

IN MEMORIAM

Louis Guttman, 1916-1987

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The development of scaling theory by Louis Guttman at Cornell and by Clyde Coombs at Michigan is one of 62 "major advances in social science" identified and analyzed in *Science* by Deutsch, Platt, and Senghaas (1971) for the period 1900-1965. Observing that these achievements were increasingly likely to be the products of teamwork (teams account for more than half of the advances since the 1930s, and less than one quarter in the earlier period), Deutsch et al. emphasize that these team workers "were not colorless cogs in an anonymous machine." Rather, say the authors,

we find among them strong and individualistic personalities with some of the strengths and weaknesses found in the personalities of artists. Often they have appeared to some of their contemporaries as "... overbearing men," ... unwilling to suffer fools or critics gladly. The decisive difference from the past is that today these creative individuals nonetheless know how to work with other people, how to support others, and how to elicit their cooperation in turn. Indeed a surprising number of them founded significant organizations or institutes to carry on their own work.

Louis Guttman died at the age of 71 having added facet theory, smallest space analysis, and other innovations to his name, and having founded and directed the Israel Institute of Applied Social Research not simply to carry on his own work but to pioneer in the application of social science to the building of a new nation. His scientific achievements and their institutional grounding deserve to be eulogized from both these vantage points (and the writer regrets that he is unequal to the dual task).

Guttman came to Palestine in 1947 -one year before the establishment of the State- equipped with a Minnesota Ph.D. from Stuart Chapin (1942), early publications on scaling and methodology in the *ASR*, *Psychometrika*, and the *Annals of Mathematics*, an associate professorship at Cornell (1941-1950), a postdoctoral fellowship from the SSRC (1947), but, most of all, with the years of teamwork (1941-1945) as an expert consultant at the Research Branch of the Information and Education Division of the War Department. Volume 4 of the *American Soldier* is the record of this monumental effort and the credentials that Guttman could present to the Israel Defense Forces, to whom he volunteered his services. Only an American Zionist could hope that an untested, underground army, surrounded by enemies on the verge of attack, would immediately recognize the relevance of attitude research (Gratch, 1973). Nevertheless, and not long after, a Psychological Research Unit was established with Guttman at its head, complete with a public opinion division charged with conducting studies, among both soldiers and civilians, of morale, food rationing, radio listening, and the like, and anticipating problems of demobilization. During this period, Guttman managed to complete work on his third and fourth principal components of scalable attitudes, "closure" and "involvement," still in time for inclusion in volume 4.

Following its own demobilization, and influenced by the British model, the budding institute was attached to the Office of the Prime Minister, and, in yet another transformation,

in 1955 became an autonomous, not-for-profit organization dedicated to the public interest, with Guttman as scientific director until the day of his death. Throughout its history, government and public institutions have been the institute's primary clients, even after market and opinion research- on the American model- began to flourish in Israel.

In the same year, Guttman was appointed Professor of Social and Psychological Assessment at the Hebrew University, divided among business administration, statistics, psychology, and sociology. The timing, and the distinguished title, reflect his multidimensionality but also hint at the limits of teamwork among strong personalities trying to advance their several causes within a very small space. For years, Guttman had been trying to convince fellow sociologists that he was no less a theorist than they, meaning by theory "an hypothesis of correspondence between a definitional system for a universe of observations and an aspect of the empirical structure of these observations, together with a rationale for such an hypothesis" (in Gratch, 1973). After the development of facet theory and smallest-space analysis by means of which verbal formulations can be shown to guide empirical observation and constitute a basis for examining the resulting statistical structure, even theorists of the other kind now agree that "a central theme in Guttman's work [is] that measurement is not merely the assignment of numbers but the construction of structural theory By combining the nonmetric thrust as refined in smallest space analysis with the elucidative features of facet design, Guttman has provided a parsimonious means not only for numerically representing data structures, but for interpreting them as well" (from the citation of the Educational Testing Service, awarding Guttman its 1984 prize for "distinguished service to measurement").

There were many other honors: the Rothschild Prize for Social Sciences in Israel; the Israel Prize in 1978; election to memberships in the Israel Academy of Sciences and Humanities and the American Academy of Arts and Sciences (foreign honorary membership); the Andrew White Professorship-at-Large at Cornell University and the Outstanding Achievement Award of the University of Minnesota. The festschrift (Shye, 1978) says more.

Substantively, I believe that the theme of "well-being"- physical, psychological, and social- of individuals, groups, and societies may be said to underlie Guttman's work. This concern dates to his earliest publications, but the Israeli context, of course, offered ample-too ample-opportunity to pursue it. The institutionalization of this concern is the Continuing Survey of Social Problems established by Guttman (jointly with the Communications Institute of the Hebrew University) during the crisis-laden period prior to the Six Days War. With a group of social indicators at its core, and a "mapping sentence" to guide it, the survey has accumulated a great reservoir of empirical observations on the well-being of Israeli society over the past twenty years.

Louis thought hard and worked hard, emerging periodically to offer some new message to the world. The faithful, in Jerusalem, could observe the process in action at institute seminars on Friday mornings when Louis went to the blackboard to outline what the guest speaker had been trying to say. A few veterans may recall a party at an AAPOR convention in the 1950s at which Louis offered instruction in the hora.

References

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