

# A final (?) note on implicit/explicit speech equivalence

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The recitation of lists of words varying in syllabic content or of sentences in grammatical or ungrammatical order failed to demonstrate the previously reported equivalence between implicit and explicit speech. It was suggested that explicit recitation takes longer because of the greater effort involved in producing an audible response.

Landauer (1962) concluded that we do not recite words or numbers to ourselves appreciably faster than we say them out loud. While that study has been the major reference in the literature, Marshall and Cartwright's (1978) replication failed to support that conclusion. Of the several types of lists that they had subjects recite from memory, only the list of the numbers 1-10 showed statistical equivalence. The numbers 81-90 and the alphabet were recited faster implicitly than explicitly. Marshall and Cartwright suggested that factors relating to the nature of the items and difficulty of the task may determine whether an equivalence will be obtained. The present study manipulated those factors in a task more directly testing recitation, that is, tasks without the memory component present in Landauer's study and our own earlier study.

In the first study, subjects recited explicitly and implicitly lists of eight one- and three-syllable words that were projected in front of them. In all, there were 50 recitations of each type of list, with the words randomly ordered for each recitation. In the second study, subjects recited, again from a projection, both explicitly and implicitly 50 sentences in correct grammatical order and the same 50 sentences with the words in random order. Different groups of 16 subjects were used in each study. The methodology was essentially the same in each: Presentation of the items to be recited activated a clock, and the subject, upon

completing the recitation, pressed a button on a hand-held switch to stop the clock. In all conditions, subjects were instructed to recite at the same "comfortable rate," reciting each word completely before going on to the next word in the list.

As in the Marshall and Cartwright (1978) study, silent recitation was faster than overt recitation for the lists of words varying in both syllabic content [ $F(1,585) = 280$ ,  $p < .001$ ] and grammatical structure [ $F(1,585) = 1,663$ ,  $p < .001$ ]. Further, and not unexpectedly, the three-syllable words and ungrammatical "sentences" took longer to recite ( $ps < .001$ ). As in our earlier study, there was no evidence that equivalence was being approached as trials progressed.

Our earlier findings and those presented here lead us to conclude that nonequivalence is the rule rather than the exception in comparisons of implicit and explicit speech. Only for the most familiar and often repeated strings (e.g., the numbers 1-10) may an equivalence be approached. By way of a unifying explanation, we offer the following simple observation: There is always more effort required in explicit recitation, and such effort adds to total execution time.

## REFERENCES

- LANDAUER, T. K., Rate of implicit speech. *Perceptual and Motor Skills*, 1962, 15, 646.  
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