

IN MEMORIAM: RICHARD RUGGLES (1916–2001)

*Memoir by James Tobin based on his remarks at memorial service,  
March 9, 2001*

My earliest memory of Richard Ruggles is stopping at his college room at Harvard, where we were fellow undergraduate students of economics in the class of 1939. It was hard to get in the door, because the floor inside was covered with spreadsheets. Ruggles had his hands on a large data set of hospital births in Boston. He was collaborating with a psychology professor in analyzing it. I was sure impressed, but for Ruggles it was a matter of course. Throughout his life he loved to mobilize facts for research and to figure out how best to find and display their messages. Maybe because he had grown up in an academic family in Cambridge, he already knew as a freshman what a university was about.

Ruggles and I were good though not intimate friends throughout college and graduate school at Harvard. Then after the war we both made our careers at Yale. Somehow he managed to get his economics PhD in record time in 1942, and he had an appointment at Yale in 1947, three years before I was in the job market. He touted me to the Yale department, I assume, and he and Nancy sang the praises of Yale and New Haven to Betty and me. At Yale we were close personal and professional friends for half a century. Although we worked in different areas with different methodologies, we saw eye to eye regarding the methods and objectives of our discipline. Since the Ruggleses had the good sense to live across the street from the economics department, they were usually easy to find. Their home contained their offices, classrooms, and stat labs.

Eventually Yale added a third member of Harvard '39 to its economics department, William Parker, a wise and humane economic historian. It happened that at Harvard and during the war he had been a close friend of both Ruggles and me, a bridge between us. Bill Parker's approach to economics was uniquely his own, reflected in his beautifully written writings and in generations of economic historians he inspired at Yale. His death in May 2000 was a severe blow.

During the war Ruggles worked in London in the United States Office of Strategic Services, precursor of the CIA. OSS, filled with bright economists, mathematicians, statisticians, and scientists, was trying to bring rationality to the conduct of war, in particular to Air Force attacks on German war production. Traditional intelligence methods involved research on German industry, from published sources and from spies and other informants. After the war, the Strategic Bombing Survey, led by John Kenneth Galbraith, found that these estimates were very inaccurate. A spectacularly costly error was the bombing of a ball bearing factory in eastern Germany in 1945, under the illusion that without its output the German war machine would bog down. Because of the distance from England, many planes were lost and anyway there were plenty of other sources of ball bearings.

Richard Ruggles devised a much more accurate method. His team (which included two college friends whom he rescued from less interesting and productive chores as Army privates, Bill Parker and Fred Peel, who is here today) photographed or transcribed the serial numbers on German tanks, trucks, planes, and other equipment abandoned in France. From these data Ruggles and company inferred where these articles and their parts were produced and when, and what the volumes of production were. Ruggles was sure there must be systems to these numbers, needed by the Germans themselves, and he broke their codes. He also figured out as a matter of statistical theory, how to infer from a sample of serial numbers and the observed maximum (decoded) number, the best estimate of the volume of production. He published an article on this episode in the *Journal of the American Statistical Association* (Ruggles and Brodie, 1947). After V-E Day the focus of serial number magic shifted to Japan.

At Ruggles's retirement festivities in 1984, I read the following poem:

THE LEGEND OF DICK RUGGLES THE ECONOMETRIC  
DETECTIVE AND THE ENEMY SERIAL NUMBERS

Behind the lines the Germans toil.  
Their guns, their tanks, their planes pour out.  
Say, aren't they running short of oil?  
Ball bearings too, without a doubt!  
"For want of nail a kingdom lost"—  
But where to strike the knockout blow  
To nail the nail, and at what cost?  
Economists were s'posed to know.  
Behind their desks they thought and guessed  
While bombers dropped those futile loads  
Ken Galbraith's surveys late confessed.  
BUT Ruggles and his cam'ra crews—  
They jeeped the front on war-scarred roads,  
With captured en'my arms obsessed.  
Their Kodaks gathered all the clues.  
He cracked the Nazis' serial codes.  
No less than Doctor Hjalmar Schacht,  
He knew where they produced and what.  
His tale of this amazing deed  
In JASA's pages you can read.  
"A picture's worth a thousand words."  
An armchair theory's for the birds,  
A thousand data, common sense,  
The very best intelligence.  
That lesson, kids, is very clear.  
It's guided Dick his whole career—  
And Nancy too. A pow'rful pair,  
Returns increasing by the square.  
May they go on year after year!

JAMES TOBIN  
*Election Day 1984*

Richard Ruggles and Nancy Dunlap were married in 1946. They were probably the best husband–wife team in the history of economics. They were certainly the most completely integrated. Talk about the synergy of mergers! They did everything together. Whether an article had his name or hers or both, it's a good bet that it contained inputs from the two of them. And not just articles, all their activities, in professional associations, *Econometric and Income and Wealth*, in assignments in Washington, United Nations, Europe, and Latin America. Nancy was extremely well-organized and disciplined; she kept the team on message and on schedule.

Nancy was a first-rate economist, worthy of a professional position anywhere, including Yale. For this, she was 20–25 years too soon. The prevailing view at Yale was that appointments of spouses were immoral nepotism, especially within the same department. This made it very difficult for the Ruggles team to function efficiently. Nancy worked for many years at the UN in New York. This was a bad and unfair policy and put some unfortunate distance between the Ruggles and the Yale economics department and administration. In any case, the Ruggleses were unsympathetic with the abstract and conservative trends of the field of economics, even at Yale, since 1970.

Nancy lost her life in a tragic accident in 1987. Richard was devastated, but he sought valiantly to keep their professional work going. In these last five years he assembled, edited, and published at Edward Elgar their lifetime essays, individual and joint, in three volumes. His main purpose, I am sure, was to put on record before the world Nancy's substantial scholarly contributions. He was very happy to live to see these volumes in print.

These essays cover the spectrum of interests of the Ruggles team: empirical research, especially on large databases; measurement of income and wealth; determinants of prices and price movements; presentation and dissemination of information; demography; economic development; and public finance.

In personal as well as professional life, Richard was always looking for new and better ways to do things. Decades before card catalogues became computerized, he tried to persuade librarians to put them on microfilm. The house he and Nancy designed and essentially built at 100 Prospect Street, mostly with the constant help of Bill Hill, a carpenter of kindred spirit, is full of advanced conveniences for home and office. Their previous house, in the same block, they had completely rebuilt inside. Richard was a shrewd entrepreneur and investor. In the early postwar years he and Nancy were busy enough in Washington to decide to acquire an apartment there. They bought a two-flat building in Foggy Bottom. It turned out to be in the crucial middle of a block a developer was buying up to replace with a big apartment complex. Ruggles's bargaining power was enviable. Richard was in the top brackets of the income and wealth distributions he studied, and he liked to pooh-pooh the idea that his marginal utility of consumption was heading toward zero. But in social and economic policy he was strong for redistributions in favor of the poor at home and abroad. In personal relations with family, friends, colleagues, students, and others he was generous, gentle, considerate. In particularly sensitive period of strains within the economics department, he as chairman restored peace and tranquility.

The three children of Richard and Nancy, it is interesting to see, reflect their parents' interests and values. Pat is an economist working for Democrats in Congress. Jo carries on her father's interests in disseminating quantitative information. Steve is a historical demographer working on the series of United States decennial Censuses.

All friends of Richard Ruggles are immensely grateful to Caridad. Their marriage in 1989 gave Richard a happy and comfortable life these last 12 years.

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#### REFERENCE

Ruggles, R. and H. Brodie, An Empirical Approach to Economic Intelligence in World War II, *Journal of the American Statistical Association*, 42, March 1947.