

KENJIRO SHODA

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## 1902-1977

Kenjiro Shoda died of a heart attack on March 20, 1977 at the age of 75 as he drove with his family to Ashikaga to enjoy the view of plum blossoms. Since there had not been any danger signals, his unexpected death was a great shock to all who knew him.

Kenjiro Shoda was born at Tatebayashi in Gunma Prefecture on February 25, 1902. He spent all of his school years in Tokyo except when he attended the Eighth National Senior High School at Nagoya. He was graduated in 1925 from the Department of Mathematics, Faculty of Science of Tokyo Imperial University. After spending one year at the graduate school of the same university, in 1926 he went to Germany for further study. While in Tokyo Imperial University he was a student of T. Takagi. At graduate school, he studied the group representation theory through works of G. Frobenius and I. Schur under the guidance of T. Takagi.

The first year in Germany was spent at the University of Berlin where he studied under I. Schur. His first mathematical accomplishment, the beautiful result on matrices, was attained in this period. The following year, 1927, he moved on to the University of Göttingen where he attended the Emmy Noether's lectures on "the Hypercomplex Systems and Representation Theory". This particular year seems to mark the most significant period in his mathematical growth. There, near Noether, he witnessed the remarkable process of creation of great mathematical ideas and theory, and youthful Shoda buried himself in enthusiastic pursuit of mathematics in a wonderfully creative atmosphere generated by the many young, able mathematicians who had come from all over the world to Göttingen then, attracted by Emmy Noether. Among these youthful mathematicians, whom people used to call 'Noether's Boys' in Göttingen, young Shoda found his time of mathematical growth and maturity. This one particular year, spent under Emmy Noether, seems to predestine what he was to become as a mathematician. During the several years following the Göttingen year, he made a great contribution to the theory of algebras by producing many creative works on this field. Especially, the Brauer-Shoda Galois theory for simple algebras is noteworthy.

In 1929, Shoda returned to Japan and set out to write "Abstract Algebra". Written and compiled with refreshingly new materials, this book, since its publication in 1932, played a major leadership role in research in this particular field in this country. We now have produced many first class research mathema-

ticians in this field.

In 1933, Shoda was appointed professor at the Faculty of Science of Osaka Imperial University. When he was appointed, the Faculty at Osaka was still a young one. In this growing institution, Shoda played a central role in research activity and helped produce many outstanding scientists. We owe much to Shoda for our great tradition of respect for liberty and creativity in the institution.

Since 1946, in an attempt to unify many existing theories of algebraic systems and elucidate the essence of them, Shoda created the Theory of General Algebraic Systems. In recognition of his many brilliant mathematical accomplishments, the Japan Academy awarded him the Japan Academy Prize in 1949, and in 1969 the Japanese Government presented him with the Japan Culture Medal, the highest award in the field of general culture the Government can offer. Since 1953, he has been a member of Japan Academy.

Among his activities in general academia he was selected, in 1946, the first Chairman of the Mathematical Society of Japan, and lead the reconstruction effort of the Japanese mathematical community after the War. Since 1954, he was elected twice a member of the Science Council of Japan, for the 3rd and 5th periods. In 1955, he presided over the organization of the international conference on algebraic number theory that was held in Japan for the first time. Since then, he has played, a leadership role in many international scholarly conferences held in Japan. He also endeavoured to establish the Yukawa Fellowship in the Faculty of Science of Osaka University. The Fellowship was established to commemorate the occasion of Yukawa's receiving the Nobel prize. As director of the Fellowship, Shoda promoted the scholastic exchange of young research scientists. Also his service as director of the Taniguchi Foundation should be mentioned. His contribution, in these capacities, to scholarly interchange among nations of the world is immeasurable.

Shoda also left an outstanding imprint in the field of school administration. In 1949, he was appointed dean of the Faculty of Science of Osaka University. It was at this time, after the War, that Japan was going through a difficult period of transition from the old to the new educational system. Under his leadership a foundation for the new Faculty of Science and the Graduate School of Division for Research of Science was firmly established. In 1955, at the age of 52, he became president of Osaka University. During his 6 years of tenure in office he made great contributions in the rapid development of the University by creation of the Faculty of Pharmaceutical Sciences, Institute for Protein Research, Graduate School of Division for Research of Dentistry, etc. He further pursued with zeal and originality the creation of the Faculty of Engineering Science. In 1961, when the Faculty was finally established, he returned to the University, after a short absence, as the first dean of the Faculty and laid the

foundation for it as a unique school of engineering.

After Shoda retired from Osaka University, he concentrated his efforts on improvements in education. He served as president and director-general of Musashi University and also worked as director of the Private University Commission. His services also encompassed a wide variety of important posts in education such as: member of Ad-hoc Study Committee on Higher Education, chairman of Ad-hoc Study Committee on Problems of Graduate Education, member of the University of the Air Establishment Preparations Investigation Council, etc. His advice and consent, always just and creative, were widely sought after in these matter of education in this country.

He loved the scholarly life and he loved his fellow man. His discipline was strict, yet his heart was warm and big. His faith in any man whom he came to know never wavered or changed. I know that the memory of this man's warm and rich humanity will live in the heart of many for a long time to come.

Hirosi NAGAO

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- 2. Theory of Associative Algebras (多元数論), Iwanami, Tokyo (1936).
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- 4. Theory of General Algebra (代数学通論), Kyoritsu-Shuppan, Tokyo (1947).
- 5. Elements of Number Theory (整数論提要), Kyoritsu-Shuppan, (1948).
- 6. Theory of Associative Algebras (多元数論), Kawade-Shobo, Tokyo (1948).
- 7. Algebra (代数学) I (with K. Asano), Iwanami, Tokyo (1952).

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