The social-interactional perspectives in the studies of special education and autism: an interview with Kristen Bottema-Beutel and Juliene Madureira Ferreira /

As perspectivas sociointeracionais nos estudos de educação especial e autismo: uma entrevista com Kristen Bottema-Beutel e Juliene Madureira Ferreira

Mariana Lima Becker [1]
Phd Candidate at the Lynch School of Education and Human Development at Boston College.
http://orcid.org/0000-0003-4911-5506

Ricardo Rios Barreto Filho [2]
Professor at the Departamento de Letras at the Federal University of Pernambuco. PhD in Language Arts (concentration in Linguistics) at UFPE.
https://orcid.org/0000-0002-2895-2981

The socio-interactional perspectives of language do not just promote reflections in a purely academic or theoretical viewpoint. This area of research also aims at shedding light into current social matters, such as education, work and health. Thus, we wanted to provide an interview with scholars

---

[1]
✉ beckermr@bc.edu
[2]
✉ ricardo.rios@ufpe.br

who make a relevant use of these perspectives in order to contribute to the discussion of social practices.

We firstly met Dr. Bottema-Beutel, who is an associate professor at Boston College, where one of us (Mariana Lima Becker) is doing her PhD training. She focuses on Special Education and has been using Conversation Analysis and Discourse Analysis since her own PhD research in order to better understand the interaction of people with disabilities, especially to show what they are able to do while interacting. She has numerous publications on Special Education, especially on autism. Dr. Bottema-Beutel kindly accepted our invitations and also introduced us to Dr. Madureira Ferreira, who was working together with her in a research project about interaction in Special Education classrooms.

Dr. Madureira Ferreira is a Brazilian researcher who is settled in Finland and is a professor at the Faculty of Education and Culture at the Tampere University. She has professional experience both in Brazil - at the Federal University of Uberlândia - and in Finland, where she currently works. She is interested in educational and school psychology and her research addresses topics, such as inclusion, special education, peer interaction in studies in both Finland and Brazil.

The fact that we could talk to both of them together was very enriching for us, because their perspectives could give us a cross-national and cross-cultural point of view about what is to do social-interactional research in different countries and educational contexts. During the interview, we addressed the affordances of their research methods, the challenges they face in their field, their purposes and future plans.

We noticed that their work goes beyond the academic milieu, insofar as they provide important insights about the learning processes and the agency of children with disabilities. Their work thus provides relevant applications for this population and also points out aspects that are not often addressed by the mainstream literature on autism and special education.

Interviewers:

Tell us a little bit of who you are, your trajectory and what you have been working on.

Kristen Bottema-Beutel:

Revista Letras Raras

ISSN: 2317-2347 – v. 11, n. 3 (2022)
Todo o conteúdo da RLR está licenciado sob Creative Commons Atribuição 4.0 Internacional

I am an associate professor of Special Education at Boston College. I did my PhD training at UC Berkeley with Laura Sterponi, and she is interested in a range of topics, but one of them is social interaction in autistic children. And when I went to Berkeley and started to hear her perspective, it was totally new. It was not the way that mainstream autism researchers think about researching autism. So she used conversation analytic and discourse analytic combined with ethnographic approaches to understanding autism. For me, that sort of approach was critical, because there is so little description of autistic social interaction in the literature, even though autism is described as impairments in social interaction. So that seemed like a really interesting paradox, but the field is sort of perseverating on these cognitive explanations for autism without any examination of social interactional explanations. So that's how I got started thinking about it in this way. I think once you start looking at these social interactional descriptions of autistic sociality, you see a much more complex picture of what it is, what it means to be an autistic person in a social interaction. It opens up all different kinds of questions. It reveals autistic strengths, it gives insight just into autistic ways of being in the world. So that's what got me interested.

Juliene Madureira Ferreira:

So for me, what actually drove me to become interested in social interactions was when I was working at the Federal University of Uberlândia, seven years ago. And I was allocated in the teacher training school. So they are what we call Colégios de Aplicação in Portuguese, I was allocated in one of those. My basic role there was to be an educational psychologist that would oversee the developmental processes of children. In my case, it was children from early childhood education and the first years of elementary school, and I would also oversee internships of Psychology or Pedagogy students that were carried out in that facility. So I kind of had that dual role as an educational psychologist and as a research teaching staff. And it was particularly important at that time, because it was when the regulations and the laws in Brazil were changing so there was a more inclusive agenda in the Ministry of Education. There was a new regulation through which the school had to prioritize at least 10% of the vacancies of new incoming students for children with disabilities. So these children with disabilities could have intellectual disabilities, multiple disabilities or developmental disorders, such as autism and others. We became more aware of the interactional demands that needed to be changed, not just the

infrastructure of the school or the hiring of extra staff, but about what we should actually do. And what we should actually understand in order to foster a learning environment for all the children, so this is what drove me to pay attention to social interactions and particularly to peer interactions, because we had investments at the time, we had quite a good amount of money at that time to do these studies. I know the reality now is a little bit different from that time, because we had a lot of extra staff. We had a lot of in-training professionals that were supporting this schooling process, but we noticed that the peers were the most important partners for the children. It was actually, in the peer interaction, that inclusion became solid, because they wanted to interact with other children. And that is when I started my PhD in *Universidade de São Paulo* in 2013. So I was looking at what the peer contribution is from a developmental perspective, what the peer contributes and how the peer contribution comes about for the development of children with intellectual disabilities in that particular case. From that point on, I have always worked with children with some sort of disabilities or children with behavioral or psychological issues that became challenging in the schooling process. Thus, I came to Finland during my PhD and I pretty much never went back to Brazil, but this continues to be the focus of my research here. I see my methods in different aspects. They started with the microanalysis of behaviors, so this approach is a little bit different than conversation analytics and discourse analytics, it is more focused on observable behaviors and on understanding how the regulations of behaviors become significant for children in different situations. I also usually analyze this from a developmental perspective, where we can see the changes, and that the interactions become more complex or easier depending on a certain set of behaviors and nonverbal communication as well. So I think I would define my starting point there.

Interviewers:

What are the affordances or benefits and the challenges of implementing the methodologies you use in your research?

Kristen Bottema-Beutel:

I don't necessarily think it has to be this way, but cognitive approaches tend to search for deficits. That's sort of the purview, that's what they see as the purpose of their research. So they'll do group design

studies where they compare autistic children on some cognitive tests to non-autistic children. And if there's a difference, then they have identified some deficit and, then, that will explain why autistic kids develop the way that they do. I think there's a lot of problems with that. It actually hasn't yielded all that much understanding of what it's like to be an autistic person and even how they develop. So interactional approaches are a little bit agnostic about deficits. It's really just asking: how did this interaction occur? How did it proceed? What were the pieces of interactional conduct that steered the interaction one way or the other? So you don't have to have any assumption about things being deficient. You just look at it and you see how it went. How did the participants themselves contribute to and make meaning from this interaction? So that's the starting point, and I just think it's a much more fruitful way to see what's going on. You don't have to have this deficit approach, and it allows you to see that these interactions do go forward. For example, you can have non-speaking autistic kids, with what other perspectives would call a limited interactional repertoire, but the close transcription processes help you identify all these seemingly small pieces of conduct, whether it be talk vocalizations, the body orientation, just movements of the eyes, all those things can go on a transcript, and you can just see how they contribute to an interaction and what unfolds. So I think that you're looking at more. If you're using a cognitive assessment, you actually aren't looking at an interaction at all. So it just invites you to see more and it invites you to see it in a way that doesn't presume that deficits are the primary thing that's going on. So that's what I think is the benefit of interactional approaches, it is that you're actually looking at what's happening. I think the difficulties are that it's very time consuming. It takes a lot of effort to transcribe. I think, in my corner of research, there aren't a ton of people that do it. That's why it's exciting when you are able to collaborate with other people who have perspectives that are amenable to this sort of approach. So challenges for me are that, when I use social interactional methods, I have a harder time getting my research published in mainstream autism journals. I usually have to publish it in some other kind of journal, which may or may not ever be engaged with other people who I consider to be in my field. So it's a little interdisciplinary, and so that means that there's not a lot of cross talk. I feel like I am in an almost separate corner of research. When I go to conferences, people look at me like they have absolutely no idea what I'm talking about. But I think that is changing. I think that people are now seeing that we actually need these nuanced descriptions of how social

interactions with autistic people happen. So I don't think there are necessarily methodological challenges. I think there are disciplinary challenges.

Juliene Madureira Ferreira:

Well, I completely agree with Kristen and I think, for me, what has been the most challenging situation is the time that we must allocate in order to do a micro analysis, for example, of a thousand minutes of video interaction. 25 encounters with the child, for example, can easily go up to that. It's enormous! So we have to analyze the videos, for example, for each of the behaviors that we are selecting. Usually, it's a complex selection. So we observe the gazes, the gestures, the body posture and the regulations, so we observe how one behavior is connected to the other. In order to analyze all these elements, we look at the video separately, because it's impossible to look at the gaze and the gestures at the same time. So you have to look at the gaze at one time and then look at the gestures at another time. It's extremely time consuming! And one of the most problematic reviews that I have had lately is because we have, in a very wide perspective, the cognitive approach to everything. Basically, it's very difficult for reviewers to get outside of that framework and understand that this is a new proposal. So it's impossible to look at, for example, collaborative learning, which is a very cognitive phenomenon, but it's purely grounded in social interactions, in an interactional process. It's impossible to look at collaborative learning and understand the meaning making process and participatory sense making with a cognitive perspective. So one of the reviews that I usually get is "your definition, for example, of learning is not in accordance with this and that cognitive perspective". And then I have to argue that, well, this is exactly what we want. We wanted to offer something else, an alternative. And then show how, through this alternative, we have much more peer participation. We have much more agency. We have much more of the children with disabilities being able to express themselves and being able to regulate others' behaviors during an interaction, which affects developmental processes or learning processes. So these are the main obstacles that I have encountered in the past years.

Interviewers:

How is the process of data collection for you in terms of having permission from schools to use video cameras in order to collect data that allow you to see that level of detail you work with?

Juliene Madureira Ferreira:

Well, I can tell you about the experience in Brazil and in Finland. So first of all, every country has its own regulations, and you have to comply with them. In Brazil, for example, it's impossible to do any research in schools or with children without having the project approved by an ethical committee. In Finland, it's a little bit different. We are under the European Union regulations, which are very explicit. So if you follow those regulations, the bureaucratic processes are way easier than in Brazil. We get consent so much faster. You just have to make more paperwork basically, but the time that we wait for the decision is usually faster and the decision comes a little bit quicker. What I have considered as important is actually how to act with the children in the school. So my approach is I always have some time that I go to the school and I get acquainted with the children, so that they understand that I am there. They see the cameras, they play with them. They get used to being recorded and they get used to seeing themselves in the videos, then I start the data collection. So, when I start the data collection, they are already very familiar with the process and the agreements that I do with the families, especially if these are families of children with disabilities or children that are under special education support. Also, I offer them a contribution, like a return for their engagement. I offer them an assessment of some sort. So before I do any analysis or use the data, I tell the parents what I have observed in the data. In some cases, this is really nice, because I can show them how the children are engaging with other peers. I can show them how they are doing in school, which is usually information that teachers don't necessarily share. I also selected some pieces of the recordings to show the parents, and they really appreciate it. This has worked so far. I did this in Brazil, and I do this in Finland as well. But I have never had any issue with ethical committees. You know what you have to do, you know what the paperwork is about, you know which ethical committee you should submit, and you basically just do the process.

Kristen Bottema-Beutel:

So I think Juliene's data collection is much better than mine <laugh>. So Juliene, I think you had like three cameras and three microphones?

Juliene Madureira Ferreira:

In our project, we had two cameras, one fixed and one mobile camera with a large microphone that you attach to the cameras. Thus, we wouldn't be afraid of not understanding what children are saying, because they're whispering or something like that.

Kristen Bottema-Beutel:

In our project, we were in mainstream or inclusion classrooms. So it was classrooms with like 25 kids. And two of the kids were autistic. And we did this, I think in three or four classrooms. I don't think our data collection procedures were that great. We had one camera that was mounted and we would move it when the kids moved because we had our focal kids. And then we had these point of view glasses. It was basically like a go pro, like camera glasses that I think we had eight pairs and so eight of the kids would wear them. They could all sync together, like the sound you could line it up so that they all sync together. I think it was a good idea. But it didn't actually work like a hundred percent. Our observations were only 30 minutes long, but the glasses got hot. There's a battery because it's a camera and they were wearing it on their face. So a lot of the kids were like "it's too hot". There were just logistical things like that, and I didn't anticipate, that ended up making the data collection not go as smoothly as it could have. So there's the equipment issue. As Juliene mentioned, the microphone is really important because, especially if you have a big classroom, there are things happening all over the place and a lot of overlapping talk. So you have to kind of decide. Like, what is the context? Is this a full group with the teacher talking and students talking one at a time, is it small group interactions, and I'm just gonna record the small group? Is it like a class? You just have to make these decisions logistically of what you are going to record. And is it feasible to record that? So there's the equipment issue and then the permissions issue. I think my experience was similar to Juliene. It wasn't super hard to get permissions. We did have to go through it in Massachusetts. Many of the big urban schools have their own IRB (Institutional Review Board). So you have to get the IRB permission from the school. You have to collect consents from every student in the class. And then you have to get, of course, your own university IRB. But I think, in Massachusetts or in the US, it differs by institution. I know that by working with Juliene. In Finland, it's like everyone is under the same regulations. In the US, it can totally vary by institution. Boston College is pretty willing to work with you to make sure you get the permission

Revista Letras Raras

ISSN: 2317-2347 – v. 11, n. 3 (2022)
Todo o conteúdo da RLR está licenciado sob Creative Commons Atribuição 4.0 Internacional

secured. They're not trying to deny your permission. So they'll let us know what we need to do to make this an ethically workable project. So I think with other school districts, they would have had different procedures for giving us permission on the school district level, and it might not have worked. So I think, with classroom interactions, there is that complication that you have logistic things to figure out about how you're going to collect the data, how you're going to get the right information, how your recordings are gonna be usable. And then the permissions issue. What happens if I don't get consent from five of the twenty kids? What ethically do I have to do in those cases?

Juliene Madureira Ferreira:

Yeah, this has happened, for example, in our current project. So we have, in this project, a classroom with 12 children, and it's a special classroom, which is very rare in Finland. But we managed to get the approval of the school to do the research in this special classroom. And they have 12 kids, nevertheless, only nine participated in our study, but we don't want to exclude the other children from the activities that we are proposing. So they benefited from the process that we were suggesting. But, when we are analyzing the data, we have to take off all the contributions of those 3 children. And then they might appear from time to time in the recordings, because it's a small group. But we cannot, in any way, publish anything they are in. So we don't exclude the child so that they don't participate in the recordings, but we do not use absolutely any data that comes from that child. And this is what we have to do here.

Interviewers:

Can you tell us about the project that you are working on together? We know it is going to be out soon.

Kristen Bottema-Beutel:

I guess I can give an overview and then Juliene can speak about it, because she has done most of the work on it. So I'll just give an overview of how we came to be collaborating. So, Juliene came here in 2021, and she was here until December. So Juliene came and she emailed me and said "I'm gonna be in the Boston area". And we arranged for her to be a visiting scholar, which gave her permissions to have database access. So she's interested in the social interactional analyses of classrooms, which

Revista Letras Raras

ISSN: 2317-2347 – v. 11, n. 3 (2022)
Todo o conteúdo da RLR está licenciado sob Creative Commons Atribuição 4.0 Internacional

very coincidentally I was also working on. It's a coincidence because a lot of my work isn't in classrooms, because it's hard to get good data. But a graduate student of mine, Shannon Crowley, had started analysis on some of our classroom data. And we were using a conversation analytic approach to look at instances where autistic students are in small group interactions with a paraprofessional or reading support specialist and a group of other students. So our question was: how do those interactions unfold? And we've settled on this particular phenomena, which in conversation analysis is called accounts. And I think it's related to politeness research, so Ricardo might be familiar with this. But it is when you have an interaction and there is some component of the interaction that violates agreement preference, or is considered to be untoward in some way, you provide an account for it. So, if we were in this zoom call right now and I had to leave, I would say "I have to go", but I wouldn't just say "I have to go", that's an unpreferred sort of unexpected piece of conduct. So I would provide an account for it, for example, "I have to go because my kitchen's on fire". And I would have to do that in order to express alignment with my interlocutors and show my sort of reasonableness in the interaction. So we were looking at how primarily paraprofessionals accounted for autistic children's behavior because autism often means that you produce behavior that is unexpected. And an interesting thing is that usually you account for your own behavior, it's very unusual for someone else to account for your behavior. But we found that, all over our data, the adult would provide an account for autistic children's behavior for the benefit of the other kids in the group. So it's in almost every piece of literature on non-autistic populations, they'll talk about accounts and they're like this never happens. And we found that this other provided account happened quite frequently. So we were working on that when Juliene joined us, and she has these amazing recordings of these classroom interactions. She also found accounts in her data, but it was the other kind. It was the autistic kids providing accounts for a range of different things, their own conduct and the others' conduct. So the paper that we're working on right now is looking at how the autistic kids' provision of accounts show their orientation to normative conduct and their agency in the interaction, and in what ways they account for their own conduct. I think most of them are autistic kids, but I think there might be other intellectual disabilities too. So that's like the basic conceptual gist of the project. And I'll let Juliene talk about the specifics.

Juliene Madureira Ferreira:

I have been working on this project because it has different angles. So it started because it's a very unique pedagogical approach that supports participation and also supports children to actually bring elements, contents, experiences that they find interesting for them, from home or other social contexts. And they would like to share and further investigate in the school. So it's actually a pedagogical approach that was elaborated by a Brazilian scholar, a very good friend of mine, Luciana Muniz, and she's even won the award from the Ministry of Education, as the best pedagogical practice of the year in 2020. And we have been discussing this pedagogical approach and how to utilize it for special education. So that's when I came in and we collected this data in the spring semester of 2021. Then, I started looking at how we can actually show this agency that we can see in the data. So I came across Kristin's exceptional work. And I said, "Okay, I have to learn this". And I have to work with her on this, especially because it was with autistic children, so it fits it very well. My initial approach with microanalysis wouldn't have allowed me to explore in such detail what the conversation analysis actually does. So I said " Ok, I have to contact her and I will make this happen". And it has been a great experience. So Kristen taught me pretty much how to do it and how to incorporate this analysis to the project. The project has other analysis and other discussions as well, but this is the one that we are focusing on right now. So the data consists of longitudinal data, we collected it for six months. It consists of video recordings of children in morning sharing circles, where they bring their experiences through a diary. So the initial process is that the children get a diary, an ordinary notebook that they can take home, or they can take wherever they want. And they make notes of things that were very significant for them, but they might not write anything. They might glue a picture or draw something. The important thing is that they come and share what they have learned or what they want to share, what their interests are. So the data consists of these morning circles, where the children are actually sharing what they bring with the diary, and they explain what's going on. And we video record the group dynamic in general. Then, from this learning diary, the teacher elaborates lessons that will incorporate the children's interests into the classroom curriculum, so that the children can experiment and experience what that one child brought that was interesting. So they make a small election of what the topic is gonna be about in the next days. Then, the teacher incorporates this into their classes, and we have some video recordings of those learning activities as well, and also the diaries themselves. So

what children actually did during those six months and the practice were great, it originated this particular data that we are using for the project, where we are looking specifically at the accounts.

Interviewers:

So the data collection was in Finland?

Juliene Madureira Ferreira:

Yes. But one branch of the project is in Brazil. So we have data collection in Brazil as well, but I'm not leading that analysis. That analysis is being led by Luciana Muniz, and I collaborate with it. So I bring some insights to it, but I'm not leading the analysis. I'm leading the analysis with the Finnish data and the ideas that we are gonna look at the accounts. We are gonna look at the interactional structure that the teacher provides during these sharing circles. So this is probably the next thing that we are gonna look at if Kristen has the time to co-operate on the next semester. So I have already started selecting some of the episodes and things like this. And the main theoretical discussion is about the children's agency on their learning process and trajectories.

Interviewers:

What are some of the implications of using this methodology beyond academia? What are your thoughts about the implication of this study for the participants, their families etc?

Kristen Bottema-Beutel:

I think there are many things, but one thing I think is that there's not a lot of representation of this kind of thing, at least in the U.S. I guess I was gonna say English speaking literature, but I think some of the premise of the project is that autistic children and children with other intellectual disabilities do have agency. We're not investigating whether or not. They do! That's an assumption that we're sort of revealing how that manifests in these different group interactions. I don't think there's a lot of work conducted in that way. I think, in the U.S., there's this assumption that this kind of participation is a challenge and almost impossible for kids with these disabilities. I think one thing about this, like

Revista Letras Raras

ISSN: 2317-2347 – v. 11, n. 3 (2022)
Todo o conteúdo da RLR está licenciado sob Creative Commons Atribuição 4.0 Internacional

accounts, is that you provide an account because you have construed something as accountable. Even in instances where the teacher says "why did you do that?", the autistic students are in the meaning making of that question, and what is accountable or what needs to be accounted for is unique to them. There's not a "these are not known answer questions". So this idea diary pedagogical approach is different from a lot of classroom approaches, especially with kids with communication impairments, where there's no interactional trust. Teachers will only ask questions that they already know the answer to, because it's very important to them that they verify the answer in this case. There's none of that: they're asking the students about things that are of their own unique significance to them. So it's the affordances for agency and the possibility for agency are addressed, in ways that are completely absent from much of the literature on autistic kids. The teacher can't say "No, that's wrong", because it's about the student's own significance and meaning making processes. So I think those are the pedagogical implications of showing how this goes forward. I think a lot of us teachers would assume that this kind of thing is not possible. It would simply break down. We can't have interactions like this with kids with communication impairments, because it's so unpredictable what they're gonna say, and we're never gonna settle on a common meaning. But it just shows how, even in groups of kids who share the same impairments or who are thought to share the same impairments, they weave these very interesting, significant and meaningful interactions in the classroom, just by the teacher being open to having this kind of discussion. So I think having examples of that and being able to show this is here. This is what happened. How it proceeded is important.

Juliene Madureira Ferreira:

Yeah. This is a practice that was not originated, or it was not elaborated for special education, right? So this is a practice that benefits any classroom, in any school anywhere. But we were kind of really testing it out to see how it would work in the special education classroom and it was very relevant. And the teacher recognizes the relevance and the families also recognize the relevance. So the implications were very concrete as well as the benefits.

Kristen Bottema-Beutel:

Revista Letras Raras

ISSN: 2317-2347 – v. 11, n. 3 (2022)
Todo o conteúdo da RLR está licenciado sob Creative Commons Atribuição 4.0 Internacional

I think just one last thing to say about it, when Juliene and I have been doing the analysis, it's not that we're looking at these interactions and saying "See, this group of kids with disabilities can look just like typical kids", because they definitely do not. It's not that they have somehow conformed to some neurotypical norm in their interactions. They absolutely haven't. And yet, that is not an impediment to having these meaningful exchanges. They do look very different than what a classroom of non-autistic kids would look like. Nevertheless, it does not diminish the significance of the interactions that they have, and you can see both of those things happening.

Interviewers:
What would be your future research agenda? Individually or perhaps in collaboration?

Juliene Madureira Ferreira:
I would really like to bring Kristen to Finland and to collaborate a little bit closer sometime soon. So we have been talking about that. What opportunities would be for her to spend some time here. And I think it would be really nice to continue the work, perhaps in a different perspective, collecting combined data or something like this. But we haven't really established anything, because we are in the process of doing this project. So it is definitely my wish to continue exploring this data set in other aspects or with other perspectives. And this is something that I have probably shared already with Kristen that I would like us to continue doing. And we also have been discussing a possible special issue for a journal. So there are many things under discussion basically, but Finland and the U.S. are very far away and we have our academic lives, and there are many other things going on as well. So I'm not quite sure when we will manage to do it yet, but this is what we have been talking about.

Kristen Bottema-Beutel:
Juliene's data set is amazing. It's like many hours of very expertly collected data. She has artifacts that we have seen in these sessions, where the kids are all looking at a drawing and Juliene will be like "Oh, I have the drawing". And it'll be this perfect picture of the drawing, so she documented everything. So the analysis has been good, because it's such a rich data set. You could analyze it literally forever. I think you could get many different things out of it. I was actually just thinking when Juliene and I

started, we were talking about how we have kind of a cross-geographic cross-linguistic perspective on this, because of our different locations. I think that these are the strengths of these cross national perspectives. I think I'm partly trying to justify the fact that I am on these teams of research where I'm the only monolingual speaker. And I'm trying to justify my contribution, even though I don't speak the language of the data being analyzed. So, in all of the data, the kids are speaking Finish and Juliene translates it into English. And you know how many hours like generating a transcript in itself is time consuming, but then translating it all, making the English gloss. It is very time consuming, but it has made these interesting conversations about the difference of the structure of the Finish language and how it's different from English and how it means that they're doing different things with the language. And I don't know if they've been tedious for Juliene, but I feel like that's such an interesting focus on the way of different languages, it's not all amenable to direct translation. And you do have to have these kinds of deeper level discussions about what it is they're doing, given the different structures of Finnish versus English etc. So I have really enjoyed that part and like the different special education structures across the different geographic contexts, how that affords different kinds of interactions and assumptions about what the kids can do. I think those sort of cross-national cross-linguistic aspects of this collaboration have been very illuminating for me. So I feel like that is highly motivating to keep kind of thinking about this. And we have talked about it. I don't think my data set is quite as rigorous as Juliene's in terms of what we collected, but I would be interested in seeing if we could do something different or something similar in a U.S. context, in collecting a companion data set to see how the different geographic context contribute to the different kinds of interactions that the kids have.