Miner Gallaudet; The Lorna Doone Country of Devonshire, England]

Yes, I left college but my heart will always be passionate for the deaf...

[Slide 24, Third Generation]

[1913, James Cloud; A Plea for a Statue of Abbe de l'Epee in America]

...to continue showing the love and honor the Deaf Americans have...

[1913, George T. Dougherty; The Discovery of Chloroform]

So, they got three bottles and inhaled in for a longer time. They slept like a rock. Silent. After a long time, finally, they awoke. Dr. Simpson yelled "EUREKA!"

[1915, Amos G. Draper; The Signing of the Charter of Gallaudet College]

I hope to see that succeed. So I decided I will put my name on that Act,

[1915, Thomas F. Fox; Lincoln's Gettysburg Address]

Today, there are various lectures but Lincoln's Gettysburg Address remains to be true, classic, and beautiful.

[1913, Willis Hubbard; An Address at the Tomb of Garfield]

The Deaf people all paid to make his figure into a stone sculpture and placed it in the college chapel...

[1913, Robert P. McGregor; A Lay Sermon]

...feel compassion and pity and send food, clothes, medicine and doctors to all ends of the world!

[1913, George W. Veditz; Preservation of the Sign Language]

They try to banish sign from the school room, from church, from Earth, banishing it so that...

[Slide 24; Fourth Generation]

[1913, Mary Williamson Erd; Death of Minnehaha]

With both hands his face Hiawatha covered. Seven long days and nights he sat there...

[1920, Winfield E. Marshall; Yankee Doodle]

Yonder, I see many soldiers with drums. With two wooden drumsticks They beat their drums...

(Slide 25)

As I mentioned, I did extensive research on the people in these films and have made the information available in a database. If you enroll in the online course, you'll have to exit the course at times to watch the films in a separate window. All films are transcribed and made available on the database. I'll show you.

(Slide 26)

Also, if you want to find a specific sign, you can search for a word, and the database will return a list of all materials that include the word. If you click on one of the results, it'll take it you to the exact place in the film or material where the sign appears. You can see how multiple people produce the same sign, which can vary depending on the time period when the sign was articulated. So, while the user-friendly design for HSLDB functionality enables rapid online access to historical sign language content, it also interfaces well with the edX platform. In turn, this creates great potential for the field of Deaf Studies to transform the expression of collective memory- both as it is nurtured within our traditional sign language cradles and how it is sustained across time. I do need to wrap up so we can have time for questions, but I know some of you want to access the course and database, so I'll include the URL addresses here for each of them.

(Slide 27)

I'm sorry I didn't have time to go over how many students were enrolled and that sort of information, but I can share this slide here.

(Slide 28)

I'd also like to recognize key members of the MOOC team. Matthew Malzkuhn, who you've seen behind the camera today has also helped me with videography- you can see him in action in the far-left picture. The other two on the top row are featured in homework assignments so students would have some variety in who they watch. Those pictured on the bottom row were featured in segments about Black ASL, Chinese Sign Language, and Langue des Signes Québécoise (LSQ). Thank you.

NOTE

Original presentation was delivered to an international audience. As such, language use seen here comprises a mixture of ASL and International Signs. Even fluent signers may want to refer to the English transcript for clarification or specificity at times.

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