

A THIN LINE BETWEEN APHASIA AND POETRY

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Background. Aphasia is a neurological speech disorder. Aphasia can affect speech comprehension (e.g. Wernicke's or 'fluent' aphasia) and speech production (e.g., Broca's or 'non-fluent' aphasia). In previous literature, it been suggested that aphasic speech and poetry bear mutual resemblance. We aimed to evaluate the null hypothesis that poems of mediocre quality and aphasic transcripts can not be distinguished.

Methods and setting. A web survey was conducted among employees of a Dutch medical center and among subscribers of a statistical newsgroup on the internet. Respondents were presented four pairs of poems and aphasic transcripts (A-P pairs). A-P pairs were 'matched' on salient words. For each pair, the respondent was asked to give two ratings. The Likert-type scale ranged from 1 (very bad) to 5 (very good). The internal consistency of the aphasic speech items (Cronbach's alpha = .69) and poems (Cronbach's alpha = .72) was satisfactory. There were three non-fluent-type and one fluent-type aphasia items. We used a Wilcoxon signed-ranks method to test the null hypothesis that the medians of A-P pairs were the same.

Results. There were 112 responses for this survey, of which 89 were full responses (completion rate 79.4 %). The sample was comprised almost entirely of high-educated persons (93.3 %). There were 57 women (57.3 %) and the mean age was 39.6 years (SD = 12.74). The majority was a native speaker of English (77.5 %). Overall, the aphasic transcripts (mean rating = 3.13, SD = .74) were rated slightly lower than the poems (mean rating = 3.37, SD = .76). There were 47 positive ranks (poem > aphasic), 22 negative ranks (poem < aphasic) and 20 ties (poem = aphasic). Differences in A-P ratings were non-significant among men ($m_{\text{aphasic}} = 3.40$, $m_{\text{poem}} = 3.53$, $Z = -.954$, $p = .340$) and significant among women ($m_{\text{aphasic}} = 2.93$, $m_{\text{poem}} = 3.25$, $Z = -3.370$, $p = .001$). There were no significant A-P rating differences between native and non-native speakers of English. The fluent-type aphasic transcript was rated higher (mean = 3.25) than the non-fluent-type transcripts (mean = 3.10).

Discussion and conclusions. In a small sample of mostly high-educated men and women, poems were rated slightly higher than aphasic transcripts. Among men, there were no significant differences between ratings of poems and aphasic speech, whereas women rated poems slightly but significantly higher than aphasic transcripts. Poems and aphasic transcripts may be indistinguishable, especially for men. The findings raise questions on gender differences in the specialization of the left brain hemisphere in the context of poetry.

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