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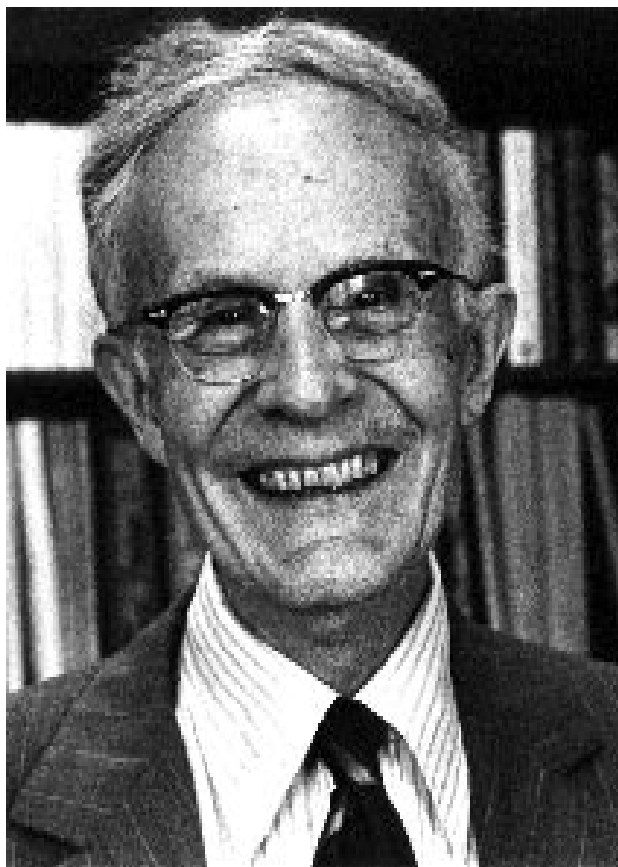
THEODORE WILLIAM SCHULTZ  
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*A Biographical Memoir by*  
D. GALE JOHNSON

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Photograph by Patricia Evans

*T. W. Schultz,*

# THEODORE WILLIAM SCHULTZ

*April 30, 1902–February 25, 1998*

BY D. GALE JOHNSON

**T**HEODORE WILLIAM SCHULTZ was an outstanding innovator in the development of economics, a teacher who had a remarkable impact on hundreds of students, a highly successful academic administrator, and a keen observer of the world in which he lived. I know of no one who learned more from direct observation than he did. Whenever he had the opportunity, he went to the field, so to speak, to see how real people addressed their problems. While he always cherished the structure of economic analysis as it existed, he wanted that structure to help him understand what went on in the world. If it didn't, he thought that the structure or the implications that were commonly attributed to it should be revised. As will be noted, he was responsible for a number of important innovations in the way economics helps us view reality.

He was born on a farm near Arlington, South Dakota, on April 30, 1902; he died on February 26, 1998, at the age of ninety-five. He was one of eight children, with four brothers and three sisters. He was unable to attend high school because he was needed on the farm. In 1921 he attended a short course at South Dakota State College. Someone at the college recognized that he was an obviously unusual individual,

and in 1924 he was admitted as a regular student. He completed the undergraduate program in three years and received his B.S. degree in 1927. He immediately entered the graduate program at the University of Wisconsin, where he was awarded his Ph.D. in 1930. He became an assistant professor at Iowa State College and remained at the college until 1943, when he moved to the University of Chicago.

In this memoir I shall give major emphasis to why he had such a positive influence on the lives of others, provide an example of his strong dedication to academic freedom, and draw attention to some of his major administrative accomplishments. I will give less attention to his major contributions to economics because two excellent and authoritative reviews exist. One was prepared by Mary Jean Bowman (1980) at the time of his receipt of the Nobel Prize in economics and the other very recently by Marc Nerlove (in press). I strongly recommend each of them.

His influence on the lives of people—students, colleagues and others—was very great indeed. He was very open, always ready to intellectually engage anyone who approached him in a serious manner. He carried out an enormous correspondence, responding to all serious inquiries or comments that came to him, not mattering whether from complete strangers, fellow economists, or important political figures. As many testify, his impact on students was enormous, both in the classroom and as a thesis adviser. But he was accessible to more than just his students, colleagues and persons of importance. Let me illustrate by recounting how I first met him.

My first contact with him was sixty-six years ago. The nature of that contact and my first meeting with him tells a lot about why he had such a positive effect on the lives of so many people. I was a junior in high school and had entered a statewide speech contest. I had decided that the subject

of my speech would be international trade and agriculture. Access to material on that topic was very limited in my small Iowa town. In preparing for the speech, I wrote a letter to Professor Theodore W. Schultz, then head of the Department of Economics and Sociology at Iowa State College, asking for his help and advice. I not only got a prompt reply, but he sent me two very relevant books as gifts—at least I assumed they were gifts, since he never asked for them back, and I still have them. I prepared my speech and went to Ames, where Iowa State College was located, to give the talk. Much to my surprise he was in the audience. He introduced himself to me and that was the beginning of a relationship that lasted for more than six decades. His taking the time to respond to a request for help from a high school student he did not know, and had no reason to believe he would ever meet, was indicative of his willingness to assist—to work with, to counsel—anyone who came to him with a reasonable request for intellectual assistance.

Anne O. Krueger, who was never a student of his, related a somewhat similar experience at his memorial service. She sent him a paper on the role of human capital differentials in explaining income differences among nations. He read the paper with care and, as he so often did, he sent her a response that included high praise for her work and suggestions for improvement. He invited her to give a paper at a conference he was organizing. Somewhat to his surprise, she turned down the invitation because the topic was outside her area of research competence. He indicated that he was somewhat bemused that someone so junior would turn down such an invitation. When he reissued the invitation to attend, she did. Thus began a relationship that spanned nearly three decades.

He was a remarkably successful academic administrator. As an assistant professor, he was made head of the Depart-

ment of Economics and Sociology at Iowa State College in 1935 at the age of thirty-two and only five years after the receipt of his Ph.D. Iowa State was then, and now, one of the premier Land Grant colleges, but his appointment came in the midst of the Great Depression. Raymond R. Beneke (1998) notes that at the time Iowa State College did not have the financial resources to bring an established economist and administrator from outside so they turned to Schultz. Perhaps financial exigency has never had such a positive outcome. By some means or other, he acquired over the next several years the resources to attract a large number of young economists, who later were recognized as outstanding. He was able to accomplish this in part because there were few academic openings anywhere in the United States in those years, and with a combination of his personal persuasiveness and limited money he built a department of the first rank, one that produced four presidents of the American Economic Association, four members of the National Academy of Sciences, and one Nobel laureate other than himself. I was a beneficiary of that outcome, since I was an undergraduate from 1934 through 1938 and a graduate student and faculty member from 1941 to 1943.

He left Iowa State and went to the University of Chicago in the fall of 1943. His reason for leaving Iowa State illustrates another aspect of his personality, namely his absolute support of the principle of academic freedom in our colleges and universities. He left because the president of the college, in response to pressure from a group that purported to speak for farmers, repudiated a publication authored by a member of the department. The pamphlet was the fifth in a series titled *Wartime Farm and Food Policy*. The main objective of the series was to analyze how agriculture and policies related to it might be modified to more effectively support the war effort. The subject of the offending pam-

phlet may seem arcane today—the pamphlet argued, among other things, that oleomargarine was nutritionally equivalent to butter. And since oleomargarine required far fewer resources than butter, the pamphlet suggested that the war effort could be furthered if various taxes and regulations restricting its production and consumption were removed.

The capitulation of the college president to the protests of the dairy interests resulted in the withdrawal of Pamphlet Number 5, *Putting Dairying on a Wartime Footing*. At Schultz's insistence and against considerable opposition, both inside and outside the college, the pamphlet was revised by the original author, Oswald H. Brownlee, and was published by the college in 1944, a year after the original edition. The revision made an even fuller and stronger case for the main conclusions of the original pamphlet, in particular for the nutritional equivalence of margarine and butter but also for the resource savings. While other examples of administrative interference with academic freedom had arisen, the precipitating factor was the margarine issue. Schultz resigned from Iowa State and accepted a position in the Department of Economics at the University of Chicago. Following his resignation, fifteen additional members of the faculty left for other positions, including several who went to the University of Chicago for periods of varying lengths (Beneke, 1998).

He became chairman of the Department of Economics at the University of Chicago in 1946, a position he held until 1961. The department was a premier one when he became chairman, and it was as strong or stronger when he concluded his chairmanship.

A great monument to his administrative strengths was his role in the creation of the relationship between the Catholic University of Chile and the Department of Economics that he chaired. While this relationship later became subject to

a great deal of controversy, I believe that it can be said that no university ever had such a positive impact on a country as the University of Chicago had on Chile. First, Schultz displayed great insight in insisting on certain features of the relationship, which involved the United States International Cooperation Agency, the Catholic University of Chile, and the University of Chicago. He was concerned that the anticipated high level of economics education at Catholic University at the time the contract ended would not be maintained. At the time most of the universities in Latin America depended primarily on part-time faculty members, and few departments of economics had more than one or two full-time faculty members. He convinced the Catholic University that by the close of the contract it should have four full-time faculty members in economics. The Catholic University more than fulfilled this condition by hiring a dozen full-time professors and set a pattern that has been widely adopted throughout Latin America.

A major aspect of the agreement was that students from Chile would be provided the necessary financial support to undertake graduate studies in economics at Chicago. These students on their return helped to transform the teaching of economics in both the Catholic University and its main rival, the University of Chile. Gradually they also moved into important policy positions in the government. Starting with the presidency of Alessandri (1958-64) they have had significant roles in every Chilean government except that of Allende (1970-73). When a military coup overthrew the Allende government in 1973, a group that came to be known as the Chicago Boys was given the daunting task of rebuilding Chile's shattered economy. This they did, combining modern market-oriented policies with concentrated attacks on extreme poverty. Infant mortality, for example, fell by more than 70% in one decade.



When General Pinochet left the presidency, and democratic elections were held, the coalition party that won the election committed itself to follow the economic policies instituted during the Pinochet regime. That coalition party, which later won a second election, kept its campaign pledge. Chile today stands out as one of the few economic success stories in Latin America over the past decade or so. President Eduardo Frei came to the University of Chicago in 1997, and in a public speech thanked the University of Chicago for its major contributions to Chile.

Schultz made major and lasting contributions to the understanding of the economics of agriculture in developed countries in three important books: *Agriculture in an Unstable Economy* (1945), *Production and Welfare of Agriculture* (1949), and *The Economic Organization of Agriculture* (1953) and more than two-score important articles in professional journals. Among his publications related to agriculture, he is probably most remembered and acclaimed for his *Transforming Traditional Agriculture* (1964). During the 1950s developing countries, and most of the economists who advised them, accepted the view that agriculture could contribute little or nothing to economic growth. Economic growth, it was argued, depended on developing industry and transferring resources out of agriculture. The view that the marginal product of labor in agriculture was zero was widely accepted. It was believed that labor could be withdrawn and transferred to cities with no adverse effects on agricultural production, even if no other resources were added. Many also accepted the conclusion that farmers in developing countries did not respond to economic incentives but were guided by tradition or culture. He showed that these views were erroneous. Not only were they erroneous, but their acceptance by policymakers caused great harm to nations as a whole and to farm people in particular.

He provides a guide to what he hoped to accomplish:

The purpose of this study is to show that there is a logical economic basis why traditional agriculture employing only the factors of production at its disposal is incapable of growth except at high cost, and why the rate of return to investment in modern agricultural factors can be high by past growth standards. It really does matter what is done in developing agriculture in countries that want to achieve economic growth as cheaply as possible (Schultz, 1964, p. 5).

If only this lesson had been learned much earlier, the people in most developing countries would be far better off than they now are.

On its publication, *Transforming Traditional Agriculture* encountered opposition from some quarters that lasted for many years. One example was a review in the *Economic Journal*:

No transforming of Chicago: this is an ill-informed and potentially mischievous book on a subject [that] is among the most vital and most urgent in the world. It is ill-informed because Professor Schultz ignores literature essential if a balanced judgment on the problem of the transformation of primitive peasant agriculture production is to be arrived at, and the basis for effective policy is to be found in the largest and most populous parts of the world (Balogh, 1964, p. 996).

As an antidote to the criticism in the quoted review, and others as well, the following statement made at his memorial service by Anne Krueger serves very well:

It is almost impossible, with hindsight, to understand how great Ted's contribution to understanding economic development was. Development was seen to be "different" because "normal economics" didn't apply. It was said to be that cultural obstacles, structural rigidities, dependence on primary commodities and other phenomena made developing economies different. At bottom, people (most of whom were then in agriculture) were thought to be set in their traditional ways, either too content or too ignorant to be willing to change or to respond to incentives.

So, it was thought, there was a free lunch—zero marginal product of labor. All you had to do was to add capital (according to a plan) and you could extract savings and labor from traditional agriculture to industrial-

ize. Savings could come free because there would be no response to producer prices, and labor was free by assumption.

Ted challenged all that frontally. *Transforming Traditional Agriculture* was central because it said peasants were well adapted to their circumstances, knew their environment, and could not do better until given the means (capability) for transformation to more productive agriculture.

In saying this, Ted committed many heresies: he said peasants were rational and would respond to incentives; he said labor was not a free good, using data from Indian regions on declines in farm output after the flu epidemic; he said large farms weren't necessarily more efficient; and much more.

The test of time and experience has confirmed his conclusions. In those areas of the world where governments have provided reasonable incentives to farmers and where new methods of production that were more profitable than those they superseded have been made available, the people are much better fed today than ever before, and the farmers have substantially higher real incomes. Life expectancy has increased in the developing world, due in considerable part to improved nutrition, from thirty or thirty-five years in 1950 to more than sixty years today. In those areas of the world where governments have exploited agriculture and relatively little has been achieved in terms of improved methods of production, the countries have stagnated in terms of food supply and income per capita.

In the document that accompanied the Nobel Prize in 1979 it was *Transforming Traditional Agriculture* and his other work on the same subject that was given as one of the two main reasons he merited the award.

The other major phase of his work given emphasis in the Nobel award was his work on human capital. The view that it was appropriate to invest in people was anathema to many. In his presidential address to the American Economic Association, "Investment in Human Capital," he notes this opposition:

The mere thought of investment in human beings is offensive to some among us. Our values and beliefs inhibit us from looking upon human beings as capital goods, except in slavery, and this we abhor. . . . To treat human beings as wealth that can be augmented by investment runs counter to deeply held values. It seems to reduce man once again to a mere material component, something akin to property. And for man to look upon himself as a capital good, even if it did not impair his freedom, may seem to debase him. . . . (But) by investing in themselves, people can enlarge the range of choice available to them. It is one way free men can enhance their welfare (Schultz, 1961, p.2).

He understood what many others overlooked in their opposition to the analysis of human capital or investment in people. The investment is made in considerable part by those one is dependent upon, namely, one's family, or by oneself. Its outcome, in turn, depends to a very large degree on the effort each individual makes to take advantage of the opportunities it opens up.

His interest in human capital was, to some degree, due to his efforts to understand the sources of economic growth. He studied the efforts to explain economic growth by analyzing changes in the factors of production: land, labor, and capital. Each of numerous statistical analyses found that about half of the growth in output was unexplained. In the analyses, the unexplained part was attributed to productivity change. Schultz found this attribution unacceptable and argued instead that the unexplained residual was not a measure of productivity change but instead was, at least in some degree, a measure of our ignorance. He argued that one reason the residual was so large was that an important input, namely human capital, was ignored when labor was included in the analysis simply as the number of workers. It was his belief that once the value of the human capital was included in the analysis the size of the residual would be reduced.

It was surely no accident that his Nobel lecture was "The

Economics of Being Poor.” I do not know if the poverty that he suffered in his youth influenced him in his interest in poor people. In the decades that I had close contact with him, he never mentioned the difficulties of life that prevented him from going to high school. There was never any doubt about his interest in and concern for the poor farmers of the world. He took advantage of opportunities to visit rural areas in Latin America and Asia. He was critical of our agricultural policies that adversely affected farmers in developing countries. For example, he called attention to the negative impact of our disposal of large quantities of our surplus grain on the prices received by farmers in the recipient countries. The topic of his Nobel lecture reflected his concern for the hundreds of millions of farm families in developing countries. Given the scope of his scholarly work, he could have used the lecture to express his views on a considerable number of topics, but he chose to emphasize his concern for the poor.

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