

Irving Adler (1913-) and Ruth Adler (1915-1968) *

One of my vivid childhood recollections is the mathematics assembly program that my father wrote, incorporating an excerpt from Gilbert and Sullivan's "Mikado". My father at that time was Chairman of the Mathematics department at Textile High School in Manhattan. The program began with the Mikado singing his famous refrain, "My object all sublime, I shall achieve in time, to let the punishment fit the crime...", and then went on to the verse in which the Mikado promises that the "billiard sharp" shall be forced to play on "a cloth untrue, with a twisted cue, and elliptical billiard balls!" After a brief dialog by the skit's actors, in the course of which an elliptical billiard ball - an egg - was shattered, the skit's announcer informed the audience that in the next scene - "The Billiard-Player's Dream", "All we have to do is change the Mikado's idea a little bit. Instead of using an elliptical billiard ball, we'll use an elliptical billiard table".

My father had made, with the help of a student who had a jig-saw, an elliptical billiard table, which the audience could see by means of an angled mirror suspended over it. The cast in the skit demonstrated that a billiard ball placed at one focus of the ellipse, when shot towards the perimeter, would bounce off and always hit a billiard ball placed at the other focus. The skit then went on to deal with other properties of conic sections. This assembly program was needless to say a hit with the students, and was repeated a number of times. I think this program encapsulates my father and mother's approach to education, which was to motivate the students to *want* to come to grips with the really interesting intellectual content of the subject.

* Adapted from remarks by Stephen L. Adler on the occasion of the first Ruth and Irving Adler Expository Lecture, February, 2000.

My father was born and educated in New York City, attending Townsend Harris High School and graduating from City College in 1931. My mother was born near Liberty, New York, and walked several miles each way to attend school in a one-room schoolhouse; she graduated from Barnard College in 1935. My father taught mathematics in the New York public high schools from 1932 to 1946, when he passed the Chairman's exam, and was then Chairman at Textile High School from 1946 to 1952. Starting in the 1950s, my mother also taught mathematics, science, and art in the New York City area, and received a Master's Degree from Hunter College in 1959.

In 1952, during the Mc Carthy era witchhunts, my father was dismissed from the New York schools. Within two years he had reestablished himself in a new, and what turned out to be a very successful career, as writer of popular mathematics and science books for children and adults, many published by the John Day Company and by Knopf. His first John Day book, "Time in Your Life", was illustrated by my mother, and she continued to do illustrations for subsequent books. After my mother quit her mathematics teaching job when my parents moved to Bennington, Vermont in 1960, my mother started a series of books for younger children, the "Reason Why" series, that she coauthored with my father. Altogether, my father wrote 55 books on mathematics and science, and another 30 were coauthored with my mother. A series of mathematics workbooks that my father wrote for Golden Press sold over 27 million copies.

While I was at college in the late 1950s my father decided to return to Columbia, from which he had received a Master's degree in mathematics in 1938, to pursue a doctorate in mathematics. He received his PhD in 1961, writing a thesis on composition algebras under the direction of Ellis Kolchin. Subsequently, when he was in Bennington, he became

interested in the classic problem of phyllotaxis, the spiral arrangement of leaves on plants, and wrote a number of papers published in the Journal of Theoretical Biology and elsewhere that are considered major contributions to the field.

In 1961 my parents received jointly an award for “outstanding contributions to childrens literature” from the New York State Association for Supervision and Curriculum Development. Among other recognitions that my father received for his career contributions were the award in 1993 of the Townsend Harris Medal, the highest alumni honor of the City College Alumni Association, and the award of honorary degrees by St. Michael’s College, Vermont, in 1990, and by City College of New York in 2002. My father also was instrumental in founding a Vermont Academy of Arts and Sciences, of which he is a past President and a Fellow, and in 1982 he was elected a Fellow of the American Association for the Advancement of Science.