Gallaudet University Department of Interpreting and Translation
2017-2018 Colloquium Lecture Series
Dr. Dr. Joseph Hill
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Dr. Keith Cagle

Hello everyone and welcome. This is the first fall morning that we have had of this semester. I'd like to welcome our students, first and foremost. Who are the BAI students in the audience? Please stand. Thank you to our Bachelor's of Arts and interpreting students. And our MAI students? Please stand. And our PhD students. Please be recognized.

Actually, one of our interpreters, Marc Holmes, is also a PhD student but is currently working in the role of an interpreter. Thank you again for coming.

It's wonderful that you are all here because our students from our Bachelor's to our PhD are the heart of this department and program, and the heart of what we do here at Gallaudet. If not for you, we wouldn't have a Department of Interpreting and Translation. Again, you are the heart of what we do here. Keep that in mind.

I would like to welcome everyone else…Faculty, staff, visitors from other interpreting agencies, a warm welcome to you all. This is our first Colloquium Lecture of this year. I believe we are now seven years running. The Colloquium Series is supported by the DoIT and the Center for the Advancement of Interpreting and Translation Research, CAITR.

This colloquium seeks to bring in well-known, well-respected researchers in the field of interpreting to share all of their new findings with all of you. Our basic goal is to improve the quality of the lives of Deaf people through research.

I would like to thank Dr. Brenda Nicodemus who couldn't make it here today. She is currently on sabbatical leave in New Mexico. She is the coordinator of our Colloquium Series and so I'd very much like to thank Brenda Nicodemus for her role.

Dr. Joseph Hill is our first presenter today. On December 7th, we will have Dr. Miako Villanueva, who will be speaking about community-based participatory research on how the Deaf community can participants in research. February 8th, our speaker will be Dr. Robyn Dean. Most of you are familiar with Dr. Dean's work. Dr. Dean is most famous for the Demand Control Schema and she will be discussing ethical guidance in Interpreting Studies. Please mark your calendar for February 8th. The final lecture of the year is April 12th with our own faculty, Paul Harrelson. He will be discussing his dissertation on effective practices of workplace interpretation. So, again, mark your calendar for April 12th. This information will be posted and disseminated to you throughout the semester.

Also know that this presentation will be recorded. Hopefully Dr. Hill won't break the camera. It will also be available in our archives. As well as on the CAITR website for you to watch again and again, as well as viewing former colloquium presenters.

I'd like to thank our two interpreters, Loriel Dutton, whose voice you're currently hearing, and Marc Holmes, for interpreting for us today. I'd also like to thank the CART writer, Kacie Adcock. I don't know where she is, but thank you for being our remote CART writer today. Thanks to Barry White, who has made the technology possible. Barry is behind the screen. They are working on our live stream, and Tony Ellis for his technical support in the DoIT as well.

Before we introduce the speaker, I'd like to mention that CEUs are available. Please see Amanda Mueller up in the front upon the conclusion of this presentation to make sure you sign up to earn CEUs.

Also, at the conclusion of this presentation, Dr. Emily Shaw will come up and offer her questions, maybe make Dr. Hill sweat, and then turn it over to audience questions.   The presentation will conclude at 11:30 and you are all welcome to join us for a DoIT lunch on the second floor of the cafeteria to get to know our presenter better.

You see I've given you a flier. I'd like to thank Gallaudet University Press for providing a discount for Dr. Hill's newest book, entitled "The Hidden Treasures of Black ASL." So, thank you to Gallaudet University Press for offering that discount.

I'd also like to recognize one additional individual, Dr. Genie Gertz, from the College of Art and Sciences, for being with us today.

Without further ado, I'd like to introduce Dr. Joseph Hill. I actually got to know Dr. Hill when I was in North Carolina and he was a graduate of Gallaudet University with a PhD in linguistics. He got a job as a professor of University of North Carolina Greensboro and came to see me in my office in North Carolina. He came to North Carolina's ASLTA conference and gave many presentations there. He spent five years in North Carolina, and then NTID offered him a job in their ASL and Deaf Studies Department where he became an assistant professor at NTID and is now in his second year. Am I correct? Fourth year? Wow, I've lost track of time. He's already been at NTID for four years. How time flies! Dr. Hill has several research areas: social history, the linguistics of African-American variants of ASL, and also looking at attitudes to sign variations.   He'll now give a talk entitled "The Phrasal Rhythm in ASL Varieties" -- and I spell that because I prefer to let Dr. Hill introduce the sign that he will use for that title – "What Interpreters Need to Know." Dr. Joseph Hill.

Dr. Joseph Hill

Thank you very much for that warm welcome so that I can present my work to you.   I've been working on Black ASL since 2007 when I joined a research team with Ceil Lucas and Carolyn McCaskill and Robert Bayley. I joined them as a research assistant and really have been involved in that work ever since. I feel like I've been talking about Black ASL for more than ten years. I'm very glad to talk beaut some of my new work focused

on phrasal rhythm, which is a part of prosody that has not been looked at in Black ASL. I haven't done this work alone, but I've worked with a co-reseacher, Dr. Diane Brentari, who's looked at phonology and prosody in her other work. She offered a collaboration on this work looking at the Black ASL data to see what we could identify as prosodic features.

Some of you may already know some about Black ASL. Some of you may not. So, first, I'd like to begin with a review of some of what is known. As I mentioned, we started working in 2007 and we found quite a number of things that were published in 2011. The project itself lasted four years. The intention was to collect Black ASL corpus samples. Prior to that, there were different sign models recorded, but there was not sufficient representation of people who lived in the south, particularly Black people of a variety of various ages.

People have always known that Black southern signers signed differently, but they didn't know what those differences were, while there was a sense that their language was different. So the research team examined linguistic features, including location, et cetera. It also chronicled the history of the education of Black Deaf children. We all know that history impacts language, development and language use, and that helps us to understand those variations. Finally, it was the dissemination of the information that we had collected that helped us understand the understanding of language, the nature of language, and the study's work. So that was the culmination of the project.

Our team went to six different states, and as you can see on the screen. The total was 17 southern states that stretch from Texas all the way to Maryland. And at the time, D.C. was also considered a southern state because it had segregated schools. But due to limited resources and finances, we selected six states for our study. The note on this slide is when Black Deaf schools were founded in those states. Understand, they all had white Deaf schools that were founded earlier than these dates.

Prior to the Civil War, there was no formal education for Black Deaf students. Either they snuck into schools, or were forbidden from having schools. But there were white Deaf schools as early as in the 1700s in Connecticut, and the schools founded across the United States for white children. But there were no schools for Black Deaf children after and you can see all of these dates are post the Civil War.

So, since the original establishment of white Deaf schools, there was a period of 33 years where there were no Black Deaf schools, and then there was a period of segregated schools, able to develop their own signing variation, which was a period of roughly 73 years. Until 1954, and then of course, the time it took that integration to occur. Knowing that educational history impacts language, we knew we needed to recruit two

different samples, one of students who had gone to segregated Deaf schools who would be over the age of 55, and another group who was under 35, schools who had a different integrated educational experience and looking at the language differences.

Our research focused on Black Deaf education. We had a simple research question. When we see Black Deaf people sign, we know there's something different. What is that difference? Often, it's easy to identify lexical differences. For eliciting signs, we typically don't say words because the words we use or fingerspell the words might influence what sign they produce. So we use images to elicit their response.

When you look at this first image, you may understand that it means "science." And in North Carolina, the sign for that looks like this. The second image is of a towel. And there are a variety of signs you might use for towel. Looking at that third image, or looking at that towel, older Black students in North Carolina would sign towel very differently. Or bathroom would be signed very differently based on where they grew up.

So we know that variation occurs depending on what state, what Deaf School you go to, they will sign things differently. North Carolina has their own lexical variation as opposed to Texas where they would sign it like this. So each state has its own lexical variation. We know that lexical variation is not the only thing that's different, but there must be other features, whether a sign is done with two hands or one hand, forehead location versus lowered signs, the signs of [audio breaking up] all of these features.

Within those eight features, we've noticed that there are factors that are sociolinguistic that impact them, including age, gender, and language variety.   The majority of these categories are based on earlier work. For example, looking in the category of phonological variation, which includes two-handedness versus one-handedness, which was research done in 1997 by Woodward and Dos Santos. Where they looked at the sign for "want", for example, or "have", which one hand can be dropped and still understood. They noticed that Black ASL signers drop less frequently than those mainstream ASL signers.

In 2007, Ceil Lucas again noted that Black Deaf signers typically two-handed variation more often. In terms of (signs on) forehead location, that lowering of location. Again, in 1976, it was seen that Black Deaf signers typically keep the (signing on the) forehead location and lower less frequently, which was confirmed again in 2001 and a longer sociolinguistic project that looked at eight different cities across the country that identified that Black Deaf signers. It was first identified that Black Deaf signers signed maintained the forehead location. In terms of signing space, first found by Aramburo and was confirmed again in that 2001 sociolinguistic study.

For syntax and discourse, we looked at use of repetition and role shifting, which were both confirmed in the 2001 study. Ceil's work in 2001 looking at language variation, they collected a large sample including many Black Deaf signers in their data, and that data was collected between 1995 and 1997, and then published in 2001. Of course, as earlier I mentioned, lexical variation, which is an easy feature to identify.

Finally, language contact which is the influence of one language on another. For our purposes, we're looking at the influence of English on American Sign Language…The amount of mouthing used. Again, we notice that from that 2001 large sociolinguistic study that Black Deaf senior citizens typically have no mouth movements. Where you look at younger Black Deaf where they seem to mouth English words more frequently, so perhaps that's a history of schools for the deaf that didn't allow signing, whereas in Black Deaf schools, they were allowed to sign. So those Black youth have a more similar educational experience to the mainstream ASL users, compared to senior citizens. Additionally, the incorporation of African-American English into signing, such as "YOU TRIPPIN'," is an example of African-American English being incorporated into Black ASL. They're not all represented in the same way, but there's a variety. There's like a variation within how they're incorporated. And that was also identified in that 2001 study.

But we know that eight features are insufficient. So we decided to look at prosody, which is defined as phrasal rhythm. Diane Brentari in her work looking at prosodic features, we started talking about what phrasal rhythm looks like. I'm sure you all know, in linguistics there's a variety of prosodic features. We've got morphology, syntax, but prosody is a little bit different. It's based on signing speed or language production speed. And this is the hierarchy of prosodic units. We know that an utterance is what someone says with a sentence or word. It's what they're saying. And they're broken into smaller pieces and I'll begin with the smallest, which is a syllable. Multiple syllables combined into a prosodic word. So "THINK" is a prosodic word. "SELF" is also a prosodic word.

But when we create a compound, "THINK-SELF" is also a prosodic word. You then have clitic groups. In English, you would have apostrophe *s* for pluralization or possession, so that apostrophes so if you can't remove it, it is a required piece of the word. And we really didn't look at clitic groups within this study. A phonological phrase is a combination of prosodic words that creates a phrase. For example, "I WRITE" that's a prosodic phrase.

Intonational phrases are different and depend upon the prosodic clues listed here, which include sign duration which can vary, acceleration, and manual behaviors, which is blinking, or torso leans, or the position of brows, head, and body, which also help identify intonational phrases. So those intonational phrases are dependent on the prosodic cues and we'll use those to identify phrasal rhythm. Phrasal rhythm does not only applied to language. It applies to music, dance. In music, we hear repeated rhythms, which we

identify, and repetition is key to phrasal rhythm. That repetition, for example, use clapping, right? So I clap. But you need repeat clapping to come up with a phrasal rhythm. So that repetition is key. There haven't been a lot of studies about repetition or rhythm in sign language. There's a great deal in spoken languages but not in signed language.

LSQ - There was a study that identified repetition, which I'll talk about a little bit later. Boyes-Braem looked at Swiss German Sign Language side-to-side leaning repetition and identified rhythm based on that. But that's really the only study that's looked at that side-to-side leaning. And neither was really generalizable to other languages. That transitional space might be important, that was what was missing in the LSQ study, is that they didn't look at transition duration. So if you look at an ASL narrative, and then use those same signs and sign a poem, you will see differences in the way transitions are used.

I'm going to show you a clip that shows some avatars. If you have a computer-generated avatar that is using individual words to do machine translation, as opposed to avatars that are based on live motion capture, you will see the difference in the transitional movement in those two kinds of avatars. So first, I'm going to show you a normal ASL narration. Don't really worry about the signs, but look at the transitions.

So that's a simple story. Now I'd like to show you the same people, the same signs, but in a poem. The transitions in that ASL poem are less defined and a little bit shorter than the ASL story. Now I'll show you a clip with avatars. This first clip is computer generated, where there's specific words being signed, and you will know that the transitions feel very unnatural. Languages they can use represent machine translation. Yes, you know they're signing something, but it feels very unnatural. Now, if you look at this next avatar, you will have a better understanding of what they're saying. This avatar is based on a live person who used motion capture to gather data, which then is applied to the avatar. This avatar is using International Sign. This is in British Sign Language.

Can you see the difference between those avatars where there's huge spaces between the signs, as opposed to something that looks more natural, and it's really based on how they use the transitions that makes it feel more natural. So, transitional movements obviously play an important role in them, and that is too an analysis of rhythm and signed languages. So there are two questions we examined. If we just look at the prosodic cues, rate, eye blinks, et cetera, is that sufficient? Or do we want to look at something more holistic? If we then do find a variation in rhythm, we see an effect between these things what variables are going to allow us to identify those differences. What social variables are going to lead us to identification?

So now that you know what our research questions were, you have to look at how we analyzed our data. These narratives were taken from the Black ASL project. There's a host of other videos we could have used, but we looked at 23 narratives where a person is telling a story to another person because typically each of those narratives are a minute or two long, so we've got plenty of signs. I think there were more than 2,600 signs that we looked at so it required a lot of annotation. We wanted to have 24 signers but one individual learned ASL at age 16, and we wanted to have people who learned ASL earler. We grouped the subjects according to age, race, and gender, so we had an older Black ASL user, younger Black ASL users, et cetera. The narrative they performed was told to another person. The signer watched a cartoon that the other has been relying on to tell them the story. So they watched the cartoon and explained the story using a narrative. And that's what we recorded.

This is an example of the cartoon they watched. There were two different cartoons that were used. One is a Popeye cartoon and the other one was another cartoon that included animals, a dog and a rabbit, where the dog was chasing the rabbit. In addition, we're going to show you the Popeye cartoon example. In addition, we used clips from participants so you can get a feel for their rhythm.

(Clips being shown)

So you can tell the difference based on assigned speed and transition. How do you capture that? Here is a screen capture of Elan data annotation. I know you've done a lot of this, but it's really how you can capture these different phonological features.

The Black ASL work for signing space, but our new work is focused on these lower tiers. I'm going to zoom in a little bit so you can get a better sense of what it says. Highlighted here you see the sign for "LOOK." Our whole utterance fills the screen, so it starts about here, and the signs that are made POPEYE IS DRIVING LOOKS and sees something is gone.   The intonational phrase, POPEYE DRIVING LOOK, that's one intonational phrase. And the LOOK AT EMPTY is the second. If we just pull out that prosodic word, LOOK, what's vital are these markers on either side of look, that's our transition duration. And then you can also see the blink. So we annotated all the blinks and transitional durations, each prosodic word within each intonational phrase within each utterance.

In terms of our measures, we looked at sign rate, the number of signs per minute, sign duration from handshape to formation, to handshape degradation, which also includes all of the holds. We also looked at transition duration, which are those movements between signs, both before and after each prosodic word. We also looked at phrasal position, whether it was mid-utterance or at the final place in an utterance. We then combined those measures into a rhythm ratio, and that rhythm ratio looked at sign duration versus transition duration. So sign duration is between two transition durations. So if they're all

equivalent, then they're each a third of an utterance, which gives us a rhythm ratio of thirty percent.

If the sign duration is longer than the transitional duration, then the rhythm ratio is greater than thirty percent. If the sign duration is shorter and the transitions are longer, then the rhythm ratio is less than thirty percent. So now that we have a measure, we can look at the rhythm ratios across groups. If we just look at sign rate, we might see enough difference between our groups, for our Black ASL users, which included older and younger. We see young Black males as being really different from the other groups. In the mainstream, we see very similar sign rates across categories. But what about those Black young males? Is the effect on race or age? That doesn't help us. So now we have to look at our next measure.

Our next measure focused on sign duration. Sign duration is very dependent upon position within an intonational phrase. So, those different durations occur at different positions. They are longer at the final position. So these red dots represent final position, and intermediate to the intonational phrase. Placement is important, but it really wasn't of interest to us. You will notice that younger white signers, sign duration is significantly shorter than all of the other groups. Young Black males is similar to them, but females are different. Then we looked at transition duration. Again, red dots shows prosodic words in final position as opposed to the black lines, which show them in intermediate positions in the intonational phrases. And of course sign duration before and after has an effect, but this data didn't really seem helpful to us either.

This group of younger Black ASL users of both genders seemed different than others, but we weren't sure what that meant. Now, rhythm ratio includes both sign duration and transition duration within our measure. Now, we again see these two young Black ASL groups as different than the other groups, but it provides us a point to look at age, race ad language variation, so we can see that something is happening here. So it means we could use rhythm ratio for measuring variation, but we wondered whether spoken languages have a similar measure, which they do. So let's talk about what their measure looks like.

Spoken languages studying rhythm, look at intonation, stress, and there are two classes of languages. One is syllable-timed so you see the consonant-vowel pairs. So the time for each is very similar in a syllable timed language. Stress-time languages have very different timings. They stress on certain vowels.

Within each of these groupings, you see more consonants than vowels. Consonant ratio of fifty percent. To help you understand what that means is on this next image. Spoken languages use a Pairwise Variable Index, which compares length of vowels and length of

consonants. That measure helps you see the languages, syllable timing -- you'll see syllable timed languages grouped here. They include Spanish and Italian and French, which are syllable-timed languages, as opposed to English, Dutch, and German, which are stress-based. So those language groups have something in common. Japanese has different timing, and so it's not included in either of those groupings. But usually Pairwise Variable Index measures are pretty standard across language study.

So when we decided to do their standard deviation to help compare across PBIs and compare our measure to PBI, so we used our standard deviation and incorporated it into PBIs, a process which I'm not going to dive into, but what we looked at is length of standard -- length of transition, standard deviation on the x axis, and on our y axis is the length of sign duration standard deviation, and that's typically how PBI -- on their x and y axis.

Let's look at transitions first. We cut this in half to see the effect. They define genders. Blue is females. Red is males. And the shape shown on the screen, if it's a square, it's older, and if it's a circle, it's younger. We're not talking about the shape of the people, we're talking about the shape shown on the screen.

You'll see that older people are grouped in longer transitions where the younger have shorter transitions. So it seems that age has an effect, but there's -- in terms of transition duration, based on these groupings, if we're looking at sign duration, again, we're focused on the standard deviation here, and we've split in half for time duration. We can see that blue gender female is longer sign duration than males all below in a shorter duration.   So we can see some differences on sign duration based on gender, and when we combine both of those factors, we can see an effect.

Examples. A Black young male and an older white female, to give you a sense of their rhythm. You remember where these two samples were located on the ground. There wasn't a huge difference between them in terms of sign duration. They were very similar. But then transition during ration had an effect on them because of age, which is one of the reasons that we decided to use the rhythm ratio as our measure. So our rhythm ratio seems affected obviously by age. And gender has an effect. It's there, secondary, and then language variety, whether it's Black ASL or mainstream. There are other potential factors, including socioeconomic status, or region where they live or were educated, which have additional effects. But for now, it seems like it's stopped by looking at age, gender.

We can't look at those prosodic cues in isolation. We have to look at them in total, and we know that those are factors, but there are likely additional factors. Advantages to rhythm ratio include the fact that gross measures such as sign rate tell us about different groups where we get more information from rhythm ratio, including sign duration, transition

duration, and prosodic features. And that really captures the ability to use standard deviation between sign transition and the mean and transition duration and the mean.

If we look at Black males, and look at what that means, so there's obviously something there. Somehow we can consider one additional factor, which is using rhythm ratios as a prosodic measure for further examples. So now I believe we have some time for questions.

Dr. Emily Shaw

Wonderful job. Thank you so much for coming today. Let's give Dr. Hill a hand again. Fabulous presentation.

I have three questions, which I hope will lead to further discussion. First off, I was fascinated with the discussion about how we can't separate these different features. You have to look at sign language as a composite. Traditional sociolinguistic -- handshape, location, space. But your research shows us that we must look at sign language holistically as a composite.

Again, that formula…could that formula include, for example, other nonmanuals, eye blinks, head movements in order to make the rhythm ratio more robust as a measure of prosodic gestures?

Dr. Joseph Hill

That phrasal rhythm is looking at the intonational phrases and is really narrowed in there in terms of those durations. But it seems like blinking is very common within sign languages. They all have blinks that help identify intonational phrases, and that could help us. But for rhythm, there isn't a lot of way to measure that. We came up with this as a new measure, so we would have to test this to feel more confident about this measure across the board. Right now, it's based on Black ASL and mainstream ASL. We need to look at other regional variations to determine whether it is helpful in identifying those patterns, to create greater support for the work we're doing, and if there's variation between northerners and southerners, you know, is there a way to use this to measure the variation regionally.

Dr. Emily Shaw

We worked together to collect samples in the Midwest of the United States, and so we brainstormed several different ideas for future analysis, and we will definitely add this to the list. Two things that we actually decided to look at. This analysis is done from recorded samples of one person signing to another person. Now, back and forth

conversation has an effect on rhythm, and if we are looking at multiple players having a conversation, how can we then look at phrasal rhythm of two interlocutrs

Dr. Joseph Hill

I think having cameras on both participants, then you'd have to parse out in your annotation each participant. I wasn't as involved with the coding. Diane Brentari used her research assistant to code all of those intonational phrases, eye blinks, and other prosodic cues, and it takes lots of time for a single clip. It's very time consuming, because you have to go through each clip multiple times. You have all of the features documented, and then you have to do reliability tests to ensure to ensure that …(unintelligible) so it's very time consuming. So if you're capturing that dialogue, the data, then it's going to take a lot of time and effort.

Dr. Emily Shaw

One of the biggest challenges that we face these days. Now technology has the ability to catch sign language details such as facial expressions, but you still have to do manual coding in order to identify each of these different prosodic cues. If one person does this annotation five times, how long does it take for a short sample?

Dr. Joseph Hill

Because I wasn't involved with that group, I'm not sure of the exact time, and the people that were used were very experienced, and I'm sure the first time you did it, it's going to take significantly longer, but with additional trials, then you're going to reduce the time. But it's still very time consuming for annotation.

Dr. Emily Shaw

That is a huge challenge in this field. I want to shift over now to application for interpreters. This past week in my class, Discourse Analysis 720, who's taking that? You might remember the discussion this week about style and linguistic variation. All people show identity through a variety of different things like clothing, hairstyle. But language is another way that we express our identity. As an interpreter, my job is to communicate the spirit of the message. The first step is to notice that style variation is happening. Like you've shown us, that Black Deaf ASL users have a difference in style.

Secondly, do I as an interpreter, have to express that differently? Is that different to the meaning of the message? And thirdly, as a person who does not have the same identity as my consumer, gender, race, obviously I can't ever fully have the exact same identity as the person I'm interpreting for. Does my background influence the decisions that I make for expressing identity style variations? Obviously, you've identified what we need

in order to see the variations, but now that we can see that stylistic variations are present, what do we do about it in our interpretation?

Dr. Joseph Hill

I don't know as much about interpreting, but I often get that question. I'm like, now I can see it, what do I do? It's definitely going to help us identify and understand why there's a difference. But if I'm struggling to understand it, but something that's different. Maybe we figure out now exactly where my struggle is, what I need to practice more, focus on more, learn more about. Once I've identified, and as it applies to an individual consumer.

Dr. Emily Shaw

You're right, because language variation typically causes people to create judgment about language. So if an interpreter becomes more educated about the fact that there is variation, then people can start talking about language variation instead of making judgment calls about the language variation that they're seeing, that they may not be used to.

Dr. Joseph Hill

And I think that's a perfect example. I think teaching linguistics class at RIT and the students, we include videos of people who are Deaf who sign ASL, but also have some transitions. They're used to seeing teachers signing very clearly, very sharp, very distinct. But when we give them samples, they don't understand the signers. You know, somebody that lives out on a farm. And that's the normality of language. That's how they're using language. And students judge that language as sloppy, and it's not a place for them to provide critique. They need to understand that there are ways they can figure out and understand that language use based on multiple exposures. So it might be a struggle when you're first exposed to it, but you need to re-expose yourself. Now, back to whatever your question was…

Dr. Emily Shaw

Solving our linguistic variation conundrum is really what I was getting at.

Dr. Joseph Hill

We've got to figure out how to match. Interpreters have their own language variation, language experiences. And if we have similar experiences, that's great. But if we don't, we don't want them to necessarily try so hard that the Deaf person feels out of sorts and reacts that what they're receiving seems a little bit odd. Typically, Deaf people are used to naturally adapting their language to where they are, so you can allow them to do some of that work. But you can ask them, so that you're both working towards that shared goal.

Dr. Emily Shaw

Awesome. Thank you so much for that dialogue and we'll have more at lunchtime. I now want to open it up to audience questions. We have a good chunk of time, probably about 15 minutes for questions from the audience. So if you would like to ask a question, please line up to my left. Don't be shy.

Lynn Dey

Hello, and welcome back. Hello, everyone. I'm Lynn Dey. I work for the Department of Interpretation and Translation andI grew up in a Deaf school in North Carolina, and my experience, we had first segregated schools. And in the early '70s, I believe 1971, the schools were integrated. We had Black Deaf students come to the white Deaf school, and I noticed that there was a difference in their signs. Is there any research about how the sign language of -- how the signs of the instructors affected students? For example, the sign language used at Black Deaf schools, is there a difference than the sign language used at white schools? And I asked students at my school where they learned sign language from. Often they would say lectures. So I wonder if there's any unique research tied to the language from those teachers. For example, Laurent Clerc used French Sign Language when he came here to America and started educating Deaf students. So there is a huge influence of French Sign Language on ASL even today because of that.

Dr. Joseph Hill

So we don't have language origination research done because there was no investigation done at the time language was developing for Black Deaf students. Those people are all gone. But based on the educational history, the school history that we have noted, many Black Deaf schools varied based on state law for qualifications of teachers who could teach at the Black Deaf schools. Some of them didn't allow Black teachers. Some of the teachers went to historically Black colleges and universities, received training there, six weeks of the summer training. So did they have enough sign language knowledge to actually teach Deaf children we do for sure based on narratives from subjects. There were some signs that were created, some dependence on reading lips, and that was very common in the student populations.

Other states allowed white teachers to teach Black students. In Alabama, there were three white Deaf teachers. You know, a lot of schools for the Deaf in the north, mostly in the north. School for the Deaf started to ban the sign language, a lot of Deaf teachers lost their jobs so they went to teach at Black Deaf school and they brought their language with them. It didn't mean that the students completely adapted to all of the white signs that were made. Carolyn McCaskill found that when they started to integrate the schools

that were about 15 minutes away from one another, the students couldn't necessarily understand each other. So, again, there wasn't always an influence based on the white Deaf students. There were differences between them.

Lynn Dey

I just remember in my day, when integration happened, communication was terrible. It was very hard to make sure that people communicated well, but I think sports, specifically basketball, was a wonderful way to help shift communication so everybody could understand one another.

Dr. Joseph Hill

When integration happened, a lot of the Black Deaf students stopped using Black ASL and started adapting to the white signs. But in our interviews with Black Deaf senior citizens, they learned the new sign of the new school, and some of them forgot the Black ASL they were using, and some continued to code switch, depending on who they were talking to. And so they would use Black ASL only with their Black Deaf peers.

Pamela Collins

Thank you. Wonderful. Thank you. Got to give you a hug. Thank you so much for your incredible work. This is so important and rich.

First off, to applications, before we jump through interpretation First off, let's talk about language and cultural applications. It's so important to first learn the language and the culture before being able to apply that to an interpretation. First off, it's very important that you have a team that understands the language and culture. As an interpreting team, we need to have a variety of young and old Black interpreters. Often when people are telling stories I think the exposure to the Black Deaf experience helps interpreters to be able to have a knowledge of Black Deaf culture and the language, how to be able to approach interpreting tasks. And so I think that that application to class, just like you were talking about in your class, it's so important that students be exposed to Deaf people from a variety of locations, races, cultures, and there's still information missing about Black ASL and ASL that's being used with people from Africa, so it's very important to have this exposure to language and people from a variety of different cultural backgrounds that use ASL. So, thank you so much. I have no question. I'm just saying that we need more.

Dr. Joseph Hill

Right. And that Black educational research started this 2007 and hasn't really been touched since we concluded our project in 2011. So, yes, we need additional work and

we've continued to look at that same work, but we need new work. This is the first collaboration between Dr. Brentari and I, but I think we need … of course, some of it's dependent upon the financial resources and grants to do additional work. But not a ot of people have the expertise in Black ASL. That Black ASL team, remember I mentioned the name, the three people that led and I joined, I became the fourth. But now Ceil Lucas has retired. That leaves just the three of us. Robert Bayley is hearing. He's not as familiar with American Sign Language, so that leaves Carolyn McCaskill and I. I don't know if Carolyn's going to keep on doing the work, but, you know, I hope to have a long career doing it, but then that leaves me. I can't do all the work myself. So we absolutely need people who have interest and resources and time to actually get together and add to this work. I can't do that much alone, so really need collaborations. So if you want to take it on, then I'd be happy to encourage you doing some of it on your own that. This is not a one person job.

Pamela Collins

Start bringing you coffee and learn by sitting at your feet before I start jumping into the research myself. But again, thank you, your work is very much appreciated.

Paris McTizic

Hello, everyone. Amazing work. Such a fascinating presentation. Let me make sure I'm situated correctly here. I'm Paris, a student here in the MAI graduate program, and a former bachelor's of interpretation student. During your presentation, I think it's very important for us to recognize rhymn, especially in our work.   But how do you think we can then incorporate that rhythmaticity. We can then be able to connect with individuals. If we can first recognize it then we can incorporate it. So how can we and students incorporate that rhythm in our language use?

Dr. Joseph Hill

As with any language feature, it's really acquired through practice. You can practice on your own, but you have to somehow figure out once you're doing the practice on your own, engaging it with another. So incorporating that rhythm somehow, and it's through organic exposure and interaction, not just looking at it on tape. You really have to interact with people, and it's easier to do it that way. And then once you add in the interpretation process, it gets harder again. With frequency it becomes natural for you to align it with your interpreting more easily. But it's just through practice.

Paris McTizic

Thank you.

Audience Member (Name Unknown)

Hello. Good to see you again. Let me make sure I'm in the frame. Your research was done from 2007 to 2011. And of course, that is not in digital media. It's frozen text. And so now with the popularity of Facebook, I know that often people have arguments or signs, repetition, there's so many things that go left unresearched. So I'm sure that we can't take all of the social media posts in sign language and use those as research mediums. And I'm wondering about social media's influence on the language itself. Especially in terms of ASL. There are many people of color who are posting videos of sign language in ASL, and I'm wondering if in their social media posts, there is a trend of code switching to mainstream ASL, or if Black ASL is contained in those social media posts?

Dr. Joseph Hill

You know, when we're exposed to things in the educational system, the schools for the Deaf, you see more formalized language. You see Black ASL. I don't know that you're seeing it become more standard, used in more standard settings. Social power has an effect on language use. And it also depends on who you're talking with. If you're going to maintain the dominant language as opposed to other varieties. Because when you're talking to people who are of the same group, who live in the same area, then you're more likely to use their language variety and language variation than persists.

Audience Member (Name Unknown)

There's three actors out there especially in Rochester and Black Deaf comedians now that population is growing.   And so I have seen that there is the use of Black ASL, especially in humor. So could comedians have a role in variation in language use.

Dr. Joseph Hill

It's really hard to say. You'll see social commentary used in the community, but the community really influences how language is used. So you might see something used on social media, see it in a video, but in conversation, does it really affect you and how you're using language.

Audience Member (Name Unknown)

Last question. I'm in graduate school, in Dr. Shaw's class using Elan…very time consuming. You talked about many possible annotation layers. How many layers do you

think it's possible to identify? I've never seen as many tiers as you have in your research.

Dr. Joseph Hill

It really depends on your focus. I think it's unlimited. You know, for the Black ASL project, we were focused on role shifting, for example. So constructed action, constructed dialogue. So, we would parse those out in different tiers, and then there are other people who might want to focus on prosody, and they can add additional layers if they wanted to. So you can add as many layers as you want. Really dependent upon what your focus is. Elan is a very flexible tool, and sometimes, you know, you'll set it up a certain way, and then you feel like you're wasting your lunchtime editing your tiers because you change your structure. But I think you really need, and I'm sure you have to have some sort of consensus within a research team, that you're going to set it up a certain way. You're going to use a certain format. So there needs to be some standardization in terms of format, and that's really focus dependent.

Audience Member (Name Unknown)

I'm glad that you mentioned being focus dependent so that you don't get to unlimited tiers. But of course, going back and using an original annotation and adding to it can make it difficult, like you said, because of the formatting.

Margie English

Good morning. Nice to see you again. I'm Margie English. I saw that you used sample videos, a variety of different people, ages, and all of these were young signers regardless of race. What were you looking for in terms of race? What did you notice? And did you notice a similarity in the younger population? You might have said that and I might have missed it, but could you repeat that?

Dr. Joseph Hill

You mean in terms of rhythm?

Margie English

Right, especially in intonational phrases and rhythm.

Dr. Joseph Hill

So, again, I think we didn't really key on any one of those. We did it more holistically. The young Black male seemed very different than others and was of interest, and that Black young female had that variation. But, again, I have to admit, the sample was

relatively small in terms of the number of young Black females. If we had a more robust sample, we're not sure whether we'd see the same thing we found or find a bigger difference. I mean, there are plenty of samples out there, and you can see some patterns, but you actually need more samples of Black Deaf signers, because maybe there is a possible difference based on each of those individual factors, including the prosodic features. And again, using them with more repetition, you'll see greater effect.

Margie English

Another question, it might be tangential, is that you said you had several assistants helping through the annotation. You have many things on there, left-handed, right-handed, pauses.   It's really cool to see all of those tiers. And you said that each clip had to be reviewed five times? Did all use the same style? For inter rated reliability? And if not, how did they recognize inter rater reliability? Did all -- do all assistants -- did an annotation? Did you?

Dr. Joseph Hill

Typically what you did, they all view the same video file and they had certain keyed utterances that they compared. There were a couple of files that they would do and comment. And they each did it five times. So they would watch it in normal speed, and then they would watch it slower, and then two assistants would sit down and make sure that they agreed on how it was coded and knew exactly what they were looking for and how it should code. That's how they proceeded. I wasn't as involved with that portion, but I was told exactly how they did that methodology.

Margie English

That makes sense. But I'll follow up more later.

Dr. Emily Shaw

And again, let's give Dr. Hill a round of applause. Thank you so much for your presentation. Just a reminder, if you are wanting to sign up for CEUs, please see Amanda. You will sign up, and then receive an online evaluation.   In order to get CEUs, you must complete the evaluation. Secondly, Dr. Miako Villanueva will give a presentation December 7th here in this room.   Please mark your calendars for that event. Thirdly, please join us in heading over to the cafeteria for lunch, where we will continue our conversation with Dr. Hill about his research. And lunch is paid on your own. Again, thank you for coming to join us for this wonderful discussion and presentation by Dr. Hill.

Dr. Joseph Hill

Thank you.