

Author's Reply to the Comments

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I am very grateful to Professor Ishihara who has offered thoughtful criticisms on my study, especially on my interpretation of the results.

His first criticism is concerned with the interpretation of the results in Experiment I. He argues that the results obtained in Experiment I can not rule out the independent storage hypothesis offered by Slamecka (1968) since *Ss* in the experimental groups had no chance of acquiring the general representation of the list structure during presentation. As Professor Ishihara has noted, Slamecka (1968) assumed that *S* encodes and stores the general representation of the list structure during presentation and uses this general representation of the list structure to form a retrieval plan which guides his search for the independent item traces. However, Slamecka (1968) also predicted that if at the time of recall the incidental learner was given a retrieval plan equivalent to that used by the intentional learner, the recall should be the same. According to this prediction, *Ss* in the cued condition should show enhanced clustering because the category labels were given as the general representation of the list structure. This prediction, however, was not supported by the data. Professor Ishihara also suggests that the number of words recalled in incidental learning might be too few to produce clustering. I agree with him that this is an important factor to be taken into consideration, but it should also be noted that *Ss* in the control group showed clustering in incidental learning even though they recalled as few words as *Ss* in the experimental groups. Therefore, I would like to conclude that the

general representation of the list structure should be stored together with the individual list-items to produce clustering. In other words, individual list-items should be stored in cohesive groups mediated by the category levels as the general representation of the list structure.

His second criticism is concerned with the interpretation of the results in Experiment II. He suggests that the results should be discussed in relation to the retrieval mechanism as postulated by Tulving & Patterson (1968), who preferred to identify PM and SM with different types of retrieval mechanism rather than with different types of store. Here, the underlying assumption is that the recency items are the product of a limited-capacity retrieval process that is unaffected by experimental conditions, while pre-recency items correspond to a retrieval process whose efficiency varies systematically with experimental conditions. An advantage of this retrieval view is that it is not obviously inconsistent with current experimental data. It seems to me, however, that this consistency with experimental data is essentially a reflection of the theory's poverty in specific detail. It seems necessary to specify the nature of the primary memory retrieval process, and how it differs from the secondary memory retrieval process. Furthermore, it will not only be fascinating but also important to discuss the results obtained in Experiment II in relation to the retrieval mechanism of Tulving & Patterson (1968). However, it is beyond the scope of this study to determine which model of memory (two-store model or two-retrieval model) is adequate. The main objective of

Experiment II was to find out whether or not the items in the terminal input position were unitized.

Finally I would like to thank the editors

for providing me with the opportunity to discuss with Professor Ishihara, who is an excellent researcher in the field of verbal learning and memory.