

The Autistic Language Hypothesis



Keynote Speaker: Rachel Cullen




Rachel Cullen (They/Them)

- Neuro-queer
- Autistic researcher and advocate
- PhD student with Kent University researching Autistic communication
- Consultant at Cullen Consultancy on autistic experience



Guide of presentation:

Introduction and the different approaches to Autistic people and Autistic communication



What is the Autistic Language Hypothesis?



Examples



PhD pilot data



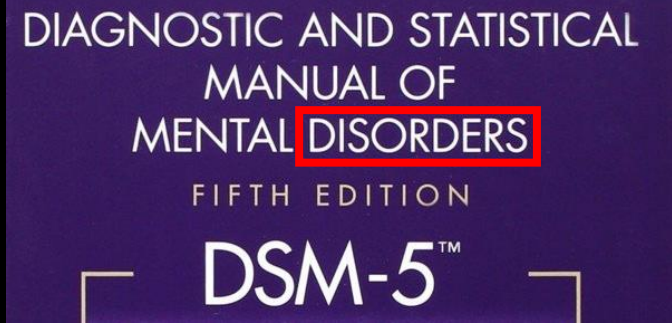
Questions

What is autism?



We are Autistic People

The medical model approach to Autistic people:



- (1) Deficits in social communication.
- (2) Deficits in social interaction.
- (3) Restricted, repetitive patterns of behaviour, interests, or activities.



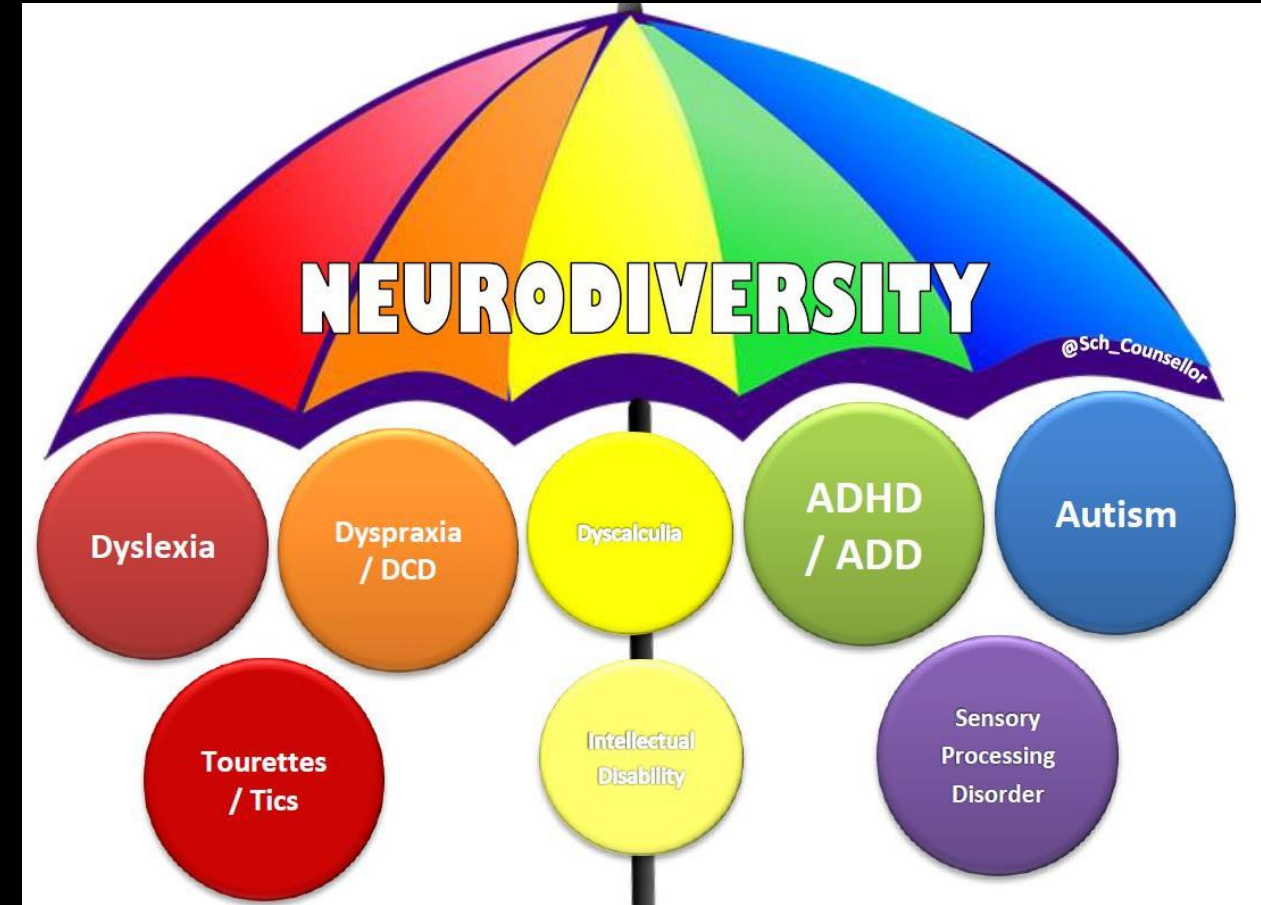
Frames Autistic people as:

- Disordered
- A collection of deficits and impairments
- Needing interventions / treatments to lessen suffering from Autistic symptoms
- Something to be prevented, reduced or cured

The Neurodiversity approach

Frames autistic people as:

- A natural variation in human neurology
- Different not disordered
- A community and shared identity
- Needing acceptance and accommodations to thrive



Taking the Neurodivergent approach

Different not disordered

Social interaction

Social Communication

Stimming (self stimulation)

Verbal

Non-verbal



Social Communication

Verbal

Non-verbal

Pragmatics studies the role of **both** verbal and non-verbal communication and how this contributes to meaning in **social contexts**



A \neq **B**

Pragmatics and Autistic people

Social Communication

Verbal

Difficulty with inferred meaning

Literal interpretation of language

Scripting and Echolalia

Talking about specific topics for extended periods of time
(mini speeches)

Turn Taking

Why Does any of this matter?

The ability to use pragmatic language is **fundamental** for social communication

Autistic people are currently theorized to lack the ability to use verbal and non-verbal communication **appropriately** in social contexts.

This perspective **centers non-autistic** social communication as ***appropriate*** and ***normal*** whilst **framing Autistic** social communication as ***inappropriate*** and ***abnormal***.

Why is this problematic?

Using a socialized norm with which to compare different groups to has led to human rights movements...



How does this relate to communication?

Autistic people have been pathologized and '*othered*' through centering non-autistic people as '*normal*'.

But what if...

Autistic people have an effective but different way of communicating which makes for effective communication with other autistic people.

However, this is not understood or shared by non-autistic people therefore has been deeply misunderstood and considered a *deficit* in communication.

Time for A New Approach



Let's look at the evidence...

The Double Empathy Problem (Milton, 2012)

Crompton, et al, (2020)

Williams, et al, (2021)



How can we explain Autistic social communication outside of a deficit model?

Så hvordan kan vi forklare autistisk social kommunikation uden for en underskudsmodel?

This is what I propose:

The Autistic Language Hypothesis (ALH)

Autistic language hypothesis main components:

(1) Processing of meaning in context occurs at word level instead of sentence level

(2) Meaning is found in linguistics (words) not non-linguistic (body language etc.) features of communication

(3) What isn't said isn't automatically known to autistic people

(1) Processing occurs at word level instead of sentence level

Hello, how was your day?



V.S

Hello

how

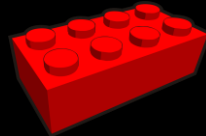
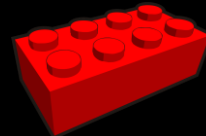
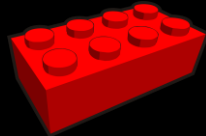
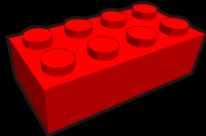
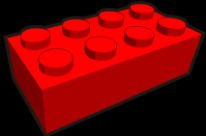
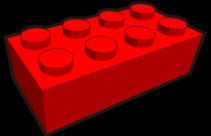
was

your

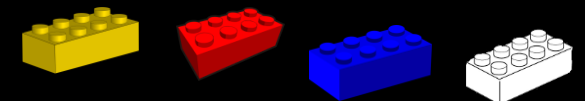
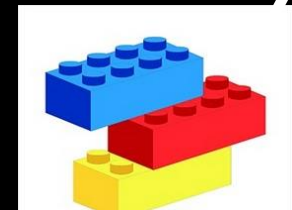
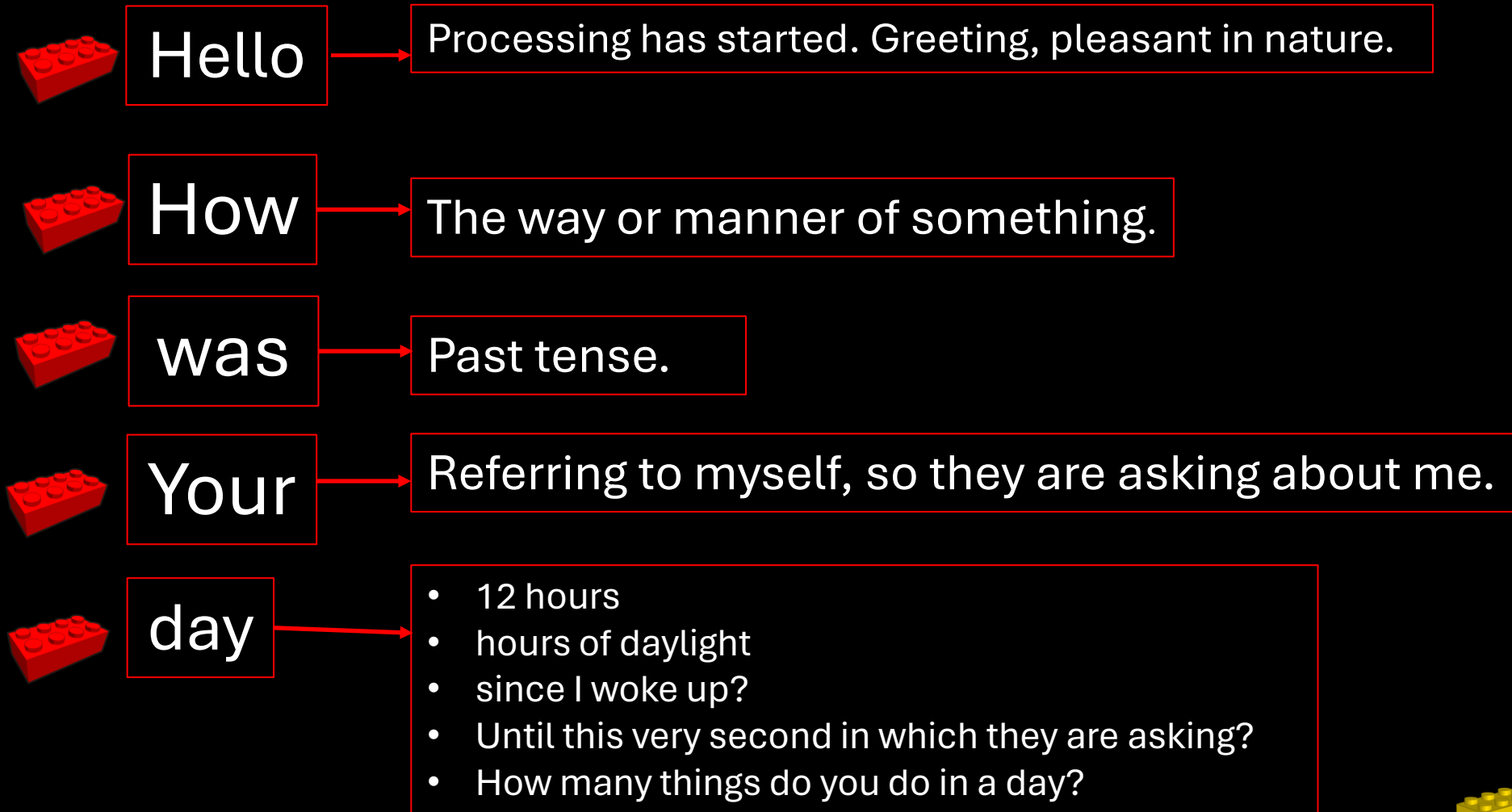
day

?

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(1) Processing occurs at word level instead of sentence level



(2) Context is found in linguistic not non-linguistic features of communication

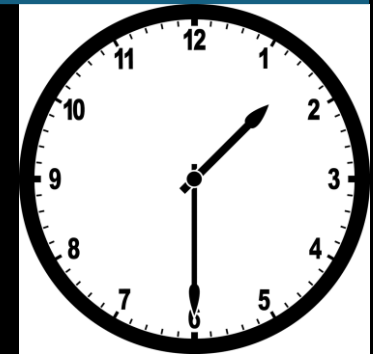
Hvordan ser kaninen ud?

What does the rabbit look like?



Hvad tid er frokost?

What time is lunch?



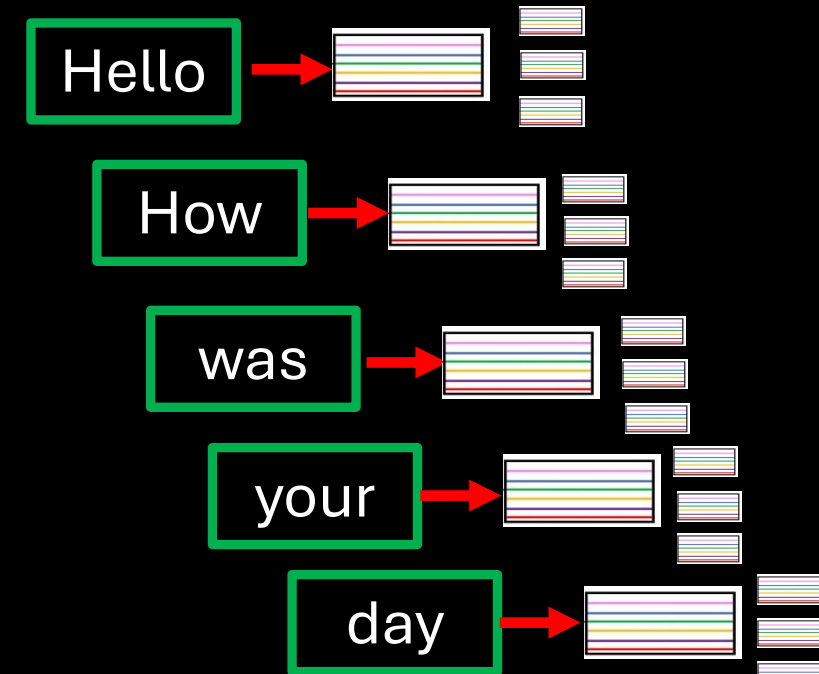
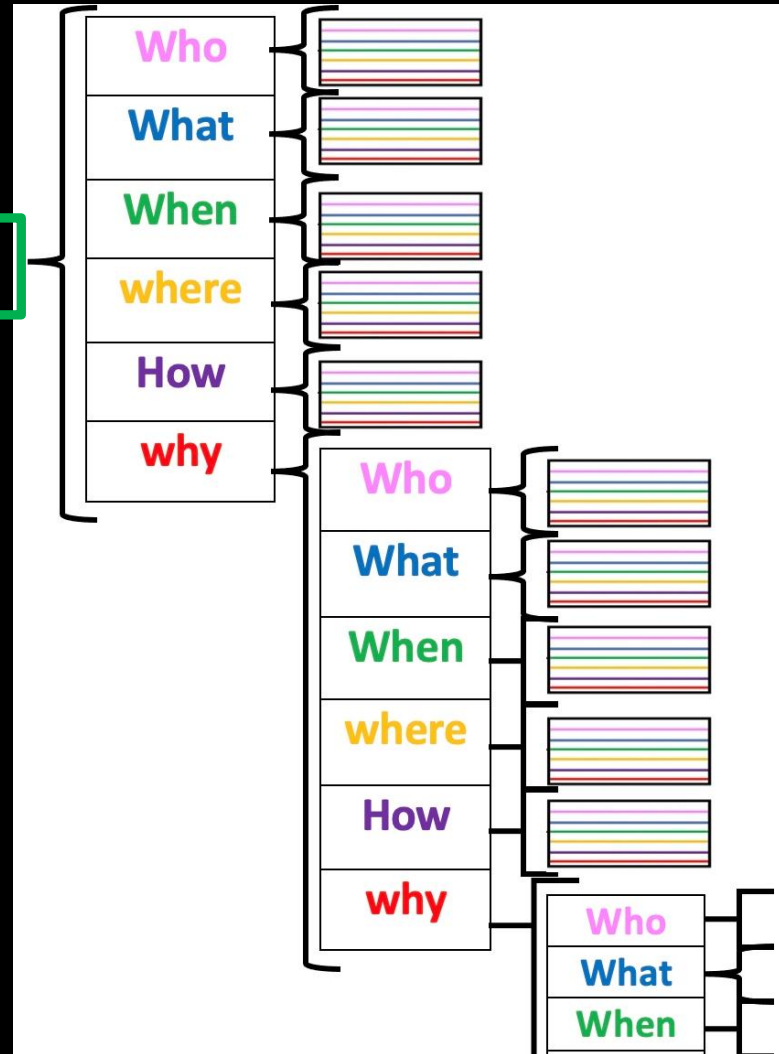
Hvad er dette?

What is this?

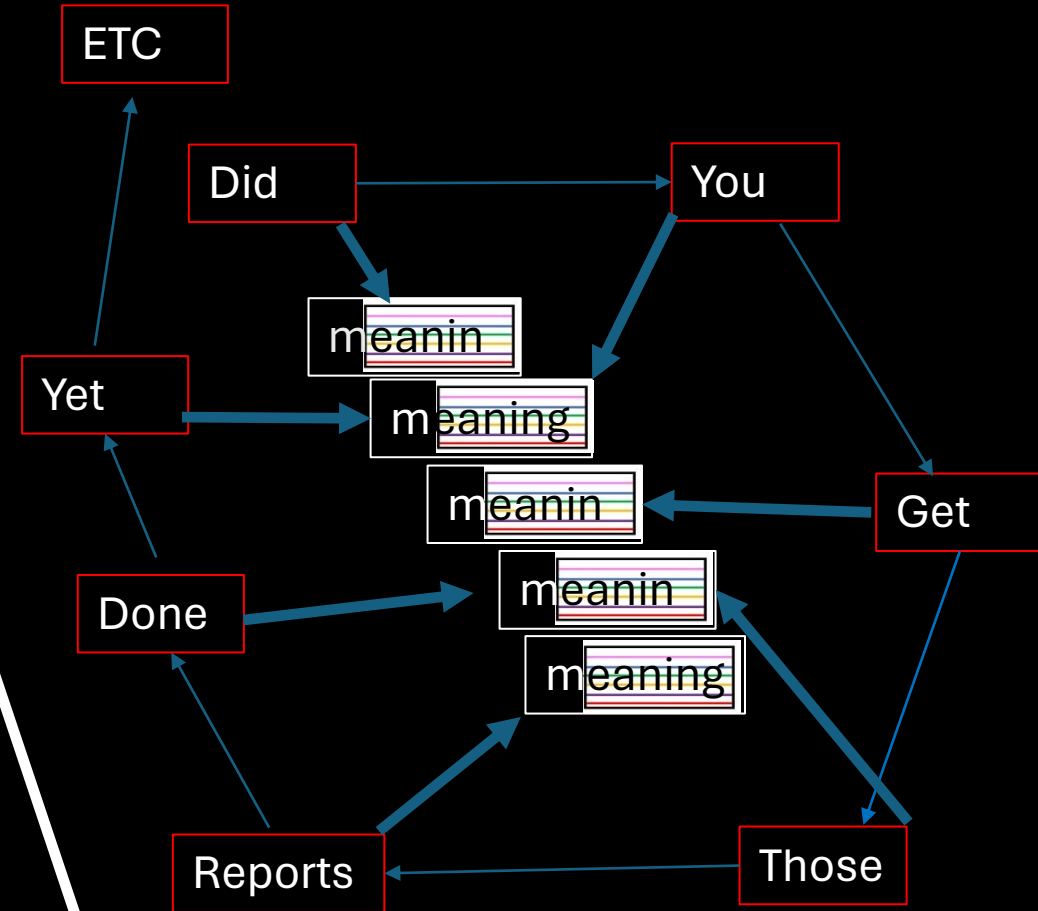
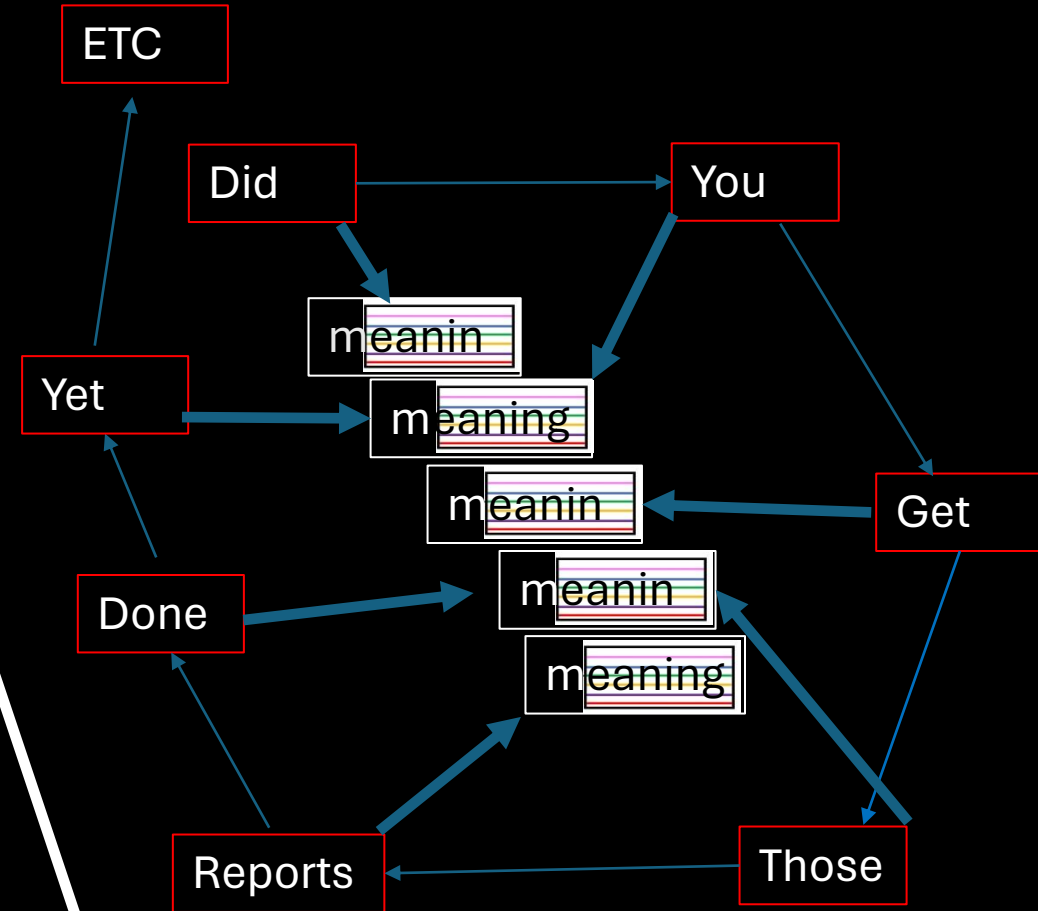
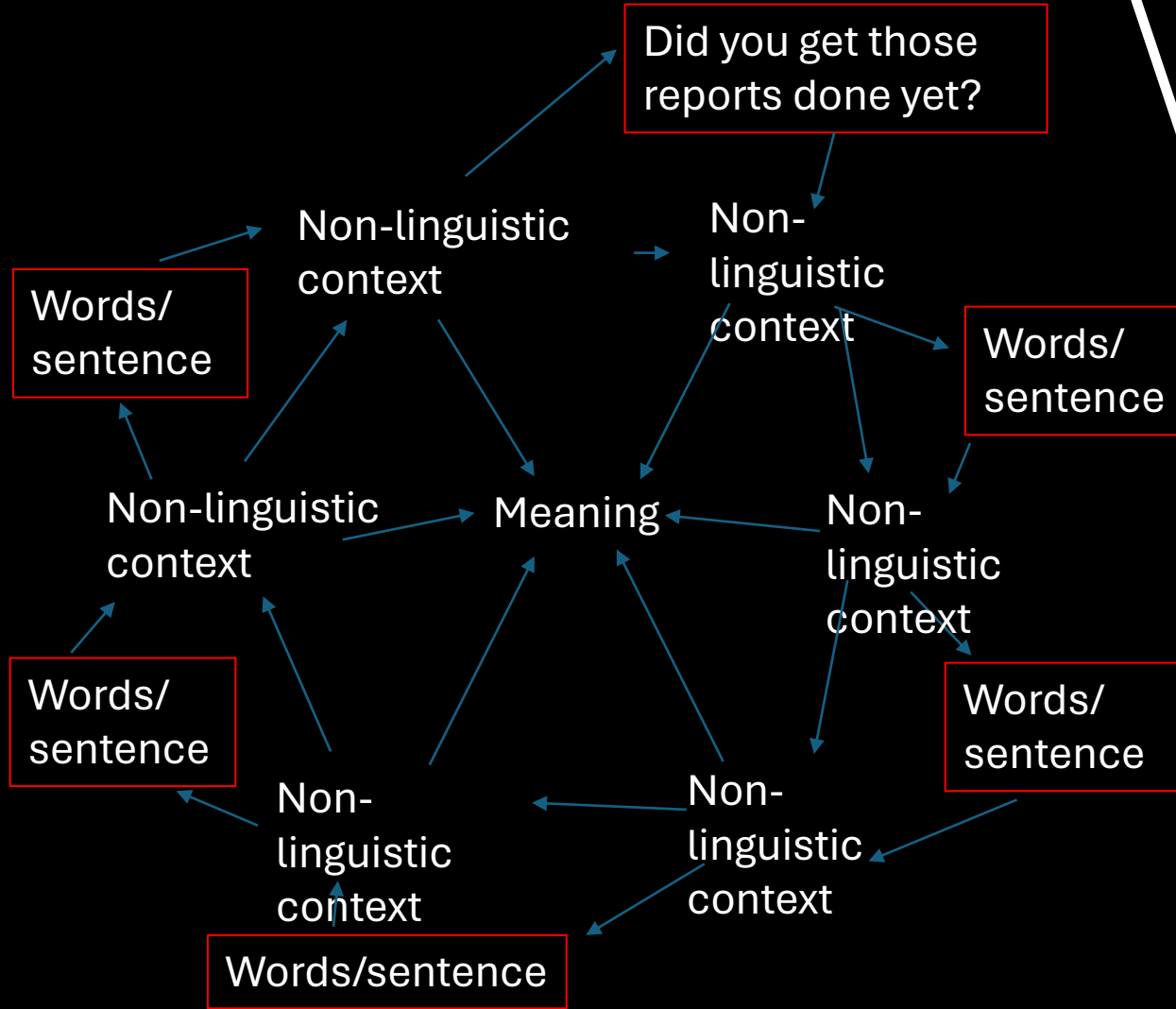


(2) Context is found in linguistic not non-linguistic features of communication

Hello, how was your day?



(3) What isn't said isn't known to autistic people



(3) What isn't said isn't known

- Who am I talking to?
- Where are we talking?
- How are they talking?
- What is their body language saying?

Hello, how was your day?

- Who are they talking about?
- What are they talking about?
- When did the day happen?
- Where did the things in the day happen?
- Why did the things in the day happen?
- How did the day happen

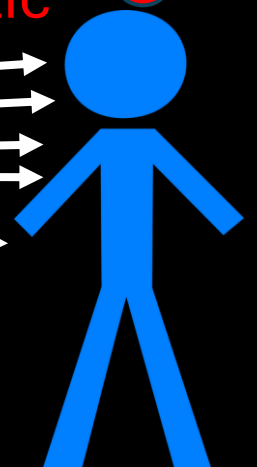
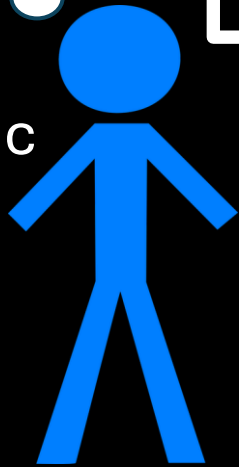
Non-autistic

Who is saying it

Vs.

what is said

Autistic



All Talk...No Action

Does this mean using this hypothesis to get anyone to speak?

ABSOLUTELY NOT!

The hypothesis and its purpose is to understand how autistic people communicate at a verbal level

The idea is that it could potentially be used to establish effective two-way communication for non-speaking autistic people

Two-way communication isn't about being verbal!

Its about establishing a neutral communication ground accessible to both parties involved via any means necessary

Autistic language hypothesis: In action

What would the Autistic Language Hypothesis look like in the context of a conversation between two Autistic people?

What would the Autistic Language Hypothesis look like in the context of a conversation between an Autistic person and a non-Autistic person?

How do Autistic people experience a conversation with someone who is also Autistic?

How do Autistic people experience conversation with someone who is not Autistic?

I will be exploring these questions in my PhD research

PhD research

What am I investigating? (Part 1)

Are there differences in structural aspects of conversation between autistic and non-autistic people?

Conversational
turn duration

How long each
conversation turn lasts

Turn Allocation

How do people start/stop
talking in a conversation

Repair

How are mistakes or
miscommunication
fixed in conversation

PhD research

What am I investigating? (Part 2)

If there are structural conversational differences, **how are these experienced by:**

Autistic people having a conversation with another Autistic person

Autistic people having a conversation with a non-Autistic person

Why is this research important?

Structural aspects of conversation are **subconscious**, so it is indicative of how we engage in language based on our neurotype.

Autistic people engage with language differently, but we don't know what this looks like in Autistic only interactions.

Real world consequences:

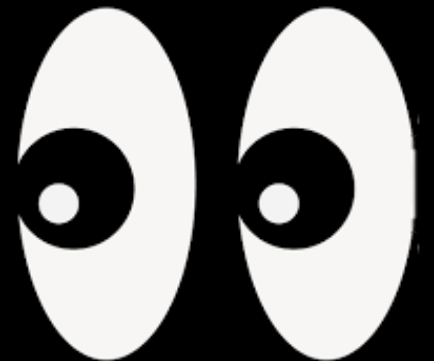
- Perception
- Understanding
- Treatment

Stigma and discrimination around Autistic communication impacts on ability to self-advocate or be taken seriously by others.

Nothing About Us Without US!!!

With all that being said...

Are you ready for some bonus content
no one has ever seen before?



PhD research

What am I investigating? (Part 1)



Are there differences in structural aspects of conversation between Autistic and non-Autistic people?




Conversational
turn duration



How long each
conversation turn lasts

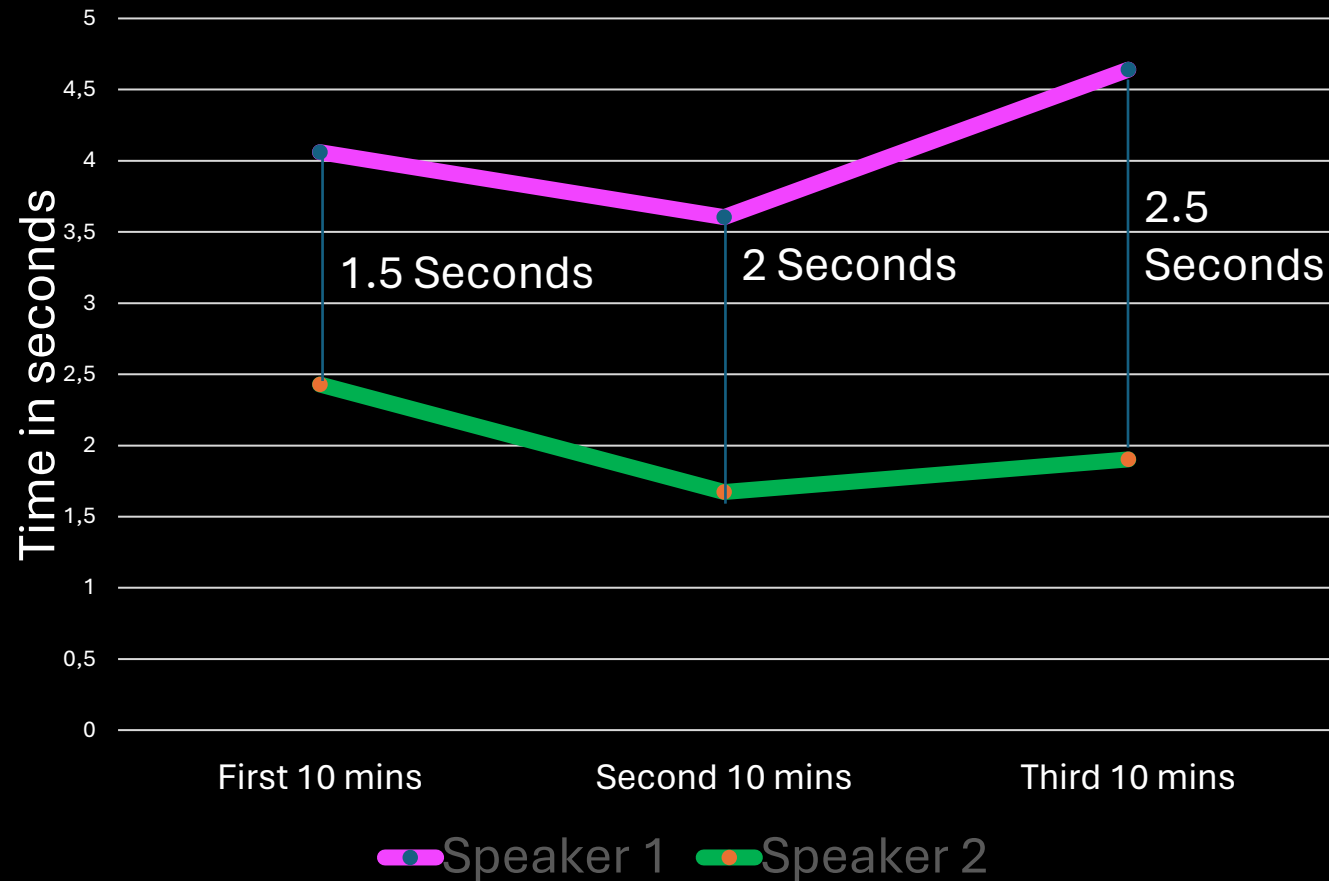
Study information:

- Pilot study
- 4 female participants (2 Autistic and 2 non-Autistic)
- 2 conversational pairs 
- 2 x 30 -minute semi structured conversations

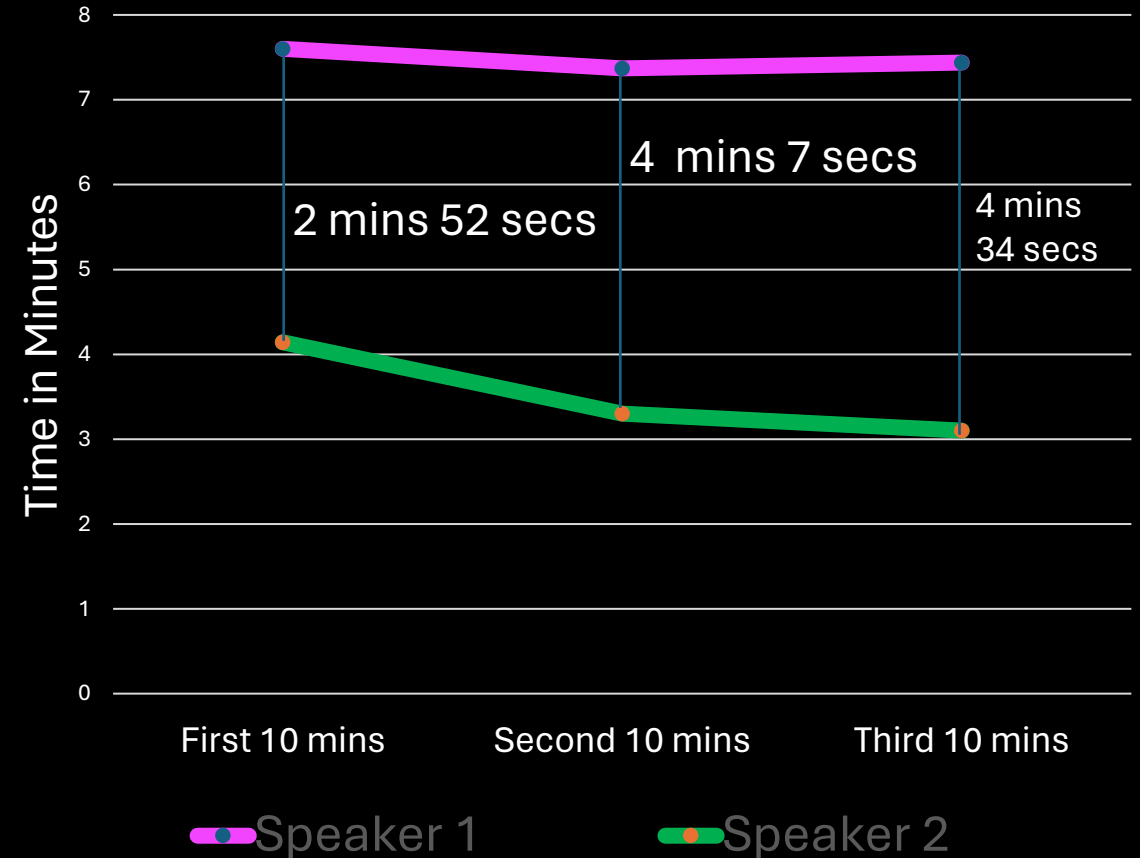
SNEAK PEAK: Conversational Turn duration

Autistic Pilot data

Autistic Average turn length across 30 minuets



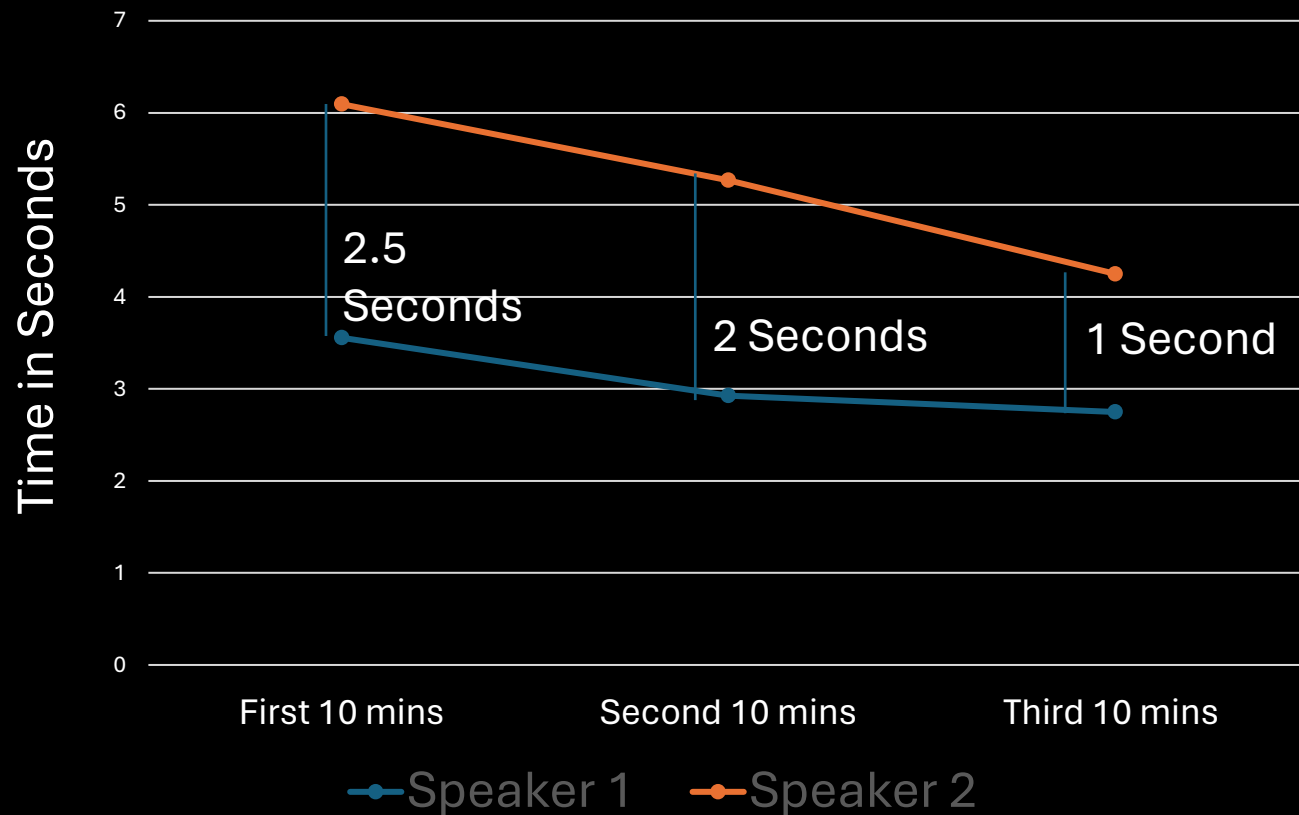
Autistic Total Turn length across 30 minuets



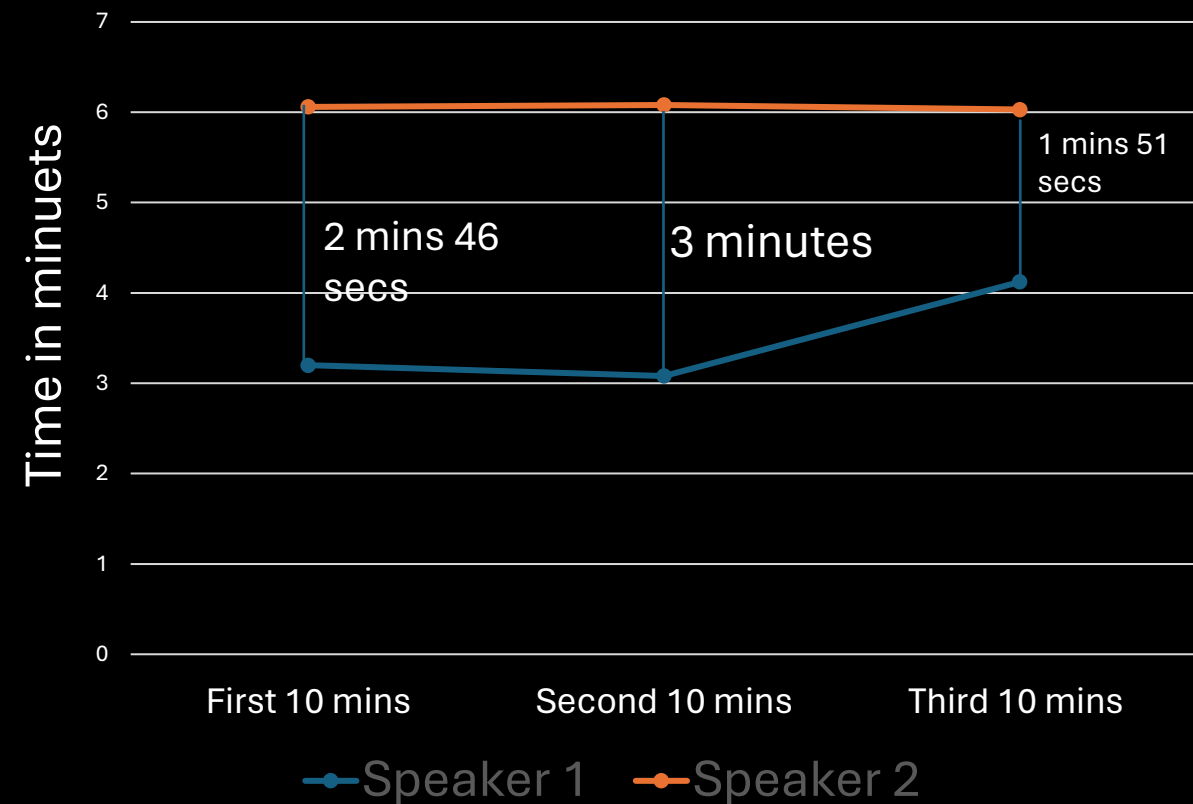
SNEAK PEAK: Conversational Turn duration

Non-autistic data

Non-Autistic Average turn length across 30 mins



Non-Autistic total Turn length across 30 mins



SNEAK PEAK: Speaker overlap duration

(both autistic and non-autistic data)

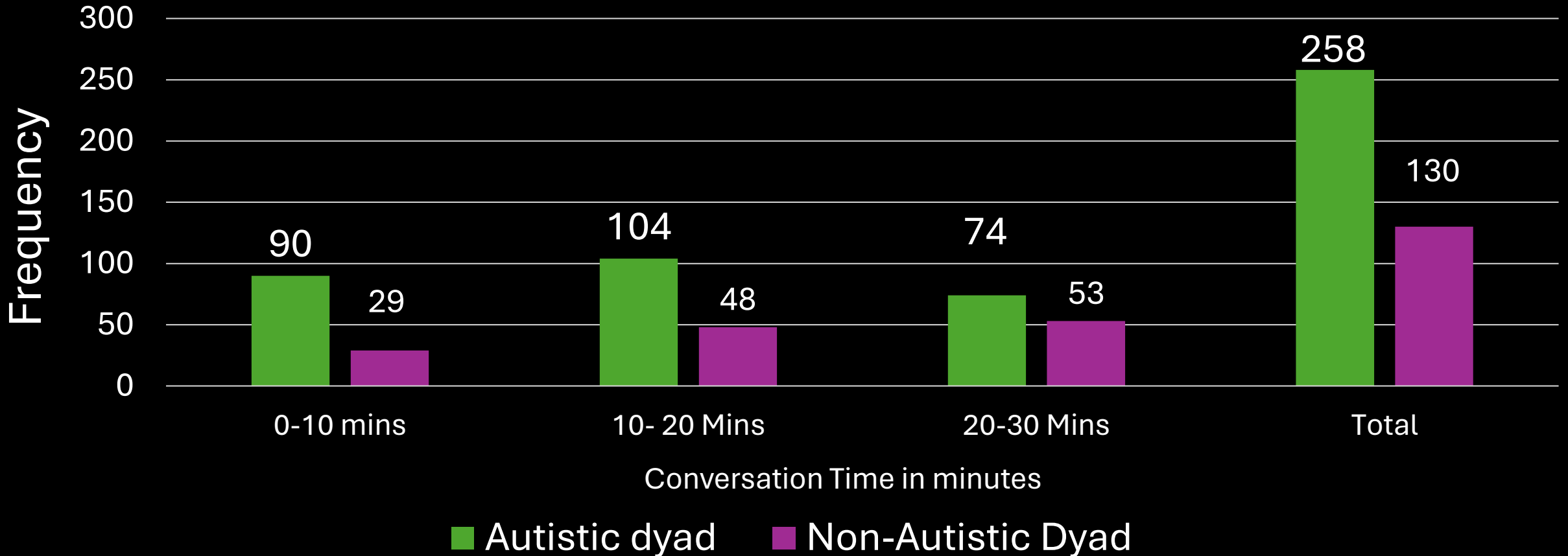
Autistic speaker <u>total</u> overlap duration	
0-10 mins	1 min 8.711 seconds
10-20 mins	1 min 9.594 seconds
20-30 mins	45.379 seconds
Total Across the 30 minuets	3 minuets 3.684 seconds

Non-Autistic speaker <u>total</u> overlap duration	
0-10 mins	15.893 seconds
10-20 mins	27.327 seconds
20-30 mins	34.196 seconds
Total Across the 30 minutes	1 min 17.416 seconds

How long did both speakers in a conversation talk at the same time

SNEAK PEAK: Speaker overlap Frequency

Frequency of overlapping speech in Autistic and non-Autistic dyads



How many times did speakers in a conversation talk at the same time

PhD research

What am I investigating? (Part 1)



Are there differences in structural aspects of conversation between autistic and non-autistic people?



Turn Allocation

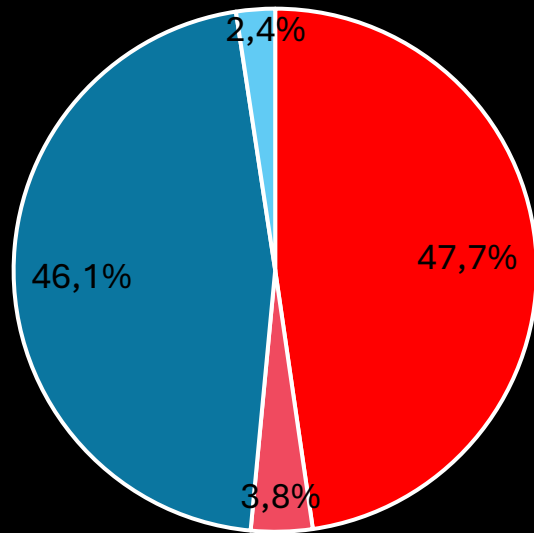


How do people start/stop talking in a conversation

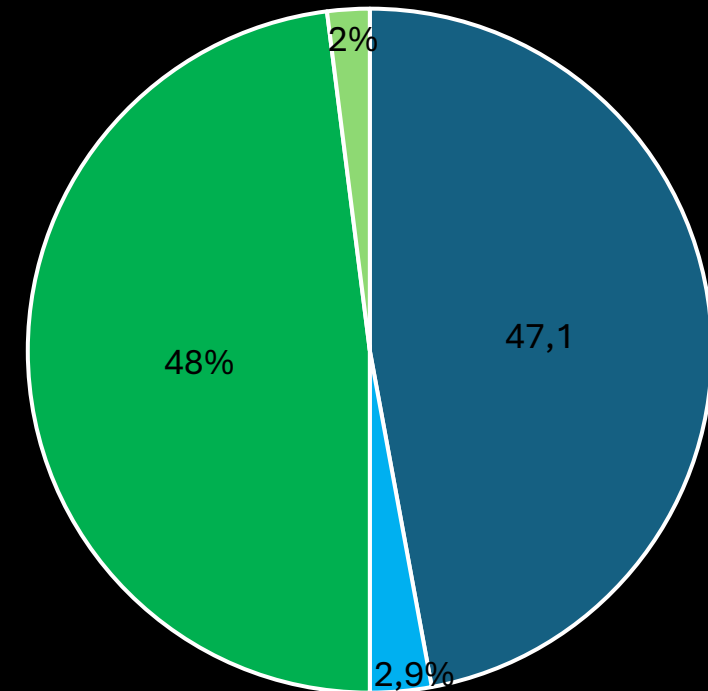
SNEAK PEAK: Turn Allocation

Autistic and Non-autistic Pilot data

Autistic Turn Allocation %



Non-autistic Turn Allocation %



Speaker 1 self-select

Speaker 1 other select

Speaker 2 self-select

Speaker 2 other-select

Speaker 1 Self-select

Speaker 1 other-select

Speaker 2 self-select

speaker 2 other-selct

PhD research

What am I investigating? (Part 1)



Are there differences in structural aspects of conversation between autistic and non-autistic people?



Repair

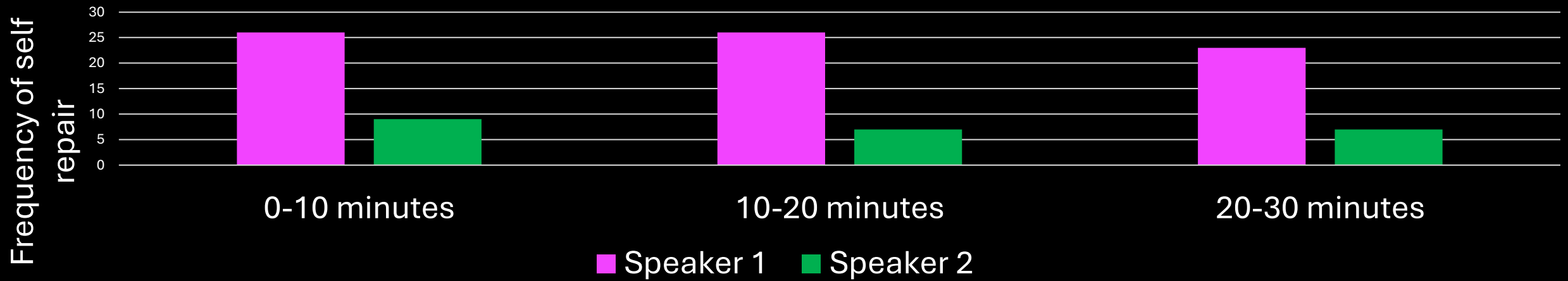


How are mistakes or miscommunication fixed in conversation

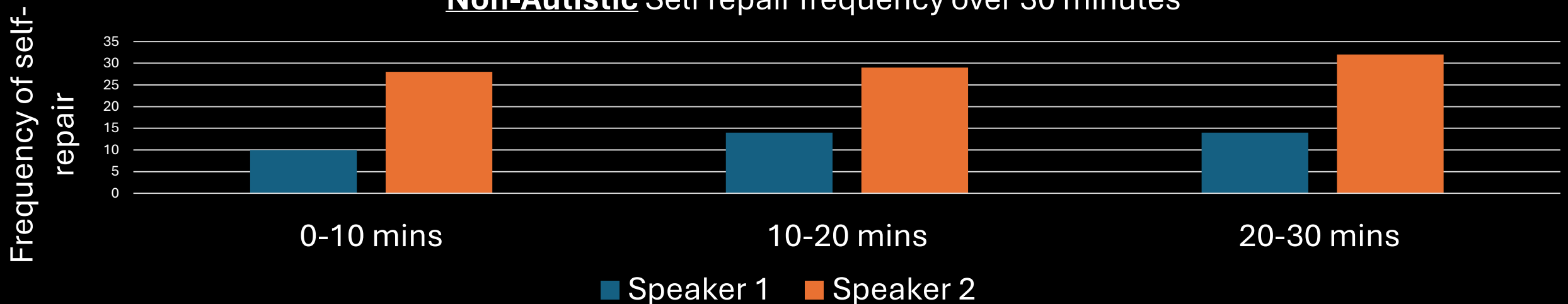
SNEAK PEAK: Frequency of Self-Repair

Autistic and Non-autistic Pilot data

Autistic Self repair frequency over 30 minutes



Non-Autistic Self repair frequency over 30 minutes



To summarize the pilot data so far:

(1) There appears to be a structural difference in turn duration between the Autistic pair and the non-Autistic pair.

(2) There appears to be a significant difference in the frequency and duration of overlapped speech between the Autistic pair and the non-Autistic pair.

(3) There appears to be no structural differences between the autistic pair and the non-autistic pair in relation to turn allocation.

(4) There appears to be no structural differences in the frequency of self-repair between the Autistic group and the non-Autistic group

Please note: this pilot consisted of 4 participants. This pilot will be replicated with 40 participants and so with a larger sample size the results may differ.

Disclaimers

Still being developed (in very early stages of research)

Only currently applicable to autistic people without intellectual disabilities or other neurodivergence

Only applicable to Native English Speakers

THAT'S A WRAP



THANKS FOR HAVING ME

Any Questions/feedback ?



Get in touch using social media, my website or email

www.cullenconsultancy.co.uk

**Cullen.Consultancy.Services@hotmail
.com**