# RELATOS DE ESTUDANTES UNIVERSITÁTIOS AUTISTAS SOBRE SUAS INTERAÇÕES COM INDIVÍDUOS NÃO AUTISTAS E AUTISTAS: UMA PERSPECTIVA DOS ESTUDOS RETÓRICOS DE GÊNERO

AUTISTIC UNIVERSITY STUDENTS' ACCOUNTS OF INTERACTION WITH NONAUTISTIC AND AUTISTIC INDIVIDUALS: A RHETORICAL GENRE STUDIES PERSPECTIVE

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Resumo: Um número crescente de estudantes autistas tem se matriculado em universidades ao redor do mundo. Esses estudantes são ensinados majoritariamente por instrutores não autistas que tentam auxiliá-los durante seu aprendizado dos letramentos acadêmicos, sem entender completamente esse grupo de alunos neurodiversos. A maior parte das pesquisas sobre o desenvolvimento de letramentos acadêmicos, inclusive sobre escrita acadêmica, até hoje não investigou a experiência de ser um estudante autista em uma universidade. Nesse estudo piloto qualitativo e exploratório com um pequeno grupo, nos baseamos nos Estudos Retóricos de Gênero (ERG) para investigar os relatos de 12 estudantes autistas de duas universidades canadenses em relação às suas interações com indivíduos não autistas e autistas na universidade. A partir da análise da perspectiva de ERG, nós fomos capazes de estabelecer e desvendar a natureza retórica dessas interações. Entender a natureza retórica dessas interações fornece um primeiro passo para desenvolver auxílio efetivo para estudantes autistas que estão aprendendo a falar e escrever academicamente em um predominante contexto universitário de não autistas. Palavras-chave: Autismo; Escrita acadêmica; Letramento acadêmico; Estudos Retóricos de Gêneros; Interações sociais

Abstract: Increasing numbers of autistic students are enrolling in universities worldwide. These students are taught by mostly nonautistic instructors who try to support them in their learning of academic literacies, without always fully understanding this emerging group of neurodiverse students. Most research on the development of academic literacies, including academic writing, to date has not explored the lived experience of being an autistic student at university. In this small-scale qualitative exploratory pilot study, we draw on Rhetorical Genre Studies (RGS) to probe into the accounts of 12 autistic students from two Canadian universities regarding their interactions with nonautistic and autistic individuals at university. By analyzing the data from the RGS perspective, we have been able to establish and unpack the rhetorical nature of such social interactions. Understanding the rhetorical nature of these interactions provides a first step towards developing effective supports for autistic students learning to speak and write academically in the predominantly nonautistic contexts of universities.

**Keywords:** Autism; University writing; Academic Literacy; Rhetorical Genre Studies; Social Interactions



Students from diverse disability cultures and, specifically, autistic students, have been increasingly enrolling in universities around the world (Alcorn-MacKay, 2010; White *et al.*, 2016). Consequently, there has been a growing research interest (*e.g.*, Heilker & Yergeau, 2011; Jurecic, 2006; Prince, 2013) in the processes of learning academic literacies (Lillis & Scott, 2007), including academic writing, by autistic students.

For researchers who investigate the development of academic literacies in autistic students in higher education, the interactions between such students and their autistic and nonautistic instructors and peers are seen as sites of critical importance. These interactions serve either as the promise for autistic students to become proficient users of relevant academic literacies or as the barriers which may prevent these students from accessing the post-secondary academic world. Historically, privilege and power have repeatedly blocked access to academia for autistic students (Dolmage, 2017; Prince, 2013); therefore, current research needs to strive to adopt research methods which reflect the lived experiences of autistic students themselves (Raymaker & Nicolaidis, 2013).

The existing (limited) research into academic literacy development by autistic university students reflects the challenges that nonautistic instructors experience working with these students, with some studies offering instructors' personal accounts of strategies they found helpful (e.g., Gerstle & Walsh, 2011; Jurecic, 2006, 2007). In general, such publications often adopt a deficit-based or biomedical model, which views autism as a pathology requiring remediation or cure and argues that autistic students should learn according to traditional models based on nonautistic ways of communicating (e.g., Dolmage, 2017; Prince, 2013; Yergeau, 2018). And yet, autistic academics and their allies<sup>1</sup> either argue that pedagogical strategies equally useful for all students, including autistic ones, have been developed already (Heilker & Yergeau, 2011), or question the dominant (or 'ableist') ways of communicating academically and call for greater flexibility in speaking and writing practices at university (Prince, 2013). These authors usually align themselves with an emerging view of autism known as the neurodiversity movement (Silberman, 2015) which holds that autistic individuals are part of the full range of human diversity, and should be celebrated for who they are (e.g., Clare, 2017; McGuire, 2016). Indeed, some proponents of this movement view autistic ways of communication as "a rhetoric; a way of being in the world through language, a rhetoric we may not have encountered or recognized frequently in the past, nor value highly in academic contexts, but a rhetoric nonetheless" (Heilker & Yergeau, 2011, p. 487).

The objective of a small-scale qualitative exploratory pilot study presented in this paper is to develop a theoretically-informed understanding of autistic students' lived social interaction experiences at university. The research question that this study raises is:

What is the nature of autistic university students' experiences communicating with nonautistic and autistic interlocutors at university, as reported by the students themselves?

This study is the first step in a large-scope multiphase participatory project where autistic students and both nonautistic and autistic instructors are invited to work together with the principal investigators to develop final research questions, research design, and approaches to data analysis; discuss findings, and produce recommendations (Kovach, 2009; Raymaker & Nicolaidis, 2013).

<sup>&</sup>lt;sup>1</sup> Nonautistic people working alongside autistic academics and researchers as equal partners with common goals, reflecting the beliefs, values and needs of the autistic community.

The paper continues with the discussion of the theories of autism and selected theoretical concepts. Further, the methods of data collection and analysis are presented, and major findings are discussed. The paper concludes with the implications of the study for future research and pedagogy.

# 1 THEORIES OF AUTISM

Although many explanations for autism have been proposed over time (e.g., cold parenting, vaccines), cognitively-based theories, which rely on a biomedical model of disability (e.g., Barnes & Mercer, 2010; Silberman, 2015), have been in the mainstream in past decades (Chown, 2016). While these theories have raised important considerations, they have not yet accounted for the diversity of autistic experiences. Perhaps the most prominent explanation so far has been the view, known as the Theory of Mind (ToM) account of autism, that autistic individuals lack the ability to understand the minds of other people (or empathize), or even understand their own minds (Baron-Cohen, 1997). However, more recently, Milton (2012) has observed that ToM accounts of autistic individuals have emphasized what was seen as a core autistic deficit, that is, the difficulties that autistic individuals might experience with understanding the perspectives or mental states of nonautistic people. And, yet, it has never focused on nonautistic individuals' understanding of the perspectives or mental states of autistic people (Hacking, 2010; Milton, 2012; Sinclair, 1993). Milton (2012) was the first to describe this phenomenon as the double empathy problem (p. 883). He posited that researchers needed to consider the difficulties that both autistic and nonautistic people have in understanding the mental states of each other.

Indeed, as Carpenter (2011) observed, the biomedical model can "create false binaries, marginalize some and privilege others, and deny people rights and opportunities through the erection of physical and institutional barriers" (para. 10). Until recently, this meant that many autistic people were denied a university education (Alcorn-MacKay, 2010; White *et al.*, 2016) and perhaps the opportunity to interact according to their own ways of communicating in spaces where ableist views of academic literacies have traditionally dominated (Dolmage, 2017; Prince, 2013).

# 2 RHETORICAL GENRE STUDIES

In contrast to ToM, a new lens, recently borrowed by disability researchers from the field of genre studies (Carpenter, 2011), promises to provide a necessary first step in "deconstructing hegemonic discourses" such as those found in the "reductive and oppressive categorization deployed by the medical model of disability" (Carpenter, 2011, para. 14). This new lens is further referred to as Rhetorical Genre Studies (RGS)<sup>2</sup>. Traditionally, in literary studies, genres have been defined by their text forms (e.g., sonnet, haiku). RGS grew out of a different perspective on genre developed by Miller (1984): rather than focusing on the form, Miller's paradigm-shifting view of genre saw it as a typified response to recurrent social situations. RGS emphasizes the social action, which a text--defined as a verbal, written, or multimodal stretch of language within a context--carries out (Bawarshi & Reiff, 2010; Miller, 1984). Within this framework, human communication is seen as a chain of interconnected temporarily stabilized (cf., Schryer, 1993) utterances, or genres (Bakhtin, 1986). Genre is defined as "a typified rhetorical way of recognizing, responding to, acting meaningfully and

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<sup>&</sup>lt;sup>2</sup> The term coined by Aviva Freedman (2006). Also known as North American, New Rhetoric, or rhetorical genre theory.

consequentially within, and thus participating in the reproduction of, recurring situations. Genres both organize and generate kinds of texts and social actions, in complex, dynamic relation to one another" (Kill, 2010, pp. 212-213). The RGS perspective on human communication has the potential to shed light on the nature of interactions between autistic students and their autistic and nonautistic peers and instructors, as they seek to mutually create knowledge and meaning at university.

# 2.1 RHETORICAL SITUATION AND EXIGENCE

At the crux of the RGS work is the concept of the *rhetorical situation* defined by Bitzer (1968) as "a natural context of persons, events, objects, relations, and an exigence which strongly invites utterance" (p. 5). Miller (1984) argued that a rhetorical situation is *not material* but rather a "construal of a type" of social situation (p. 156). Furthermore, embedded within the rhetorical situation is an *exigence*, a "form of social knowledge" (p. 157), or *an objectified social need*, which requires a response (Miller, 1984). As the situation (or rather, our construal of it) recurs, it becomes *typified* (Miller, 1984; Schutz & Luckmann, 1973). Further, RGS views genres as "stabilized-for-now" or "stabilized-enough sites of social and ideological action" (Schryer, 1993, p. 200); that is, genres are not seen as static unchanging entities, but rather dynamic, ideologically motivated situated social actions responding to current objectified social needs.

# 2.2 GENRE UPTAKE

Freadman (1994) describes *genre uptake* as any rhetorical response to a given text "informed by genre knowledge, but also by one's sense of self, one's memory of prior uptakes, as well as by other affective, embodied and material factors" (Bawarshi, 2016, p. 189). Learning to perform successful uptakes in diverse contexts (e.g., at university, in workplaces) and provide them in a timely and appropriate manner is challenging for *all* students (Canagarajah, 2006; Dias & Paré, 2000; Swales, 1990).

# 2.3 TIME CONCEPTS AND UPTAKES

Since the ancient Greeks, it has been argued that time can be viewed as both sequential time, or chronos, and (the right) timing, or kairos (Artemeva, 2004; Yates & Orlikowski, 2002). Freadman (1994) explains that to successfully perform uptakes within a genre is "to know when and where it is appropriate to do and say certain things, and to know that to do and say them at inappropriate places and times is to run the risk of having them ruled out" (p. 59). Kairos (timing) is both discovered in the flow of chronological time and constructed by the rhetor (Miller, 1992; Yates & Orlikowski, 2002), thus revealing the highly dynamic nature of any uptake, which demands the social knowledge and a good sense of timing that allow the rhetor to recognize the potential of and seize opportunities to respond to kairotic moments (Artemeva, 2005).

The discussion of time-related concepts and genre uptake suggests variability among rhetors in how they define, recognize, and construct rhetorical situations and kairotic moments. Indeed, studies have shown that rhetors progress in learning how to successfully negotiate kairos on their path to mastery of genres, with some rhetors being more successful in that than others (Artemeva & Fox, 2010). Learning to recognize and seize kairotic moments on the path to developing various literacies in different academic disciplines is equally important and non-trivial for *all* students (Artemeva, 2005).

This study draws on the RGS concepts reviewed above in its investigation of autistic students' accounts of how they handle interactions with autistic and nonautistic counterparts in the context of higher education, and how they recognize, create, and respond to kairotic moments.

### 3 METHODS

### 3.1 ETHICS

This small-scale qualitative exploratory pilot study was approved by the research ethics boards at two mid-size Canadian universities, where the research was conducted.

### 3.2 PARTICIPANTS

Eleven students were invited to take part in the project through an email invitation sent by each university's student support services to students who had previously identified as autistic and provided accompanying documentation. One additional student volunteered independently upon hearing about the study; that student was self-diagnosed as autistic. In total, 12 participants were recruited, 8 males, 3 females and 1 transgender person, ranging from first to fourth year in their undergraduate academic study; the students majored in a variety of subjects (see Table 1).

**Table 1** – Major Subjects of the Participants

| Tuble 1 Major Subjects of the Furticipants |                    |
|--|--------------------|
| Subject                                    | Number of students |
| Computer Science                           | 3                  |
| Applied Linguistics                        | 2                  |
| English Literature                         | 1                  |
| English/Journalism (double major)          | 1                  |
| Cognitive Science                          | 1                  |
| History                                    | 1                  |
| Law  | 1                  |
| Political Science                          | 1                  |
| Information Technology                     | 1                  |

**Source:** elaborated by the authors.

# 3.3 DATA COLLECTION

Two semi-structured interviews were conducted with each participant. The first interview (see Appendix for the interview guide), 45 to 120 minutes long, was conducted and audio recorded by the first author, a speech-language clinician with more than 25 years of experience working with autistic clients. All participants completed the first semi-structured interview.

The interview recordings were transcribed and a preliminary analysis confirming the accuracy of participant responses was conducted. The transcripts were then sent to the participants with a request to read and verify them prior to the second interview. At the beginning of the second interview, participants were asked to further confirm that the transcripts of the first interviews were accurate representations of their responses, thereby verifying the data. Nine out of twelve participants completed the second interview.

# 3.4 DATA ANALYSIS

The interview transcripts were uploaded into the qualitative coding software NVivo 12 Plus (QSR International Pty Ltd., 2019). Bottom up qualitative thematic coding of the interview transcripts was conducted (Saldaña, 2016) using an emergent, iterative approach, which started with low-level in vivo codes in the language of the participants (Saldaña, 2016) and progressed through a constant comparison method to a coding tree of emerging categories and high-level themes (Charmaz, 2006).

A top-down coding (Saldaña, 2016) was also conducted. This coding was informed by the Rhetorical Genre Studies framework in that key RGS concepts (e.g., rhetorical situation, exigence, uptake and kairos) were compared to the outcomes of the bottom-up thematic coding.

# 4 FINDINGS AND DISCUSSION

This study addresses the autistic students' lived experiences with social interactions involving the students themselves, their nonautistic instructors, and autistic and nonautistic peers. In this paper, we have preserved the autistic students' voices. The analysis and interpretation of student accounts were informed by Rhetorical Genre Studies. Below, we present and discuss main findings of the data analysis.

# 4.1 RECOGNITION OF RHETORICAL SITUATIONS

The study participants reported that for them, face-to-face verbal communication was associated with strong anxiety. For example, Participant 7 shared that when "everyone's talking and there's not a whole lot of coherence happening . . . [it's] really overwhelming" (Interview, May 30, 2019). In other words, one of the prominent themes of students' accounts that emerged through the RGS-informed analysis was difficulties with rhetorical situations that involved social interactions, especially with nonautistic interlocutors.

Nine out of twelve students reported that they developed precocious reading abilities as young children. For example, Participant 11 recalled that his mother had commented that he "was practically born reading" (Interview, January 26, 2018). Spending much time reading since the young age often resulted in having fewer opportunities to practise face-to-face social interactions, as illustrated by Participant 12 who observed that, as a preschooler, "it was mostly not me who initiated most social interactions at that age, but I read" (Interview, February 1, 2018) . Participant 11 reported that he "would rather . . . read a quiet book rather than go out" (Interview, January 26, 2018). That is, autistic students in our study consciously used their strong interest in reading to avoid verbal rhetorical situations, which required their active communication primarily with nonautistic counterparts.

Spending time reading or being internally focused likely led to even less practice with recognizing and participating in different kinds of rhetorical situations typical in nonautistic interactions. And yet, as Milton (2012) argues, nonautistic individuals themselves spend even less time practising interactions with autistic people, which indicates that nonautistic individuals, including university instructors, are likely less skilled at recognizing rhetorical situations that involve autistic individuals and the social needs (exigences) within these situations. Therefore, both autistic and nonautistic interlocutors experience difficulty engaging in meaningful social interactions with each other.

Furthermore, all participants noted that unstructured social interactions with nonautistic individuals were either exceptionally confusing or "exhausting" (Participant 5, Interview, May 27, 2019). In addition, they commented that they much preferred *structured interactions* such as answering questions in class or playing video or board/card games with clearly specified rules. Eleven out of twelve participants reported that they tried to *limit* unstructured interactions both because they were not sure how to join them, and they had difficulty engaging in them. For example, Participant 11 said that for nonautistic people, rhetorically appropriate interaction with their peers came naturally: "when they [nonautistic individuals] meet . . . you can just watch them, just click. It's in their eyes, it's in their voice – like their brain waves are synching." He further noted, "I don't necessarily do that" (Interview, January 26, 2018), thus reflecting that he did not think he could participate in that rhetorical situation in the same way. Indeed, he also reported that he avoided interactions with nonautistic people altogether because they were confusing to him. This information indicated that autistic university students in our study experienced difficulty in the recognition of or in participating in rhetorical situations involving nonautistic interlocutors.

However, autistic university students in our study reported that sometimes they, on their own initiative, sought assistance with social interactions that involved nonautistic people, either through participating in "social skills" groups at elementary or high school, or through observing nonautistic people closely, or by reading books on social skills. Four participants reported that they were taking drama classes to develop their communication abilities. For example, Participant 3 said that his drama teacher was "very helpful with communication and expression and pointing out what I was doing in terms of movements and pointing out where my unique thought processes, thanks to my autism, . . . was helping me and where it wasn't" (Interview, January 14, 2019). Participant 5 shared how, over the years, he had "grown up having to engage with . . . socialization actively" unlike nonautistic people who may be "doing it passively. They're just doing what is instinctual" (Interview, May 27, 2019). He described his own approach to understanding and taking part in social situations involving nonautistic people:

I have to look at the situation and be like, okay. These are the cues, this is what I'm observing, these are the responses that are appropriate. These are the responses that are ideal. That might sound to some people that interactions with me could be disingenuous, and that's not the case. It's that it's taught me to [engage] with a social situation critically. And ...carefully. There's a certain degree of calculation, but not in a Machiavellian way, if that makes sense (Interview, May 27, 2019).

In other words, some autistic students made active attempts to learn how to recognize rhetorical situations involving nonautistic individuals and how to respond to them appropriately. The recognition of and participation in rhetorical situations with both autistic and nonautistic interlocutors appears to be crucial for the overall involvement of autistic university students in interactions on campus and beyond.

### 4.2 AUDIENCE AND EXIGENCE AWARENESS

To notice or determine a social need in a conversation, an individual must at least be somewhat aware of their interlocutor and the interlocutor's social needs; that is, they need to have an awareness of their audience. For most people, this is even more difficult in written communication (Giltrow *et al.*, 2014). The study participants varied widely in their reports of their awareness of audience when writing. Some had been instructed about the nonautistic emphasis on audience in writing and either actively looked to do this or had learned to perform their written uptakes very well for nonautistic readers. In this way, they were not unlike many novice nonautistic undergraduate students (Giltrow *et al.*, 2014). Others reported that the audience was a new concept for them, or it was not necessarily important to them, or they were

unaware of it. For example, Participant 11 said, "I've never thought of an audience much before. I always think about purpose and meaning, what does this story mean – that kind of helps me write" (Interview, January 26, 2018) or, as Participant 3 put it,

I never really thought in terms of [audience] or in terms of who I was writing something for. I really just wrote, if anything, here's what I am wanting to write, and this is for anyone who is willing to read such a thing (Interview, January 14, 2019).

These comments appear to reflect what Flower and Hayes (1981) described as writer-based prose, or writing without considering an audience. Furthermore, these authors suggested that this type of writing was on the learning trajectory towards a more reader-based prose.

In face-to-face conversations, however, rhetorical situations require a much quicker response time than in writing. Participants have reported different steps they took to develop the ability to produce such prompt and appropriate responses to nonautistic interlocutors. For example, Participant 1 reported joining a sorority on campus to learn more about how to hold conversations. She observed that the experience provided "good information for me to know, and to grow from that. It's like . . . its own ecosystem that's built on the idea of like bonding and friendship, and it's interesting to see how that manifests as an actual thing" (Interview, January 26, 2018). Further, participants referred to the difficulties in working on group assignments. For example, Participant 3 reported struggling with group work when socially interacting with peers, saying "I thought I had a clear understanding of what I was supposed to do, but I didn't" (Interview, January 14, 2019). Indeed, he reported that his course instructor had acted as an intermediary to help him understand the social needs of the group. In the interview for this study, Participant 5 showed concern about whether he had understood what the interviewer (the first author) was saying, and frequently interjected, "Did I answer the question?" (Interview, May 27, 2019), suggesting a lack of confidence in the appropriateness of his response. He continued by sharing his awareness that he did not fully understand and "appreciate some of the social cues...and other aspects of socialization that other people . . . tend[ed] to appreciate naturally" (Interview, May 27, 2019). All participants reported that they had learned to determine social needs in order to engage with nonautistic peers or instructors but could do that only through explicit practice and training. Because it was still difficult and exhausting to be part of such interactions, our participants tended to avoid them.

Understanding the effort and energy that autistic students put into seeking guidance from nonautistic instructors, especially in face-to-face engagements, is very important for developing strategies for more effective interactions, but the effort to adjust should be approached from both autistic and nonautistic sides.

# 4.3 PERFORMANCE OF UPTAKES

All participants reported that their uptakes (Bawarshi, 2016; Freadman, 1994, 2002) in conversations were not always well-received and that writing was often easier for them than engaging in face-to-face interactions. For example, Participant 1 observed, "I know from my [autistic] diagnosis testing . . . that I read and write at a way higher level, like visually processing things, at a way higher level than I do hearing" (Interview, January 2019). She also reported that when needing to communicate very effectively, she would write a letter rather that have a conversation with someone, even within her own family. Online or other written interactions appear to be more successful for some, if not most autistic students.

Other participants reported that in face-to-face interactions, they were either "monologuing", thus dominating conversations, or would provide too much detail by "going

into the weeds" (Participant 10, Interview, February 8, 2018). Participant 5, for example, reported finding light social "small talk" particularly difficult. He said, "I have a really hard time having superficial interactions with people. I can do small talk, but it is more exhausting than having an engaged conversation like this [the interview for this study]. Exponentially more" (Interview, May 27, 2019). Some students indicated that they had developed very strong interests in particular topics (e.g., computer games, military history, politics) and struggled to respond to others without digressing to their area of expertise; for example, Participant 10 shared that he tended to dominate conversations:

> the way I speak and the volume of information that I hit people with, they think that I'm doing it for myself and that has been the number one detriment in all my romantic relationships. At a certain point, my girlfriend does not want to listen to me talk any more (Interview, February 8, 2018).

Participants also noted that even in their classes, they tended to dominate the discussion, as one of them said, "Every one of my teachers would tell you that I am one of the loudest, most participative students, almost too much so" (Participant 11, Interview, January 26, 2018).

Participants also reported that at least some of their difficulties would arise from not sharing common interests with nonautistic interlocutors. For example, Participant 1 who joined the sorority to learn more about communicating with nonautistic people said, "It's like been challenging and interesting, but . . . definitely a lot more difficult than being in areas where I'm comfortable and share interests with a bunch of dudes." She described herself as a "nerd" and reported coping much better with other "nerds" interested in computer games; she observed, "I think most of my friends are nerdy in some way or another" (Interview, January 7, 2019).

Some participants reported that they found social interactions with other autistic people to be much easier for them:

> When I speak to my autistic friends, it's like we're speaking a different language . . . I just feel like communication just becomes so easy because we're on the same wavelength, like we're thinking the same weird stuff. It's affected my identity, like jokes and the sort of social communication is so freeing and it feels so great" (Participant 6, Interview, May 14, 2019).

Participant 9 also shared that many of his friends whom he enjoyed spending time with might be autistic. He said, they were "not diagnosed, but I have my suspicions" (Interview, December 4, 2019).

# 4.4 TIME AND TIMING

Saying the right thing at the right time (Freadman, 1994, p. 50) is perhaps the most critical characteristic of a successful rhetor. Difficulties determining and responding at the right time during conversations, or recognizing kairotic moments (Artemeva, 2004, 2005), were reported by all participants. Research has shown that response time in autistic people compared to nonautistic individuals is typically different and usually slower (e.g., Maister & Plaisted-Grant, 2011; Romeo et al., 2018) and that this may be a major factor in being able to perform successful verbal uptakes in social interactions with nonautistic individuals. For example, Participant 1 explained her experience of time processing in conversations this way:

> It's like a huge difference, and that makes it hard sometimes interacting in person and I absolutely hate phone calls, it's the worst . . . a lot of the time people will ask me a

question, and it feels like it takes me 5 years to figure out what they said, but it's like a second, but often times that's like too slow compared to what people are expecting, or a classic one is somebody will say something and I'll say "what?" and one second later my brain figures out what they said, and then I answer (Interview, January 7, 2019).

Meanwhile, Participant 4 shared that "It's like I had a thought but then I don't have the words to describe what I'm thinking, like fast enough" (Interview, January 16, 2019). Many participants reported difficulties with the timing of their responses (perhaps leading to a preference for written and online communication as quick timing is less critical there), with Participant 6 reporting, "almost all of my closest friends are also autistic, and a lot of them I met through the neurodiverse movement through the internet" (Interview, May 14, 2019). The students themselves appear to be aware of the difference in their sense of timing from that of nonautistic individuals, which may serve as a barrier for them in seeking support from university services such as writing centres, staffed with unfamiliar nonautistic mentors or instructors.

It would be useful to nonautistic instructors to become aware of the differences in the timing of autistic students' uptakes as compared with those of nonautistic students. Further, nonautistic instructors may rely on the understanding that autistic students may find it easier to communicate online and in writing to develop pedagogical strategies that can better support autistic students. For example, instructors or mentors may provide more time when they are waiting for an autistic student to respond or choose to write down the main points of the class or an individual discussion as it is unfolding.

# 5 CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH

In this small-scale pilot study, we have relied on RGS in our investigation of autistic university students' accounts of their interactions with nonautistic and autistic individuals in the context of higher education. We consider such interactions to be critical sites wherein lie both the possibilities for as well as the potential obstacles to accessing opportunities which universities offer. The design of the study fronts the accounts provided by the real experts of lived autistic experiences--autistic university students themselves. Even though each interaction between an autistic student and a nonautistic instructor or peer may be unique, together the accounts provide a coherent perspective on the overall phenomenon. Acquainting themselves with what the students have to say about their interactions at university in the process of acquiring academic literacies may help nonautistic instructors who, in cooperation with the students themselves, may develop supports for such students.

The participants' accounts have been analyzed and interpreted from the RGS perspective, which allows researchers to identify the *rhetorical* nature of students' experiences. We have begun to investigate how autistic students recognize and respond to rhetorical situations, exigences, and kairotic moments, as well as how they perform uptakes. Our observations suggest that autistic ways of communicating may be a matter of a rhetoric different (*cf.*, Heilker & Yergeau, 2011) from the rhetoric of nonautistic individuals; it may be a matter of the differences in the concepts and practices of social interaction (in various modalities) rather than that of a deficit. This information contributes to a growing understanding of how autistic ways of interacting are different from nonautistic ways.

Further research conducted in collaboration with the autistic community is necessary to understand both the differences and similarities between autistic and nonautistic communication experiences. It may be that Heilker and Yergeau (2011) are correct in saying

that "faculty already possess all the tools and experience they will need to . . . respond . . . [to the needs of autistic students] with cultural sensitivity, ethical care, and pedagogical complexity" (p. 487). By viewing autism as a distinct rhetoric and by acknowledging Milton's (2012) understanding of the double empathy problem, universities may start to recognize the value of both autistic and nonautistic rhetorical ways of being.

In future studies, we intend to invite autistic and nonautistic instructors to our participant population and enrich our work with their voices. In conclusion, we would like to encourage autistic students, and autistic and nonautistic scholars and instructors who have experiences teaching academic literacies to autistic university students to provide feedback on our discussion

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# REFERENCES

- Alcorn-MacKay, S. (2010). *Identifying Trends and Supports for Students with Autism* Spectrum Disorder Transitioning into Postsecondary. http://www.heqco.ca/SiteCollectionDocuments/ASD.pdf
- Artemeva, N. (2004). Key concepts in rhetorical genre studies: An overview. *Technostyle*, *20*(1), 3–38.
- Artemeva, N. (2005). A time to speak, a time to act: A rhetorical genre analysis of a novice engineer's calculated risk taking. Journal of Business and Technical Communication, 19(4), 389–421.
- Artemeva, N., & Fox, J. (2010). Awareness versus production: Probing students' antecedent genre knowledge. Journal of Business and Technical Communication, 24(4), 476– 515.
- Bakhtin, M. M. (1986). The problem of speech genres. In C. Emerson & M. Holquist (Eds.), & V. W. McGree (Trans.), Speech genres and other late essays (pp. 60–102). Austin, TX: University of Texas Press.

- Barnes, C., & Mercer, G. (2010). Exploring disability. Polity.
- Baron-Cohen, S. (1997). Mindblindness: An essay on autism and theory of mind. MIT press.
- Bawarshi, A. (2016). Accounting for genre performances: Why uptake matters. In N. Artemeva & A. Freedman (Eds.), Genre studies around the globe: Beyond the three traditions (pp. 186–206). Inkshed Publications.
- Bawarshi, A., & Reiff, M. (2010). Genre: An introduction to history, theory, research and pedagogy. Parlor Press.
- Bitzer, L. F. (1968). The rhetorical situation. *Philosophy & Rhetoric*, 25, 1–14.
- Canagarajah, A. S. (2006). The place of world Englishes in composition: Pluralization continued. College Composition and Communication, 586–619.
- Carpenter, R. (2011). Disability as Socio-Rhetorical Action: Towards a Genre-Based Approach. Disability Studies Quarterly, 31(3).
- Charmaz, K. (2006). Constructing grounded theory. Sage.
- Chown, N. (2016). Understanding and evaluating autism theory. London, UK: Jessica Kingsley Publishers.
- Clare, E. (2017). Brilliant imperfection: Grappling with cure. Duke University Press.
- Dias, P., & Paré, A. (2000). Transitions: Writing in academic and workplace settings. Hampton Press.
- Dolmage, J. T. (2017). *Academic ableism*. University of Michigan Press.
- Flower, L., & Hayes, J. (1981). A cognitive process theory of writing. College Composition and Communication, 32(4), 365–387.
- Freadman, A. (1994). Anyone for tennis? In A. Freedman & P. Medway (Eds.), Genre and the new rhetoric (pp. 43–66). Taylor and Francis.
- Freadman, A. (2002). Uptake. In R. Coe, L. Lingard, & T. Teslenko (Eds.), The Rhetoric and *Ideology of Genre: Strategies for Stability and Change* (pp. 39–53). Hampton Press.

- Freedman, A. (2006). Interaction between theory and Research: RGS and a study of students and professionals working "in computers". In Artemeva, N. & Freedman, A. (Eds). Rhetorical Genre Studies and beyond. Inkshed Publ.
- Gerstle, V., & Walsh, L. (2011). Autism spectrum disorders in the college composition classroom: Making writing instruction more accessible for all students. Marquette University Press.
- Giltrow, J., Gooding, R., Burgovne, D., & Sawatsky, M. (2014). Academic writing: An introduction (3rd ed.). Broadview Press.
- Hacking, I. (2010). Autism fiction: A mirror of an internet decade? *University of Toronto* Quarterly, 79(2), 633–656.
- Heilker, P., & Yergeau, M. (2011). Autism and rhetoric. College English, 73(5), 485–497.
- Jurecic, A. (2006). Mindblindness: Autism, writing, and the problem of empathy. Literature and Medicine, 25(1), 1–23.
- Jurecic, A. (2007). Neurodiversity. College English, 69(5), 421–442.
- Kill, M. (2010). Glossary. In A. S. Bawarshi & M. J. Reiff (Eds.), Genre: An introduction to history, theory, research, and pedagogy (pp. 210–219). Parlor Press & The WAC Clearinghouse.
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations, and contexts*. University of Toronto Press.
- Lillis, T., & Scott, M. (2007). Defining academic literacies research: Issues of epistemology, ideology and strategy. Journal of Applied Linguistics, 4(1), 5–32.
- Maister, L., & Plaisted-Grant, K. C. (2011). Time perception and its relationship to memory in autism spectrum conditions. Developmental Science, 14(6), 1311–1322.
- McGuire, A. (2016). War on autism: On the cultural logic of normative violence. University of Michigan Press.

- Miller, C. R. (1984). Genre as social action. *Quarterly Journal of Speech*, 70(2), 151–167.
- Milton, D. (2012). On the ontological status of autism: The 'double empathy problem'. *Disability and Society*, 27(6), 883–887.
- Prince, D. E. (2013). All the things I have ever been: Autoethnographic reflections on academic writing and autism. In J. Davidson & M. Orsini (Eds.), *Worlds of autism:*\*\*Across the spectrum of neurological difference (pp. 319–330). University of Minnesota Press.
- QSR International Pty Ltd. (2019). NVivo qualitative data analysis software (version 12 Plus).
- Raymaker, D., & Nicolaidis, C. (2013). Participatory research with autistic communities:

  Shifting the system. In J. Davidson & M. Orsini (Eds.), *Worlds of autism: Across the spectrum of neurological difference* (pp. 169–190). University of Minnesota Press.
- Romeo, R. R., Leonard, J. A., Robinson, S. T., West, M. R., Mackey, A. P., Rowe, M. L., & Gabrieli, J. D. E. (2018). Beyond the 30-million-word gap: Children's conversational exposure is associated with language-related brain function. *Psychological Science*, 29(5), 700–710.
- Saldaña, J. (2016). The coding manual for qualitative researchers. Sage.
- Schryer, C. F. (1993). Records as genre. Written Communication, 10(2), 200–234.
- Schutz, A., & Luckmann, T. (1973). The structures of the life-world. In J. Wild & J. M. Edie (Eds.), & R. M. Zaner & H. T. Engelhardt, Jr. (Trans.), *Studies in Phenomenology and Existential Philosophy*. Northwestern University Press.
- Silberman, S. (2015). *Neurotribes: The legacy of autism and the future of neurodiversity*.

  Penguin Random House.
- Sinclair, J. (1993). Don't mourn for us. Autism Network International Newsletter, 1(3).

- Swales, J. (1990). Genre analysis: English in academic and research settings. Cambridge University Press.
- White, S. W., Elias, R., Salinas, C. E., Capriola, N., Conner, C. M., Asselin, S. B., Miyazaki, Y., Mazefsky, C. A., Howlin, P., & Getzel, E. E. (2016). Students with autism spectrum disorder in college: Results from a preliminary mixed methods needs analysis. Research in Developmental Disabilities, 56, 29–40.
- Yates, J., & Orlikowski, W. (2002). Genre systems: Chronos and kairos in communicative interaction. In R. Coe, L. Lingard, & T. Teslenko (Eds.), The rhetoric and ideology of genres (pp. 103–121). Hampton Press.
- Yergeau, M. (2018). Authoring autism: On rhetoric and neurological queerness. Duke University Press.

### **APPENDIX**

# **Semi-structured Interview Guide**

- 1. Can you describe your memories of first learning to read?
- 2. Can you do the same for learning to write?
- 3. Do you remember any particular feedback you received regarding your writing from your teachers or anyone else?
- 4. What kinds of writing have you been asked to do since entering university?
- 5. Which kinds of writing are your favourite?
- 6. Can you describe your writing process since entering university?
- 7. What have you found easy?
- 8. What has been more challenging?
- 9. Can you share any feedback you have received on your writing from your professors, teaching assistants or anyone else?
- 10. At this point, how would you rate or describe your writing skills?
- 11. What support do you think would help you to develop your writing skills even more?
- 12. Do you have any other personal experiences of writing which you can share with me to help me better understand your experiences as an academic writer?

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