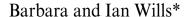
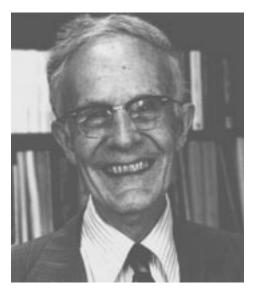
Remembering T.W. Schultz, breaker of new ground





Nobel Laureate T.W. Schultz, 1902–98, began his 1979 Nobel lecture:

Most of the people in the world are poor, so if we knew the economics of being poor, we would know much of the economics that really matters. Most of the world's poor people earn their living from agriculture, so if we knew the economics of agriculture, we would know much of the economics of being poor.

People who are rich find it hard to understand the behavior of poor people. Economists are no exception . . .

Schultz opted to study economics after growing up amid the severe product price falls and foreclosures of post-WWI South Dakota. While his subsequent research and writings influenced agricultural and development

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policies world-wide, and diverse fields in mainstream economics, he never strayed from his initial interest in the behaviour and welfare of poor people. This interest was in no way condescending: on the contrary, as exemplified in his, at the time, iconoclastic book *Transforming Traditional Agriculture*, he saw poor men and women as perfectly capable of making sound economic judgments about such matters as adoption of new technology, family size and the education of children, given their technological, economic and social circumstances. Therefore, for Schultz, the job of the economist was to help to change those circumstances, such as the lack of new technologies and education, standing in the way of poor families' self-betterment.

From the beginning, Schultz perceived that the economic fortunes of farm people were tied to the economic performance of, and the industry and trade policies adopted in, the wider economy. Throughout his academic career as a teacher and researcher, at Iowa State College and then at the University of Chicago, he promoted the involvement of general economists in agricultural economics and vice versa. He continually criticised politically determined price policies which favour urban consumers and industry at the expense of (especially poor) farm people.

Schultz pursued his research goals via advice to organisations and committees in the United States and abroad, a voluminous correspondence across continents and disciplines and, in particular, via the involvement and encouragement of University of Chicago graduate students and visiting scholars from across the world. To be seriously involved with T.W. Schultz was to be engaged in the search for answers to the 'puzzles' that he and his collaborators identified. New or prospective Chicago graduate students, and old acquaintances returning to Hyde Park, were expected to add to continuing discussions on relevant topics such as the value of poor women's time or the connections between labour markets and rural—urban income differentials. Attempts at discussion of research topics perceived to be outside the Schultz agenda rarely succeeded. His exchanges with and encouragement of scholars pursuing his research agenda continued into his nineties. The ultimate, appropriately agricultural, accolade was to be 'breaking new ground'.

Among general economists, Schultz is probably best known for his development and propagation of the concept of human capital — investments in people and knowledge — and its contribution to economic growth. This interest was a natural consequence of his strong humanistic orientation — what his Chicago colleague Mary Jean Bowman has termed 'an earthy respect for the economic reasonableness of most men and women'. More directly,

¹ Mary Jean Bowman, 1980, 'On Theodore W. Schultz's contributions to economics', *Scandinavian Journal of Economics*, vol. 82, p. 95.

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investments in people/labour quality provided one answer to the 'puzzle' of 'technical change' identified in the aggregate production function estimates of the 1950s — the large proportion of increases in national output not explained by increases in conventionally measured labour and capital inputs. Schultz's early 1960s' writings on investment in human capital and the economic value of education, combined with a 1962 Chicago symposium on investment in people, launched the modern study of human capital. Recognising that the greater part of human capital investment is commonly undertaken by the individuals and families concerned, when they sacrifice alternative earnings, Schultz emphasised the micro nature of many, and in poor societies most, decisions to invest in people. This in turn influenced his collaborators and students, most prominently Gary Becker, in their conceptual and empirical research on such topics as rates of return to schooling and on-the-job learning, the productivity impacts of quality of schooling and increases in life expectancy, the value of human time and the economics of the family.

For Schultz, the payoff to increasing population quality took the form of enhanced abilities to recognise and to respond to the inevitable inequalities in rates of return to investments which arise in a dynamic economy. As stated in his Nobel lecture: 'If we were unable to observe these inequalities, we would have to invent them because *they are the mainspring of economic growth*. They are the mainspring because they are the compelling economic signals of growth.'

What is the source of the necessary disequilibria in investment payoffs? Here Schultz focused on the gap between traditional methods of production and new production techniques resulting from scientific research. Beginning with Zvi Griliches' 1950s' work on the rates of return obtained from the adoption of hybrid maize, Schultz was involved in, or influenced, numerous studies of the rates of return to agricultural research expenditures. In *Transforming Traditional Agriculture* he pointed out the contrast between high rates of return to much biological research and the limited ability of for-profit firms to capture those returns. This pointed the way to the subsequent path-breaking work of Hayami, Ruttan and Binswanger on induced innovation in public agricultural research and its contribution to agricultural development.

Transforming Traditional Agriculture, published in 1964, highlighted the complementarity between the scientific research and input distribution systems which deliver new techniques and disequilibrium rates of return, and the schooling and other investments necessary for poor people to identify and learn to use those techniques. By emphasising the low payoffs to development policies which neglected either new technologies or investments in people, Schultz provided both a telling critique of most of the agricultural

development policies of the 1950s, and a template for the policies adopted by international development organisations in the succeeding decades.

To those of us from much later generations, T.W. Schultz was a courtly gentleman, with a turn of phrase faintly reminiscent of Mark Twain (still going strong when Schultz was born). He made special efforts to get to know students from other cultures around the world; every year he and his wife welcomed the students studying development to afternoon tea at the Schultz home in Hyde Park. His own time was never too valuable to discuss research with students, colleagues and visitors; such conversations often included an injunction to consider undertaking a particular research project, in Iowa or Indonesia or wherever, designed to put empirical flesh on some portion of the Schultz research agenda.

Remembering, what sticks most is Schultz's inveterate optimism about the capabilities and motivations of ordinary people — poor men and women, farmers and graduate students arriving at and leaving the University of Chicago.