Potential Indicators of Joint Attention in Minimally Speaking Autistic Children

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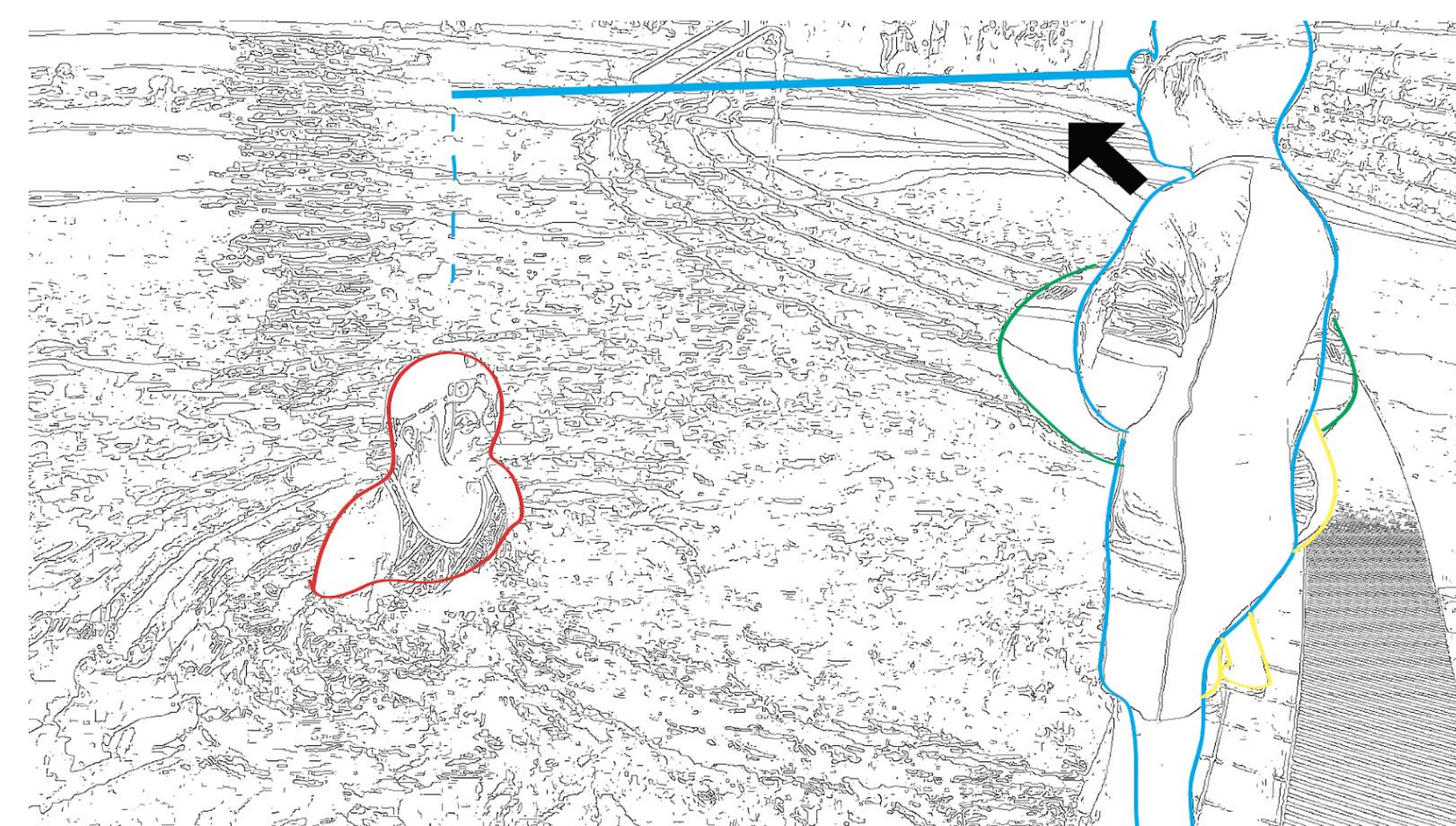
Introduction

Because of neurotypical conversation norms that non speaking autistic people are averse to, such as speaking and eye contact, neurotypical people may not be able to accurately assess joint attention in autistic people.

Methods

I studied videos of a 9-year-old autistic child, Jake, and his mother and brother at the pool, using a multimodal transcription method that follows the styles of Selting (2010) and C. Goodwin (2018). I extracted screenshots using ImageMagick and FFMPEG, two open-source programs.

Results

```
MOM     O:↑ne. (.) Two:↑. (.) Three:↑. (.)
        Jump!
```


Here, we can see Jake's mother (Mom) counting to three and telling him to jump.

Jake's gaze orientation moves from Mom, to a space behind her and to the right of her. This movement happens in less than a second. Immediately after this movement, Jake turns to his right, and jumps into a floating boat at the edge of the pool.

```
Ju::mp! JU:::MP!!!

JAKE    ((JAKE jumps into a float nearby
        instead of water))=
```

Discussion

In picture 2, following gaze as an indicator of attention, we can see that Jake's visual focus changes from Mom to a space behind her, which belies his own goals in the interaction.

Conclusions

Through these multimodal transcripts, I found numerous instances of Jake orienting his body towards his mother, even in situations where it would be inconvenient to do so, such as when moving objects and stimming. While Jake's gaze orientation sometimes oriented to objects he later interacted with, his body orientation often represented where his attention was more consistently.

Literature cited

Goodwin, Charles. 2018. *Co-operative action*. Cambridge University Press.

Milton, E. M. Damian. 2012. On the ontological status of autism: the 'double empathy problem'. *Disability & Society* 27(6). 883–887.

Selting, Margaret. 2010. Affectivity in conversational storytelling: An analysis of displays of anger or indignation in complaint stories. *Pragmatics* 20(2). 229–277.

Acknowledgments

Further research

In future studies, these methods should be used with multiple minimally speaking autistic children, environments, and tasks, so that these results can be more generalizable. Additionally, examining these behaviors in a more clinical context could help us better understand whether there may be other indicators of attention that this study may have overlooked.