Instances of the Comparative Fallacy

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INTRODUCTION

The comparative fallacy, first termed by Bley-Vroman (1983), cautioned against the theoretically untenable comparison of second language (L2) learners' linguistic systems to the target language norm. In other words, it warns that studies which examine interlanguage (IL) only in relation to the target grammar may hide a fuller, more complete picture of L2 learners' internally systematic knowledge and result in an only partially correct or even misleading understanding of that knowledge (e.g., Bley-Vroman, 1983; Lakshmanan & Selinker, 2001). The purpose of this paper is to understand how the comparative fallacy may have a disastrous effect on investigations of IL. This paper begins with a brief discussion of the comparative fallacy. Then, it considers some instances of the comparative fallacy through a review of two empirical studies (Liu & Gleason, 2002 and Robertson, 2000). In this section, the focus is on (a) the use of obligatory context and (b) reliance on the notion of omission in data analysis. Finally, concluding comments address methodological issues that could help researchers avoid the comparative fallacy.

WHAT IS THE COMPARATIVE FALLACY?

Bley-Vroman in his seminal article (1983) argued that L2 studies that employ analytical concepts defined relative to the target language are faulty in illuminating the systematic nature of IL and could lead us to incorrect conclusions. Since L2 learning is all about the learning of the target language, it would be deemed plausible and quite acceptable to base the analysis of the L2 learners' language on the target language. Why then is such a comparison invalid and even disastrous in understanding L2 acquisition?

When the IL concept was introduced (Selinker, 1972), its simple but fascinating assumption was that IL is a linguistic system in its own right, independent of the target language (see also Lakshmanan & Selinker, 2001). This assumption suggests that IL is not an incomplete or deviant form of the target language that can be simply compared and judged based on the target language norm. Because L2 learners as active language processors are not merely reshaping their L1s to conform to the L2s, but are creatively constructing an IL (Larsen-Freeman, 1991), their IL system develops its own internally logical and valid mechanisms. Hence, in order to characterize a learner's linguistic competence in the L2 accurately, the IL must be analyzed on its own terms (Bley-Vroman, 1983).

What counts as a comparative fallacy in empirical studies? According to Bley-Vroman (1983), the following types of studies are liable to fall victim to the comparative fallacy:

1. A study in which errors are tabulated, or to any system of classification of interlanguage production based on such notions as "omission" or "substitution," where these depend on comparison of interlanguage production with hypothesized corresponding target language sentences (p.2)
2. Any study which classifies interlanguage data according to a target language or depends on the notion of obligatory context or binary choice (p.15).
3. Any study which uses a target language scheme to preselect data for investigation (such as a study which begins with a corpus of errors) (p.15)
4. The dangers of the comparative fallacy are greater in population studies: A population study that uses a single TL scheme for classifying the data of many different learners will not only obscure the structure of the individual interlanguages, but it will also obscure the structure of each interlanguage in the population in a different way (p.15, 16).

In addition, Lakshmanan and Selinker (2001), while emphasizing the need for investigating IL competence independently of not only the target language system but also the native language system, described additional instances of the comparative fallacy:

1. Data that are only available as a type of transcript (e.g., not as an audio-recording) and are not collected by the analyst may become the source of a comparative fallacy because interlanguage intentions are difficult to retrieve from such data (p.394, 396).
2. In some studies, the data are selectively (or arbitrarily) included or excluded by the researcher for the purpose of the studies. This may lead to overestimating or underestimating the learners' interlanguage system (p.397).
3. In L2 studies of spontaneous speech, it is necessary to systematically compare IL performance to the performance of adult native speakers in similar or corresponding speech situations. Without such a systematic comparison, it is difficult to assess the hypothesized mismatch between the IL and the target language grammar (p.399).

In sum, the problems raised regarding the comparative fallacy are not of the purely technical type which might be improved or corrected by fine-tuning the systematicity measure. They are "basic conceptual difficulties" (Bley-Vroman, 1983, p.14). That is to say, the central issue of the comparative fallacy is that the IL data is not comparable to the target language norm because this is ultimately an invalid comparison of L2 learners' *performance* to native speakers' *hypothesized grammatical knowledge* (or *competence*). This is seriously problematic because even native speakers' performance data, as found in many empirical studies, do not precisely conform to the hypothesized norms of L1 speakers' mental representations. Moreover, a mere comparison of an IL to the target language gives an incorrect impression that the IL is an incomplete form of the target language and views L2 learning as the passive process of imitating the target language, which is contradictory to the major assumption of IL.

In the following section, I will discuss some instances of the comparative fallacy through a review of two empirical studies on the acquisition of the English article system by L2 learners (Robertson, 2000; Liu & Gleason 2002).

INSTANCES OF THE COMPARATIVE FALLACY IN EMPIRICAL STUDIES

Before discussing instances of the comparative fallacy found in empirical studies, it may be useful to first present a brief summary of the two studies. The first study by Robertson investigated the variable use and nonuse of the definite and indefinite articles by 18 Chinese-speaking learners of English. In his study, it was implicitly hypothesized that given the absence of formal equivalents of the English definite and indefinite articles in Chinese, the use of articles by Chinese learners would be characterized by optionality. That is, Chinese learners would unsystematically use and often omit English articles with no difference in meaning. In order to elicit learners' performance data, the studies employed a referential communication task. A pair of learners worked together, one taking a speaker role, and the other a hearer role. The speaker was given a sheet of paper with a diagram and described the diagram on the paper, and the hearer reproduced the diagram on another sheet as accurately as possible. The study found that omission of English articles in general was random and unsystematic, and concluded that Chinese learners failed to acquire English articles, displaying the indeterminate nature of the IL.

The second study, by Liu and Gleason (2002), also examined the acquisition of articles by non-native speakers of English. Their study, however, differed from Robertson's in that the participants were from various L1 backgrounds and that the authors limit themselves to examining only the definite article *the* because of its wide variety of usage and its higher frequency of use than the indefinite article *a(n)*. In their study, following Bickerton's assumptions (1981, cited in Liu & Gleason, 2002), Liu and Gleason assumed that the use of English articles was a function of the semantic properties of the noun phrase (NP) in discourse. Accordingly, their major concern lay in the question of whether or not L2 learners' use of the definite article was constrained by the semantic aspects of the NPs. As an elicitation method, a fill-in-the-article test was utilized: The instrument consisted of 91 problems where the participants were asked to fill out sentences with the deleted definite article, *the*. The results showed that learners' use of definite articles was indeed governed by the semantic properties of the NPs. It was also noted that learners encountered different levels of difficulty depending on the semantic properties of the NPs, and the difficulty level of different semantic environments changed as the participants' English proficiency increased, displaying the developmental patterns of the article *the*.

In the next section, I will discuss two instances of the comparative fallacy found in these two studies: (a) the use of obligatory contexts, and (b) reliance on omission.

The Use of Obligatory Contexts

The most apparent instance of the comparative fallacy found in both studies is the use of obligatory context in their analyses. Adopting the notion of obligatory contexts *per se* may not be problematic in analyzing the learners' data. In fact, many studies looked at the absence or presence of articles in obligatory contexts and effectively provided (at least) a partial understanding of the acquisition of the English article system by L2 learners. A serious problem arises, however, when the analysis of learners' IL relies entirely on the concept of obligatory context, thereby ignoring the (perhaps) systematic use of the articles across obligatory and nonobligatory contexts.

In Robertson's study, the basic procedure for using the concept of obligatory context was as follows. After collecting learners' data, obligatory occasions for the use of articles were identified in the data as seen in Table 1. Then, the learners' use and non-use of articles were counted in these contexts where a native speaker would use an article. The use or non-use of the articles in any other contexts was not considered. This is apparently an instance of the comparative fallacy[1]. The data analysis that exclusively drew on the obligatory context led the author to view the learners' performance only from the target language point of view. Consequently, he did not attempt to scrutinize the data from the learners' point of view. In addition, when he provided an account of the learners' performance in the use and non-use of articles, he made no distinction between definite articles, indefinite articles, and demonstratives, and did not even include the zero article[2], which is often carefully examined in the literature. Given the complex form and function mappings involved in each article, such a view does not illuminate the exact nature of the acquisition processes of the English article system.

TABLE 1
Types of Obligatory Contexts for Definite Article Used in the Studies

Robertson (2000)	**Liu and Gleason (2002)**	
1. Anaphoric use	1. Textual	Anaphoric use
2. Immediate situation use		Associative anaphoric use
3. Larger situation use	2. Situational	Visible situation use
4. Head noun of an associate clause		Immediate situation use
5. Unexplanatory use		Larger situation use relying on specific knowledge
6. NPs with nominal modifier	3. Cultural	Larger situation use relying on general knowledge
7. NPs with establishing relative clause	4. Structural	Unfamiliar use in NPs with explanatory modifiers
		Unfamiliar use in NPs with non explanatory modifiers

As seen in Table 1, Liu and Gleason's study, assuming important roles for the semantic properties of the NP in the acquisition of articles, also identified obligatory contexts where native speakers would use articles. The study further subcategorized these obligatory contexts into cultural, situational, textual, structural, and situational contexts based on shared knowledge between a speaker and a hearer in a speech community and specificity of information. Then, the learners' performance was analyzed in terms of whether learners could accurately supply the articles in each obligatory context. In this sense, Liu and Gleason's study could have been as susceptible to the comparative fallacy as Robertson's study. Their analysis however, may have avoided the comparative fallacy because in their data they observed the use of the articles in unexpected contexts, that is, non-obligatory contexts, and included these occasions in order to explain L2 learners' acquisition processes.

Although both Robertson's study and Liu and Gleason's study adopted the notion of

[1] In fact, the author himself acknowledged the problems caused by the comparative fallacy; however, he argued that "the strength of the defence against the changes of having committed the comparative fallacy rest on the strength of the evidence for unsystematic variability in the grammar." (in footnote 8, p.165);

[2] The term *zero article* refers to any instance in which a noun requires no article, and is subdivided into zero and null articles. The zero article occurs with nonspecific or generic noncount and plural nouns, such as *water* and *cats,* whereas the null article occurs with certain singular count and proper nouns, such as *New York* and *lunch* (e.g., Butler, 2002; Master 1997)

obligatory context in their analyses, the first study seems to be more subject to the comparative fallacy. Why is this so? The major difference between the two studies is the different points of view that initially guided the studies. For instance, Robertson's study set out to examine optionality in the acquisition of the English article system, and thus placed more emphasis on the unsystematic or random use of the articles only in obligatory contexts from the target language standpoint. Liu and Gleason, on the other hand, tried to reveal a systematic and developmental pattern with regard to the article system considering learners' proficiency from the learners' IL point of view. These different viewpoints guided the authors to approach and analyze the learners' performance data differently and led them to different conclusions: random or optional rules for the definite and indefinite articles in Robertson's study, and the natural order of acquisition processes of the non-generic definite article in Liu and Gleason's study.

Reliance on Omission

As stated earlier, a study in which errors are tabulated based on a notion such as "omission" is also vulnerable to the comparative fallacy (Bley-Vroman, 1983). This situation is observed in Robertson's study. Although the study analyzed and reported both the use and non-use of the articles by the Chinese learners, its analysis was exclusively devoted to counting and tabulating the number of omitted articles only in obligatory contexts in order to account for its initial hypothesis: optionality in the omission of articles by L2 learners. Consequently, the author failed to capture one of the important findings in article acquisition: the overuse of *the* (e.g., Master, 1997; Parrish, 1987). Since the learners' use of the articles in nonobligatory contexts was not examined, this phenomenon was not addressed in the study. Overall, the heavy reliance on counting learners' errors, in this case *omission* based on the target language norm, results in a partial or even biased view of the learners' language system with regard to articles.

Furthermore, in the data analyses, the concept of omission is rather vaguely defined, and no distinction is made between occurrences of omission and use of the zero article. According to Master (1997), the zero article is the most frequently occurring free morpheme in the English language. In L2 studies, it was also found that L2 learners tended to overuse the zero article because of its high frequency in the input (e.g., Master, 1997; Butler, 2002). If this is the case, omission of articles by Chinese learners in Robertson's study could have been attributed to an overgeneralized application of the zero article, rather than to simply not having systematic rules for the English article system. Yet, Robertson seemed not to distinguish the zero article from the concept of omission, and thus used these two terms interchangeably. From the study, it is not clear whether the omission of articles was simply the result of a lack of rules, or the result of applying the rule of the zero article. Although it may be empirically difficult to distinguish the omission of articles from the zero article, the zero article should have not been dismissed completely, as it was in this study. It should have been treated as a full-fledged article that is equal in status to the definite and indefinite articles (Master, 1997). If he had considered the zero article, as opposed to omission, it may have led him to a different conclusion.

CONCLUSION

The comparative fallacy should be avoided not only because a comparison of a learner's IL with the target language may give us a limited or incomplete picture of the IL, but also because such comparison could give us an incorrect understanding of L2 acquisition. In order to avoid the comparative fallacy, Lakshmanan and Selinker (2001) provided practical and applicable methodological solutions. Firstly, learners' data should be collected by the analyst so that learners' intentions can be accurately retrieved and interpreted in the data analyses. Secondly, L2 studies of spontaneous speech so far rarely carry out a systematic comparison of the language learners' speech samples with the performance of native speakers in similar or corresponding speech situations. It is essential to see whether or not a hypothesized difference between the IL grammar and the target language grammar is really observed in the performance data. Thirdly, a concept of acquisition other than accuracy can be used (e.g., *emergence*). That is to say, another possible method for making serious progress in the investigation of IL is to examine when specific linguistic features emerge. In this view, acquisition is defined as first occurrence. In fact, first language acquisition research has extensively used this concept (e.g., Wells, 1985). Finally, there is a need to investigate carefully the input to which L2 learners may have been exposed, including the performance of other interlocutors in the various sessions.

As attested in many previous empirical studies, considering the target language system as a touchstone is important, and indeed crucial, to an understanding of L2 learners' language systems. The comparison of IL to the target language can provide us with a good starting point with which to approach L2 learners' mental representations. The danger of the comparison between the target language and the IL, however, will arise when the analysis exclusively rests on a (theoretical) target language norm, neglecting the internally logical and systematic mechanisms of the IL.

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