Is there less micrographia in foreign language in Parkinson's disease?

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Cerebral processing for native and foreign languages differs.[1] A 71-year-old, right-handed Japanese man with a 5-year history of Parkinson disease (PD) noticed that micrographia was more severe in his written Japanese than his written English. The severity of PD was Hoehn & Yahr III, and Menesit 300 mg and Domin 0.8 mg were given daily. The patient was a retired priest who had been a high school English teacher until age 65. He had never lived in an English-speaking country and was not bilingual. He educated himself by writing English every morning. Before drug therapy was initiated in the early morning, micrographia predominantly occurred in his written Japanese but less in his written English (figure, A). After beginning drug therapy, micrographia improved in both languages (figure, B).

Micrographia is a common and well-known symptom of PD. However, to our knowledge, this discrepancy between native and foreign languages has not previously been described. These findings may reflect a type of paradoxical movement, a well-known symptom of PD.[2]

1. Perani D, Dehaene S, Grassi F, et al. Brain processing of native and foreign languages. Neuroreport 1996;7:2439–2444.
2. Glickstein M, Stein J. Paradoxical movement in Parkinson's disease. Trends Neurosci 1991;14:480–482.

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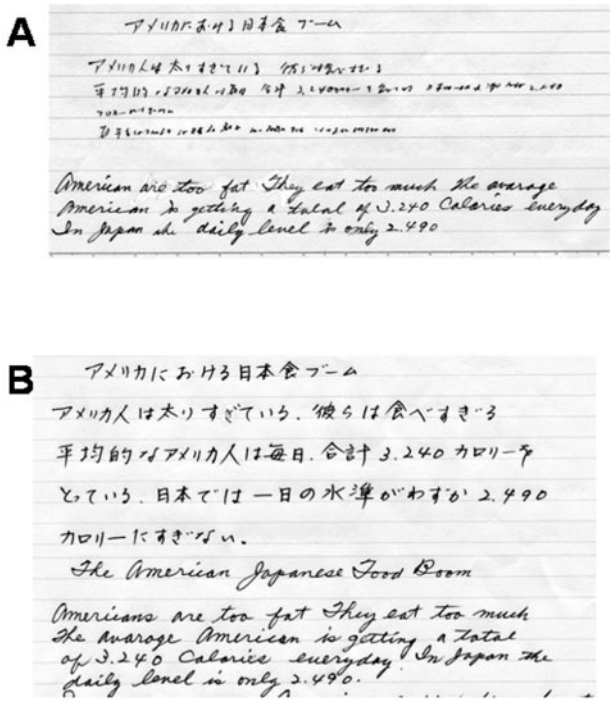

Figure. Handwritten Japanese (native) and English (foreign) texts at 5:00 AM (A) and 8:00 AM (B). During the OFF-period of antiparkinsonian drugs, micrographia was selectively seen in the Japanese letter writing (A). The finding improved after initiating therapy (B). The text shown here was composed by the patient. Corrections in A were done by the patient.

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