Errors in the written English of native users of sign language: An exploratory case study of Hong Kong deaf students

Philip Thierfelder [a], Paul Stapleton [b],*

[a] Centre for Sign Linguistics and Deaf Studies, The Chinese University of Hong Kong, Hong Kong
[b] Department of English Language Education, Hong Kong Institute of Education, 10 Lo Ping Rd., Taipo, Hong Kong

ARTICLE INFO

ABSTRACT

A considerable amount of research has been performed on the English writing of native Cantonese speaking students from mainstream school settings in Hong Kong. However, there have been few studies on the English writing of their deaf counterparts. The present exploratory study investigates the English writing of deaf learners who use Hong Kong Sign Language (HKSL) as their primary mode of communication. Via an analysis of errors found in essays written by five deaf English learners who are primary users of HKSL, we found that the most common errors were in their choice of words and in their use of articles and plural markings. Many of these errors appeared to be a result of transfer from HKSL, although some errors occurred via interaction between the learners' HKSL and their written Chinese, which was the second language of the participants. The pedagogical implications of this transfer and interaction in the learning of English are discussed.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Instruction in many classrooms, particularly in contexts where traditional approaches predominate, tends to be based on an oral delivery by a teacher that is received and largely understood by an audience of students. However, students who are deaf do not have full access to instruction provided orally due to their hearing loss, and this, along with other influencing linguistic factors, can have a significant impact on their progress in school. Studies show that a disproportionate number of deaf students struggle academically compared to their hearing counterparts (Fagan, Pisoni, Horn, & Dillon, 2007; Kyle & Harris, 2006; Paul, 2003; Traxler, 2000), especially in school subjects related to language development. In one study, Traxler (2000) found that deaf people remain around six grade levels behind their hearing peers in terms of reading comprehension. Deaf students in Hong Kong, the context for the present study, are no exception to this worldwide situation; a survey conducted by the Hong Kong Society for the Deaf revealed that deaf and hard of hearing elementary school students have a relatively low level of academic achievement (Hong Kong Society for the Deaf, 2009). Furthermore, government reports have shown that only 3.8% of deaf and hard of hearing people hold post-secondary degrees (Census and Statistics Department, 2014) compared to 22% of the general population (Census and Statistics Department, 2015). However, while deaf students in English-speaking countries are typically only required to learn to read and write English, those in Hong Kong must learn both written Chinese and English in order to gain access to higher education. This poses an additional challenge for them. Presently, relatively little is known about the linguistic challenges these students face in acquiring literacy in their

---

* Corresponding author. Tel.: +852 2498 8823.
E-mail addresses: dpthierfelder@gmail.com (P. Thierfelder), paulstapleton@gmail.com (P. Stapleton).

second written language, English, which is essentially their third language after Hong Kong Sign Language (HKSL) and written Chinese. In the present study, via an exploratory analysis of the written English of five deaf adults in Hong Kong, patterns of errors are investigated in an effort to build a better picture of what specific difficulties they face in learning to write a foreign language.

2. Background

2.1. Language learning among deaf people

To communicate without reliance on vocal utterances, deaf people use complex visual languages that combine manual signs (carried out using the hands and body) along with non-manual features or facial expressions, both of which follow regularized grammatical rules. Any of the visual languages used by different deaf communities constitutes a "sign language." As with languages for hearing people, different sign languages can be completely, partially or not at all mutually intelligible.

Tang (2007, p. 16) dispels several of the widely held misconceptions about sign languages in the introduction to her linguistic dictionary of HKSL. In effect, sign languages are not limited forms of gesture, nor are they inferior to spoken languages. They are true human languages that can be acquired naturally by children, and can be used for all the same functions and purposes as spoken languages. Deaf people learn one of the many sign languages as their native language, which, like their hearing counterparts, can have an influence on any subsequent languages they learn.

2.2. Writing challenges among deaf people and hearing L2 learners

Errors in writing are inevitable among both deaf and hearing second language learners. For deaf students, however, challenges associated with writing in a second language appear to be even more complex. Deaf students have been labeled "disfluent" (Marschark, Mouradian, & Halas, 1994) because their overall level of writing ability often lags behind their non-deaf peers. Some of the characteristic differences noted in studies on deaf learners include less lexical diversity in their writing (Albertini & Schley, 2003; Heefner & Shaw, 1996); shorter word length in written texts (Bochner & Albertini, 1988); less variation in use of cohesive devices (de Villiers, 1991); more grammatical errors (Marschark et al., 1994), and a lack of syntactic complexity (Wolbers, Dostal, & Bowers, 2012).

In terms of specific grammatical structures that are a challenge for deaf learners, a study by Cannon and Kirby (2013) found that deaf children have particular difficulty mastering a number of grammatical structures including: regular noun singular/plural markings, accusative first and second-person singular, noun/verb agreement copular "be," accusative third-person number/gender, locative pronominals, auxiliary "be"/regular past –ed, and plural prenominal determiners. In many cases these errors involve omissions of obligatory grammatical features in English. Suri and McCoy (1993) noted that these instances of negative transfer can be found in the English writing of some deaf native users of American Sign Language, and such negative transfer occurs when the lack or lower prominence of a feature in the L1, such as the copula *be* in ASL, leads to omissions in the L2 (i.e., omitting *be* in their written English). Similarly, Schneider and McCoy (1998) observed that native users of ASL often display such negative transfer errors by omitting determiners, since ASL does not have a determiner system similar to that of English.

A review of studies on English vocabulary use by deaf and hard of hearing students conducted between 1967 and 2008 (Luckner & Cooke, 2010) revealed that these students consistently have reduced vocabulary knowledge, acquire new words more slowly and have access to a narrower range of contexts that allow for the acquisition of new words when compared to their hearing peers. Cannon and Kirby (2013) noted that deaf and hard of hearing English learners whose first language is ASL might have difficulty with the acquisition of English lexical items because ASL has a relatively small lexicon when compared to English. As a result, native signers are obliged to map a single sign onto multiple English words, which presents a greater challenge than one-to-one mapping. Direct transfer, where a deaf writer glosses or translates signs directly into the written language, can also occur. Swanwick (2002), for example, found instances of deaf signers of British Sign Language (BSL) glossing BSL signs directly into their written English.

2.3. The impact of Cantonese and written Chinese

Currently, an estimated 7000–14,000 deaf people in Hong Kong use HKSL (Tang, 2006). For most users of HKSL as a first language, English is a third or fourth language after written Chinese and the spoken local language, Cantonese. While Cantonese is not taught formally in schools, some Hong Kong deaf people may acquire a certain degree of proficiency in it through lip reading and their residual hearing, amplified through hearing aids, which allows them to distinguish certain visible sound contrasts. Because of commonalities in terms of language background (written Chinese and Cantonese), it is instructive to examine the typical errors among native (hearing) Cantonese speakers learning English.

Employing a large-scale analysis using a corpus of hearing Cantonese students' written texts, Chan (2010) developed a taxonomy of error types at the syntactic, lexical, morphological, and discourse levels from a total of 4997 error tokens. This revealed that the vast majority of errors were at the level of syntax. The most common error type was calquing (482 tokens found in the data), when a string of words is translated word-by-word or morpheme-by-morpheme from the L1 into the target language. The second most common error type was word class confusion (450 tokens), which Chan also thought likely