

## Research in Progress

### *Research on Readability and Congeniality of Print*

Two research projects on psychological aspects of typographic variables have been started at the Psychological Institute at the University of Hamburg: one on congeniality and another one (supported by Grant No. Ho 242/3 and Ho 242/5 by the Deutsche Forschungsgemeinschaft) on readability.

In the congeniality project, 35 different typefaces have been judged by means of semantic differentials (Osgood-Hofstaetter). The typefaces were presented to the subjects (*S*) in form of simple alphabets. The *S*'s judgments were averaged over *S*s for each typeface, and each scale of the semantic differential, and then correlated between typefaces over scales (Q-technique of correlational analysis), and factor analyzed. Included in the analysis were 28 verbal concepts (male, female, love, dictator, hero, war, etc.) which were judged on the same semantic differential, in order to be able to identify the printing types by means of these verbal concepts in the semantic space.

In the readability project, the influences of serifs, inclination, and boldness of printing types on speed of reading—and their interactions—are to be investigated. For this purpose, a part of the Tinker Speed of Reading Test has been translated, and adapted for German *S*s; three forms of 50 items each, two of which are parallelized, the third one serving as preliminary drill. One form was printed in sixteen different typefaces, systematically varying serifs (two levels), inclination (two levels), and boldness (four levels).

The parallel form has been printed in a standard type (Optima). The reading tests are to be given under time limit (3 minutes); scores will be the number of words read within the given time. Data will be processed by means of a  $2 \times 2 \times 4$  analysis of covariance with the score on the form printed in the standard type as a covariate.

Pilot studies showed standard deviations of about 16-21% of mean reading speed for student *S*s, and about 32% of the mean reading speed for less educated *S*s (Army population) which can be reduced to 10%, resp. 21%, by means of the covariate.

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