Louis Leon Thurstone

With the death of L. L. Thurstone on September 29, 1955, psychology lost one of its greatest, a unique figure on the psychological scene and one to whom psychologists will always be indebted. If any psychologist of the past quarter century deserved to be called Mr. Psychological Measurement, it was he. His major professional objective coincided with that of the Psychometric Society and of *Psychometrika*, both of which were founded under his leadership: The development of psychology as a quantitative, rational science. By virtue of his own contributions and his influence on others, psychology has taken long steps in the direction of fulfillment of this objective. No major aspect of the field of measurement was untouched by him.

Louis Leon Thurstone was born May 29, 1887, in Chicago, where in later years he spent the greater portion of his professional life and achieved his greatest distinction, at the University of Chicago. His parents were of native, Swedish stock, his father's occupations being, in turn, military instructor, Lutheran pastor, editor, and publisher. Owing to a mobile family life, Thurstone went to school in Illinois; Mississippi; Stockholm, Sweden; and Jamestown, New York. He attended Cornell University, where he specialized in engineering. Considering the few instances of which the writer has known in which psychologists have started from a base of engineering training, he has often thought that we should be better off if more psychologists had taken that educational route.

It was during his engineering-school days that the problem of the learning curve, and hence psychology, caught Thurstone's attention. On graduation, however, he was offered a position in the laboratory of Thomas A. Edison, where he spent the year of 1912. During the next two academic years, he taught engineering courses at the University of Minnesota, and there began his study of experimental psychology. Graduate work followed at the University of Chicago. In 1915 he accepted an assistantship in the new and active laboratory established by Walter V. Bingham at the Carnegie Institute of Technology. He received his doctorate from Chicago, with a dissertation on the learning curve. His academic rise at Carnegie was something of a record. Beginning with the rank of instructor in 1917, with a promotion each year he became professor and head of the department by 1920.

The year of 1923–24 was spent in Washington, D. C., with the Institute for Government Research, an agency devoted to the improvement of civil-service practices. From that time on, Thurstone had considerable influence, directly or indirectly, upon civil-service procedures.

After his marriage in the summer of 1924 to Thelma Gwinn, Thurstone assumed his professorship at the University of Chicago. In the course of time,

https://doi.org/10.1007/BF02289032 Published online by Cambridge University Press



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he had much to do with initiating and setting the pattern for the University's distinguished Board of Examinations. In 1938 he was honored with the appointment as Charles F. Grey Distinguished Service Professor. In 1948 he was Visiting Professor at the University of Frankfurt, and in the spring semester of 1953 at the University of Stockholm. He retired from Chicago in 1952, at which time he became Research Professor and Director of the Psychometric Laboratory at the University of North Carolina, which was his professional affiliation at the time of his death.

His unquestioned creative productivity can perhaps be attributed to certain traits that seem to stand out—his dissatisfaction with the status of psychology as he found it, his keen analytical ability, and his independence and originality of thought. These qualities showed themselves in a number of ways. For example, his originality was demonstrated relatively early. While a college undergraduate he developed a novel method for trisecting an angle and published a paper on it in the *Scientific American*. By the time he graduated he had developed a motion-picture camera and projector of unusual design. It was this that brought him to the attention of Edison. His independence of thinking showed itself in the fact that he did not read widely in the psychological literature, as he was quite willing to admit, and in his general choice of some of the less popular subjects to which to devote his energies.

His dissatisfactions were many. He was discontented with the state of affairs he found in connection with psychological testing, where a rapidly growing practice seemed to have little or no underlying theory. It was in 1924 that he published his only attempt at general psychological theory, in his book entitled *The Nature of Intelligence*. More clearly, the need for test theory led him into the development of quantitative formulations, culminating in his multiple-factor analysis. His impatience with what he considered to be the severe limitations of classical psychophysics led to his development of basic theory of psychological measurement as effected through human judgments. He regarded his law of comparative judgment as one of his most important achievements.

His performance as an analytical thinker was most clearly brought to the attention of the writer when, in the fall quarter of 1935, he was privileged to attend Thurstone's seminar. Whenever a new problem came up in the seminar, it was a revelation to observe him go to work on it. He very quickly went to the heart of the problem, singling out the important variables in a way that made the problem appear simple. Incidentally, attending the seminar then and later were a large number of students, some at the post-doctoral level, who have achieved distinction in the field of psychometrics in their own right.

Thurstone's many contributions are so well known to readers of *Psychometrika* that they need not be enumerated here. Although he has been held in great respect by those outside the field of measurement, many of his developments have not had the general impact that they should have had. Thurstone

https://doi.org/10.1007/BF02289032 Published online by Cambridge University Press

did not found a school, nor did he deal in popular or spectacular subjects. He often spoke to "deaf ears" because so few psychologists were prepared by virtue of interest or mathematical preparation to listen. Perhaps his contributions that have gained the widest notice are his attitude-scaling methods and attitude scales, and his discovery of primary mental abilities and his tests of them. Of the many quantitative methods that he has provided, probably that of multiple-factor analysis stands first by a wide margin in potential usefulness and impact upon psychology in general.

It is not so well known that in the later years of his life his energies were very much devoted to performance tests of personality. This interest sprang in part from dissatisfactions with both projective tests and personality inventories. He was also working on material for a book that was to give a general treatment of psychological measurement and on revisions of his tests of primary mental abilities. It is hoped that many of these last efforts had gone far enough to reach publication.

Thurstone was always quite willing to acknowledge the assistance from his wife, Thelma. They collaborated on many studies and for years were jointly responsible for the American Council on Education college-aptitude examination. Their three sons are grown and started on their various professional careers. Besides the immediate family, Thurstone leaves behind a great many loyal and capable former students, who follow in the Thurstone-Chicago tradition, as well as many admirers around the world.

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https://doi.org/10.1007/BF02289032 Published online by Cambridge University Press