

Dr Patricia Hillebrandt, 17 Nov 1929 – 21 Jul 2022

We were deeply saddened to learn that Dr Patricia Hillebrandt, the doyenne of construction economics died on 21 July at the age of 92.

Pat spent the majority of her professional life working with, teaching and researching the industry, its firms and its institutions. Her *Economic Theory and the Construction Industry* (1974) is a seminal piece of work. While not the first economist to study or write about construction, Pat led by using economic concepts and analysis to develop valuable insight and understanding of what was happening in the business of construction.

Patricia Marguerite Hillebrandt was born in 1929, the daughter of Kenneth Henry Hillebrandt, an income tax inspector, and Marguerite Dorothy, née Henderson. She was brought up and educated in North London, although much of her education was disrupted by the Second World War. Despite this, she was Head Girl at South Hampstead School for Girls shortly after the War. After school she was offered places at UCL and LSE but, instead, joined the Foreign Office. She did, however, also enrol at LSE as an evening student for a BSc (Econ). After a year she managed to get extended leave to do a degree in economics and chose to go to UCL. On graduation, she joined Plant Protection Ltd as an assistant economist and while there started work on her PhD – on the economics of weedkillers – at LSE.

After five years at Plant Protection Ltd, in 1957 she applied to a job advert in *The Times* for an economist at Richard Costain Ltd, a large contracting company. She was appointed and thus began a long and distinguished career in construction. She was awarded her PhD shortly after joining Costain and always said that the title of Doctor in construction was a positive for a woman. Being female and having a doctorate were clearly two important aspects of her career. She operated with determination and independence in the construction industry. Her gender was a bit of a shock to many people in construction and she was often able to take advantage of their surprise. The doctorate, being gender neutral, could also be useful – she often explained that it allowed her to be treated as an 'honorary man' in situations where educated, professional women were not the norm.

Pat's role at Costain was to look at prospects for the firm at home and overseas and to make recommendations where the firm should establish regional offices in the UK. This included forecasts of construction output and effects of the economy on the construction sector. It was also an opportunity to network in the UK construction community - in government, industry and the research community. The job was her introduction to construction and contracting and she developed a strong network amongst policy-makers and business economists.

In 1962 she joined the National Economic Development Office (NEDO). This was the secretariat of the National Economic Development Council that had been established by the Chancellor of the Exchequer the year before. Its purpose was to bring government, industry and the trades unions together to develop an industrial strategy and plan for the British economy. She counted herself as lucky to have had the job at Costain, which made her probably the only economist who had experience of working in the construction industry

and almost the only one who had studied the industry at all. She was involved in writing papers and reports setting out the industry's problems and discussing possible solutions. She left NEDO in 1967 at the end of a five-year contract. Pat reckoned that her time at NEDO was the most exciting and stimulating job she had, interestingly not because their plans worked out but because the process itself was so valuable and interesting

She took up a senior lectureship at UCL where she researched and taught building economics and management at the Bartlett School of Architecture and Planning from 1967 to 1980, and was a co-founder of the Masters course in Building Economics and Management, with Professor John Andrews. After UCL, she continued her career with the Davis Langdon Consultancy Group, then as a Senior Research Fellow at Reading University and conference editor for the International Economics Association. With Davis Langdon she worked on studies of building materials, construction and building design in France and construction price books in Europe and the Asia Pacific. In 1984, she wrote *Analysis of the British Construction Industry*, an in-depth study of the UK construction industry, just as the UK government was implementing radical changes that enabled privatization, outsourcing, deregulation and the like.

She consulted independently for NEDO and, overseas, in several countries including Egypt, Sri Lanka, Russia, Latvia and Tanzania. Her links with the first three were substantial. She worked on a major study of the Egyptian Construction Contracting Industry in 1980 and 1981, sponsored by the World Bank. She first visited Sri Lanka in 1976 on a statistical review, sponsored by UK overseas aid, and later in the 1980s with the International Labour Office and the Sri Lankan Institute for Construction Training and Development. Pat's first association with Russia was in 1989, with the International Economic Association, around the time that Mikhail Gorbachev was coming to power. She made links with the Construction section of the Institute of World Economy and International Relations in Moscow (IMEMO). This developed into co-operation between IMEMO and the University of Reading and several exchanges ensued. In 1992, Pat was asked by the World Bank to undertake a study of Housing and Construction in Russia and later, with others, four reports on *Construction in the Russian Federation* were produced.

At Reading University, she worked on several research projects and with Jacquie Cannon on two important books: *The Management of Construction Firms: Aspects of Theory* (1989) and *The Modern Construction Firm* (1990). In these two books the key thrust of Pat's contribution was to show how UK main contractors had developed a business model that allowed them to generate positive net cash flow, make good return on capital despite low profit margins, and use their limited capital mainly as a (possibly insufficient) reserve against risk of losses on major projects. Five years later, there was another book with Jacquie and Peter Lansley, *The Construction Company in and out of Recession* (1995). Subsequently, her work at Reading with Will Hughes focused on procurement, contracting and financial issues, resulting in two further books. Towards the end of that work, Pat was awarded an honorary doctorate in 2006 by the University in recognition of her outstanding contribution to the understanding of how firms in the construction industry work. In her own words, "the standard economics of the firm doesn't fit the construction industry, which

has low fixed assets and operates in a different place for each project and so companies almost set up a new firm with every contract”.

Pat worked for almost 50 years in and with the construction industry. She worked, taught, researched, wrote and advised throughout that time and leaves generations of students, colleagues and others better equipped to work and live in an industry she loved. Unlike many construction researchers her interests were in construction industries and firms rather than construction projects. And, in her consultancy work, she was interested in the role of construction in the economy. The journal, *Construction Management and Economics* published a *Festschrift* in 1994, edited by John Raftery, with contributions from a range of colleagues and former students.

Pat had a life before, after and outside the industry. In 1957 she married Dr Hans Hopf, an international agricultural expert, and their children, John, born in 1959, and Robert, 1961, followed. In 1966 Pat and Hans bought a two-up, two-down cottage in the Cotswolds. Hans, John, Robert and the cottage were constants in her life. Hans retired in 1979 and the cottage, extended and modernised, became their principal home. But Hans died suddenly in 1988 and Pat had to rethink her life. She bought a flat in Acton, close to her sons but still thought of the cottage as home.

After her retirement from construction, she reverted to her married name of Hopf but continued to be active. She enjoyed working in her garden, latterly with the help of her son, Robert. She volunteered with the National Trust, guiding at Newark Park, a historic hunting lodge; she also researched the history of the building, and the result was published as a National Trust pamphlet. After spending many years doing careful research in archival sources and interviewing everyone in the locality, she wrote *The Turbulent History of a Cotswold Valley*, a detailed economic and social history of the valley she loved, published in 2006. She joined the committee of the Stroud Local History Society. She attended History of Art classes and travelled and socialised locally and in London. She was a charming and attentive host for her family and her friends.

Pat was a delightful person generous with her time and hospitality and will be missed by many, locally in Gloucestershire, nationally and throughout the world. She leaves her sons, their spouses and their children, grandchildren and great grandchildren.