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**Title:** Using Rhetorical Structure Theory for contrastive analysis at the micro and macro levels of discourse: An investigation of Japanese EFL learners' and native-English speakers' writing

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ABSTRACT

Contrastive studies between the languages of English and Japanese make up a field of research that have offered substantial contributions to our understanding of L2 writing. Ranging from the objective, quantifiable measurements of error analysis, to the more interpretive observations of discourse analysis, these studies have identified a number of features at both the micro and macro levels of Japanese L2 writing. Theoretically, however, contrastive studies in this field have tended to make assumptions about language and culture that, while oftentimes reasonable, simply have not been substantiated through empirical evidence, making their findings, which were based on those assumptions, questionable at best. Moreover, these studies have chosen to look at either local or global errors but have not effectively considered how the two are interwoven and thus have yet to satisfactorily answer the question: “Why is the English writing of Japanese oftentimes experienced as ‘illogical’ and ‘incoherent’ by native-English speakers (NESs) beyond grammatical errors and idiomaticity?”

To effectively answer such a question, the desire to know why or from where certain errors occur must be sidestepped, and the errors themselves and how they are affecting learners’ writing should be made the focus. This can only be done, however, through a different theoretical perspective—a perspective concerned with basic communication principles. It is then through this lens that the combination of quantifiable measurements and interpretive observations of anomalies at both the micro and macro levels of discourse can be effectively analyzed.

To this end, this study positioned itself in Clark’s Common Ground theory, a well-established and accepted theory of basic communication principles, as its theoretical framework, and adopted Rhetorical Structure Theory (RST), an analytical framework that can effectively identify coherence features at the micro and macro levels of discourse in tandem with one another.

As for the data set, a random selection of 400 English texts by Japanese and native-English writers from the International Corpus Network of Asian Learners of English was used. A set of predetermined parameters was applied to this set of texts to achieve a balanced data set, which resulted in two corpora: a Japanese English-as-a-foreign-language learners’ corpus (JEFL, N = 22), and a native-English speakers’ corpus (NES, N = 22). Texts in each corpus were parsed into elementary discourse units (EDUs) using the Syntactic and Lexical-based Discourse Segmenter (SLSeg). Those EDUs were then analyzed with the RST framework. Composite discourse
segments (consisting of more than one EDU) were established, the relations between the segments were determined, and the frequency of the relations was tabulated. Yule’s difference coefficient was applied to assess the difference in the relative frequency of a relation in the two corpora. Wilcoxon signed-rank tests were applied to determine if there was a statistical significance between the two corpora’s relation frequencies. The results showed several differences between the two corpora.

The most discernible quantitative difference observed was that Subject Matter (SM) relations, which are concerned with ideation and/or content (as opposed to the more rhetorical in nature Presentational relations), were used less frequently by the JEFLs (p = 0.047) than by the NESs. This underuse is interpreted as a symptom of a deeper problem, namely, cognitive overload, leading to a relatively low degree of elaboration of the actual topic of the texts. This assertion is furthered by the qualitative observations made on two other types of phenomena: a number of relations that were precisely used more frequently by the JEFLs, which often weakened the coherence of the texts, and dangling units/cross dependencies. Lastly, a closer look at the individual relations themselves found that the JEFL writers regularly struggled to match the content of a nucleus with its function, producing what I have termed “artificial nuclei” in the structure of texts. Together these anomalies result in a violation of basic communication principles that could plausibly account for Japanese English writing often being regarded as incoherent and illogical. However, there is no basis for the general, sweeping claim that such errors are caused or a result of linguistic and cultural transfer/interference. Rather, the anomalies observed in the JEFL corpus may be diagnosed as comparable, if not identical, to those produced by inexperienced writers. Thus, it would be advisable for English writing instructors to consider Japanese learners as novice writers and teach from this position rather than a view that the L1 is the source of any observed errors, at least as far as errors in coherence are concerned.