The research question: The present study examined the influence of syntax and morpho-phonology of sentences including 'paired (transitive/intransitive) verbs' that have the same stem but different suffixes, e.g., sim-**e**-ru/sim-**a**-ru (close), on generating case markers in a Japanese agrammatic patient.

Introduction: In Japanese there are many 'paired verbs' like, sim-**e**-ru (transitive) vs. sim-**a**-ru (mostly un-accusative intransitive). The paired verbs are morpho-phonologically more complex than unpaired verbs in that each of them has a similar counterpart.

Generally, subjects of sentences are marked by the nominative –ga (e.g., otokonoko-**ga** warau "a boy laughs"; doa-**ga** simaru "the door closes"), while objects are marked by the accusative –o (e.g., doa-**o** simeru. "(someone) closes the door"). Since verb phrase (VP) can assign accusative case marker –o to its object noun phrase (NP) but cannot assign nominative –ga to NP, NP moves upward to inflectional phrase (IP) and is given nominative –ga. In the transitive and un-ergative intransitive VP, NP with e.g. agent role is in specifier position and moves to IP in order to be given nominative -ga, while in the un-accusative VP, NP that is in lower or complement position jumps to over the specifier to IP. In that sense syntactic processing of NP movement is more complicated for un-accusative intransitive than for transitive and un-ergative intransitive verbs.

Japanese verbs are classified into two based on their inflectional change: 'consonantal verb' and 'vocalic verb.' The stem of the former ends with one of ten consonants (e.g., hira**k**-u (open), ma**s**-u (increase)), and that of the latter ends with one of two vowels /i, e/, e.g., mo**e**-ru (burn), so consonantal verbs are inflectionally and phonologically more complex than vocalic verbs.

The patient is a 48 year-old woman with 12 years of education, and has agrammatism and phonological impairment measured by nonword reading and mora deletion tasks.

Methods: A sentence completion test was performed, in which the patient was shown and heard 97 sentences with 'N + blank + verb' and was asked to say an appropriate case marker -ga or -o for the blank. The verb was a 'paired verb' (transitive or un-accusative intransitive verb), an unpaired un-ergative (intransitive) verb, or an unpaired transitive verb. The number of morae of verbs was three and their familiarity was matched.

Results: The patient's performance for all vocalic verbs, regardless of the paired or unpaired, and for unpaired consonantal verbs were relatively preserved (> 90%), whereas that for paired consonantal verbs was significantly deteriorated. Among them,

paired un-accusative consonantal verbs were most difficult (< 40%) that are morpho-phonologically and syntactically most complex (having morpho-phonologically similar counterparts, many stem final consonants and the longest NP movement).

Conclusion: The result revealed that the morpho-phonological complexity affects the patient's performance in generating case markers. Syntactic disorder emerged only when the verb is morpho-phonologically complex.