SYNTACTIC PERFORMANCE IN ONLINEWRITTEN DISCOURSE BY AN ENGLISH/SWEDISH BILINGUAL WITH ASPERGER’S SYNDROME: A CASE STUDY

Received March, 17, 2014; Revised March, 18, 2014; Accepted March, 20, 2014

Abstract. The present article described syntactic performance by an English/Swedish bilingual participant with Asperger syndrome. The participant’s syntactic performance was investigated by means of observing the participant’s status updates on Facebook, a social networking platform. Two observation sessions involved one week each, with the interval of six months between the sessions. It was theorised that the bilingual participant’s syntactic performance would be exacerbated by code-switching. The participant’s data were tagged in computer software CLAN. Results of the data analysis indicated that the hypothesis was not supported: the participant’s syntactic performance exhibited no

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presence of code-switching. Data analysis indicated that there was no significant difference in the participant’s syntactic performance in the period of six months.

Keywords: Asperger syndrome, code-switching, English, early balanced bilingual, syntactic performance, Swedish

Капранов Олександр. Синтаксичні вміння й навички англо-шведського білінгва з синдромом Аспергера в письмовому дискурсі online: досвід дослідження.

Анотація. В статті описано синтаксичні вміння та навички двомовного учасника експерименту з синдромом Аспергера. Синтаксичні вміння та навички досліджено в серії з двох спостережень. Гіпотеза полягала в тому, синтаксичні вміння та навички можуть бути ускладнені навіть такою, як тип двомовності. Дани проаналізовано в комп’ютерній програмі CLAN. У результаті було встановлено, що синтаксичні вміння та навички двомовного учасника не зазнають перекріщеного впливу англійської та шведської мов; не було змін у синтаксичних уміннях та навичках учасника впродовж шести місяців.

Ключові слова: синдром Аспергера, англійська мова, збалансована двомовність, синтаксичні вміння та навички, шведська мова

Introduction

This article involves a description of syntactic performance by an early balanced English/Swedish male participant (16 y.o. at the time of the experiment) diagnosed with Asperger syndrome. Asperger syndrome is a disorder from the range of Autistic Spectrum Disorders (Bell 2007). Generally, autism spectrum disorders involve childhood disintegrative disorder, Rett’s disorder, autistic disorder, Asperger syndrome (AS), and pervasive developmental disorder not otherwise specified (Ben-Arie, Miller 2009). Currently in Sweden, the classification and diagnosis of AS is based on ‘The Diagnostic and Statistical Manual of Mental Disorders. Fourth Edition’, which is often referred to as its abbreviation DSM IV. In DSM IV, the following five types of autism spectrum disorders are distinguished: ‘299.00 Autistic Disorder’; ‘299.10 Childhood Disintegrative Disorder’; ‘299.80 Rett’s Disorder’; ‘299.80 Asperger’s Disorder’; and ‘299.80 Pervasive developmental disorder’ respectively. In Sweden, it is common to provide care of individuals diagnosed with AS in a decentralised manner in the respective local communities (Dencker, &Gotffries 1991). It is also common in Sweden that individuals with AS attend ordinary schools together with their neurotypical peers.
Previous research (Tebartz van Elst et al. 2013) indicates that Asperger Syndrome (further referred to in this article in its abbreviated form ‘AS’) involves qualitative impairment in social interaction and in communication respectively, exacerbated by repetitive and stereotyped behavioural patterns. Whilst AS is viewed within the autistic spectrum, AS has three particular areas operationalised as the triad of impairments. This triad involves impairments in i) social interaction, ii) social communication and iii) imaginative and flexible thinking respectively (Wire 2005). These types of AS can range from mild to severe along the continuum of pre-morbid and co-morbid variables (Ben-Arieh, Miller 2009; Kremer-Sadlik 2005). AS in childhood and adolescence is often characterised by obsessive routines, preoccupation with a particular subject of interest and difficulties with attending to nonverbal cues respectively (Attwood 1998; Frith 1989). Additionally, research findings report that individuals with AS may experience challenges with understanding nonliteral language (Hermann et al. 2013). Specifically, metaphors, irony, jokes as well as idiomatic expressions respectively may cause problems both in children and in adults with AS (Hermann et al. 2013). Whilst no language delay is described in the diagnostic criteria of AS, individuals with AS may have difficulties with nonliteral language comprehension i) aurally; ii) visually, when reading comprehension is compromised; iii) both aurally and visually (Bell 2007). These difficulties may involve comprehension of contextualised discourse, e.g. the context of the given utterances which are embedded in previous utterances; the context of the interlocutors’ relationships and intentions; the background assumptions shared by the interlocutors in a given situation (Tebartz van Elst et al. 2013; Wire 2005).

It is reported that the majority of children and teenagers with AS experience problems with the language usage, i.e. pragmatics, with their syntactic skills being superior to their pragmatic ones (Frith 1989). Current literature indicates that children and teenagers with AS exhibit normal or almost normal syntactic development (Clikeman 2007; Pry et al. 2005). It should be noted, however, that this observation holds true in case of monolingual individuals with AS. There are open questions involving bilingualism as a variable in terms of its impact upon the syntactic performance of a bilingual individual with AS. Presumably, bilingualism plays a facilitative role in linguistic and cognitive development of a child with AS (Kremer-Sadlik 2005). On the other hand, however, bilingualism may pose significant challenges to children and teenagers with AS. Arguably, bilingualism in conjunction with insufficient flexibility and routinised behavioural patterns as typical traits of AS may lead to problems with syntactic performance by an individual with AS (Wire 2005). To further investigate this contention, the present article describes a psycholinguistic experiment involving syntactic performance by an early balanced English/Swedish bilingual (further referred to in this article as the Participant) whose syntactic performance is observed in a series of two sessions. Both of these sessions involve monitoring the participant’s status updates on Facebook in order to investigate syntactic performance.

The hypothesis was based upon previous research (Pry et al. 2005) which suggested that global syntactic performance would not be affected by AS. However, it was assumed that online informal writing would be exacerbated by the Participant’s
bilingualism. It was theorised that the Participant’s syntactic performance would involve instances of code-switching which would be identified in the Participant’s online status updates on a social network platform Facebook. It was assumed that the Participant’s code-switching would be co-facilitated by an informal nature of online discourse on Facebook. Following those assumptions, specific research aims were formulated as follows:

- to identify markers of the Participant’s syntactic performance in the Participant’s online writing on Facebook;
- to compare those markers over time with the interval between the observation sessions of six months to elucidate whether or not there would be any significant differences between the markers;
- to identify instances of code-switching in the Participant’s syntactic performance.

The Participant in the case study was a 16 y. o. early bilingual male with AS. The Participant was diagnosed with AS at the age of five. The Participant’s mother was a native speaker of British English, whilst his father was a native speaker of Swedish. According to the Participant, he was an early balanced English/Swedish bilingual being able to switch from English into Swedish and vice versa at ease. The Participant reported that he spoke Swedish with his father and English with his mother. The Participant attended an English-speaking school with English as the main language of instruction. According to the Participant, he started to use more Swedish outside of school at the time of the experiment. The Participant reported that he maintained a consistent interest in online computer games, photography and music. The participant indicated that he was present every day on Facebook and on Flickr respectively. The Participant’s real name was coded to ensure confidentiality.

The study

The Participant read the Information Sheet about the details of the experiment and signed the Consent Form allowing the experimenter to collect his Facebook status updates for research purposes. The experimenter obtained the Participant’s permission to monitor the Participant’s status updates on Facebook for one week (Session #1) and after the time interval of six months to monitor his status updates again for another week (Session #2). Only text status updates written in the English language were monitored and analysed. Visual status updates, such as pictures or Youtube videos were excluded from the analysis.

Methods

The status updates in Session #1 were collapsed into one file and tagged in CLAN, a computer software program. Tagging involved T-Units (i.e., an independent clause and all of its non-clausal elements, excluding subordinators) and types of dependent clauses respectively. Incomplete sentences and sentence fragments were factored out. In addition to tagging in CLAN, the data garnered in Session #1 were quantitatively analysed in SPSS, a statistical software program. Identical procedure was applied to the data garnered in Session #2.
Discussion

Descriptive statistics of the observation sessions were compiled in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Session 1</th>
<th>Session 2</th>
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<tbody>
<tr>
<td>T-Units</td>
<td>2.7</td>
<td>2.5</td>
</tr>
<tr>
<td>T-Units with code-switching</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Non-finite clauses</td>
<td>2.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Relative clauses</td>
<td>1.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Adverbial clauses</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Nominal clauses</td>
<td>0.4</td>
<td>0.7</td>
</tr>
</tbody>
</table>

It has been assumed in the hypothesis that the Participant’s global syntactic performance is not affected by AS. The results of the data analysis support that assumption. The Participant’s syntactic performance does not exhibit any violation of the syntactic norms of the English language. These findings are in concert with previous research which indicates that teenagers with AS exhibit normal syntactic development (Pry et al. 2005). Whilst it has been posited in the hypothesis that online informal writing is exacerbated by the Participant’s bilingualism, data analysis indicates that the Participant’s syntactic performance does not involve code-switching. The Participant’s online status updates on Facebook do not exhibit a tendency to involve code-switching from English into Swedish or, alternatively, from Swedish into English. To reiterate, this case study involves an early balanced bilingual who attends an English school in Stockholm and whose family background can be described as educated middle-class. Arguably, the Participant’s socio-economic background has a facilitative role to play in the syntactic performance, thus mapping into the Participant’s correct syntactic performance on Facebook. From the point of view of syntax correctness, the Participant’s writing meets all the expected syntactic requirements of the English language, apart from several instances containing typographic mistakes, small letter substitution instead of capital letters, and solid spelling of two words with the apostrophe omission (which is typical in casual online writing), evident from this excerpt: ‘finally at home... heres to hopingi get a lifehack to be able to watch the Ashes’.

Whilst there is no statistically significant difference between the sessions in terms of syntactic markers, data analysis reveals that the Participant’s syntactic performance is rather complex. Syntactic complexity is manifested by the usage of dependent clauses. These clauses involve non-finite, relative, adverbial and nominal clauses respectively. No other types of clauses have been identified in the data in Session #1 and Session #2 respectively. Interestingly, the distribution of the dependent clauses is skewed, since the Participant tends to prefer non-finite clauses in his Facebook status updates. The predominance of non-finite clauses is evident in both Session #1 and Session #2, e. g. ‘these things keep popping up in my life. I don’t
want to keep seeing, hearing, reading about them....’; ‘sitting awake after 4hrs of gaming...’.

It should be noted that in some of the aforementioned example involve one T-Unit with several non-finite clauses. It can be theorised that the prevalence of non-finite clauses in the data is indirectly related to the routine, since routinised behavior is preferred by individuals with AS (Frith 1989). Obviously, it does not seem possible to offer an exhaustive explanation of this particular preference in the present case study, given that more participants would be needed to establish a by-default or preferred type of clauses used by English/Swedish bilinguals with AS.

Conclusions

The present article involves a psycholinguistic experiment aimed at elucidating syntactic performance by an English/Swedish bilingual Participant with Asperger syndrome. The Participant’s syntactic performance is investigated by means of observing the participant’s status updates on Facebook. It is found that in the course of two observation sessions of one week in duration each, the Participant’s syntactic performance does not exhibit any presence of code-switching.

Data analysis indicates that the Participant’s syntactic performance is characterised by the presence of dependent clauses. It has been found that non-finite clauses seem to be the Participant’s preferred type of clauses. These findings should be taken with caution, since this is a case study with the only one participant.

Acknowledgements

I wish to express my acknowledgements to the Participant for his participation in the research. I wish to express my thanks to the conference organisers who are doing a fantastic job at the time of challenges to their country.

References


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**ПРОБЛЕМАТИКА АУДІЮВАННЯ УСНИХ РОЗГОРНУТИХ ВИСЛОВЛЮВАНЬ У КОНТЕКСТІ МОВЛЕННЯ ВОГО РОЗВИТКУ ДОШКІЛЬНИКІВ**

*Received March, 15, 2014; Revised March, 18, 2014; Accepted March, 22, 2014*

**Анотація.** У статті проаналізовано дослідження учених (Л. С. Виготський, О. В. Запорожець, Д. Б. Ельконін, Н. С. Карпинська, Л. О. Калмикова, О. М. Леонтьєв, В. С. Мухіна, О. І. Никифорова, Л. С. Славіна, Б. М. Теплов та ін.), присвяченних проблемі особливостей аудіювання дітей дошкільного віку. З’ясовано, що проблема розвитку аудіювання дітей дошкільного віку нерозривно пов’язана з вивченням особливостей художньо-естетичного сприймання дітьми літературних творів та розуміння засобів художньої виразності, а також генезису розуміння дошкільниками усних розгорнутых висловлювань. Аналіз психолого-педагогічних, онтолінгвістичних і нечисленних психолінгвістичних досліджень засвідчив достатньо широкі потенційні можливості дітей дошкільного віку щодо сприймання й розуміння усних розгорнутых висловлювань. Проте психолінгвістичні закономірності й механізми розвитку у дітей діяльності аудіювання на сьогодні недостатньо вивчені.

**Ключові слова:** аудіювання, сприймання мовлення, розуміння мовлення, усне розгорнуте висловлювання, текст, дошкільники.

Kharchenko, Nataliya. Listening of the oral extended expressions in the context of preschoolers’ speech development.

**Abstract.** The paper is focused on the analysis of the researches by L. S. Vygotsky, A. V. Zaporozhets, D. B. Elkonin, N. S. Karpinskaya, L. A. Kalmykova, A. V. Leontiev, V. S. Mukhina, A. I. Nikiforova, L. S. Slavina, B. M. Teplov in the context of listening skills of preschool children. It has been proved that the problem of listening skills development in preschool children is closely related to the study of artistic-aesthetic perception features of literary texts and understanding the means of expressiveness by children along with the genesis of understanding extended utterances by preschoolers. Analysis of psychological, psycho-pedagogical, ontolinguistic and not numerous psycholinguistic researches showed potential of preschoolers to perceive and understand the extended utterances.

**Keywords:** listening, perception of speech, understanding of speech, utterance, text, preschoolers.