INTRODUCTION

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This volume is a collection of papers offered to honor John Forbes Nash Jr., one of the most original mathematical minds of this century. This honor is long overdue, and it is important to recognize that the volume was planned and the articles solicited nearly a year before the Nobel Prizes for 1994 were announced. The idea to collect a festschrift for Nash was proposed to me at that time by Peter Sarnak and Louis Nirenberg, who agreed to collect papers in analysis, while the areas of game theory and mathematical economics were left to me. The result of our labors is the collection of papers presented to you and which, on the one hand, represents an homage on the part of the authors and, on the other hand, reflects Nash's influence on the various fields in which he has worked.

In October 1994, when we were well into our labors, the Nobel Memorial Prize in Economics for 1994 was awarded to Nash, jointly with John Harsanyi of the University of California at Berkeley and Reinhard Selten of Bonn University. The prize was given to Nash for the work contained in his Ph.D. thesis in mathematics at Princeton University, which was accepted in May 1950. At the award ceremonies in Stockholm in December 1994, in lieu of the customary Nobel Lecture, a seminar devoted to the work of Nash in game theory was held, with the participation of the other two laureates and with contributions relating to current work influenced by the thesis. An edited version of this seminar appears in *Les Prix Nobel, 1994*. With the permission of the Nobel Foundation, the report of this seminar is published in this volume. This relieves me of the necessity of describing Nash's work in game theory in any detail in this introduction.

In *Les Prix Nobel, 1994*, in addition to the Nobel lectures (in Nash's case, the seminar), each laureate contributed a short autobiography. In the remainder of this introduction, I draw upon Nash's autobiography liberally, since it provides a unique insight into Nash's own view of his work.

Nash was born on June 13, 1928, in Bluefield, West Virginia. His father was an electrical engineer and, before her marriage, his mother was a school teacher, teaching English and Latin. John remembers reading the classic *Men of Mathematics* by E. T. Bell, but when he entered Carnegie Tech, he entered as a major in chemical engineering. Nash has never reponded positively to regimentation, so it was natural for him to switch to chemistry and then to mathematics. In the end, he graduated with both a B.S. and an M.S. in mathematics. All of this took him three years (from 1945 to 1948).

During these three years, Nash completed an important piece of work on bargaining. This work was a paper for an elective course in international economics,