

Myron Tribus, 30 October 1921 – 31 August 2016

An American engineer and long-time ASA member who guided the transformation of management practices in Australia in the 1980s

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Myron Tribus — an American engineer, bureaucrat, inventor, management expert, scholar and educator and life-long learner, and a long-time member of the American Statistical Association — was a key figure in the transformation of Australian industry in the 1980s and 1990s, whose work lives on most notably through Business Excellence awards around the world, and through his profound, practical influence on people from all walks of life.

In the early 1980s, Australian Industry entered a transformational phase that resulted in a major change to the way in which organisations were led and managed. The Quality Management / Total Quality Management (TQM) movement that had started to roll across American business after the 1980 NBC documentary *If Japan Can ... Why Can't We?* brought W Edwards Deming and his work into public view the 1980 NBC documentary *If Japan Can ... Why Can't We?* had yet to reach Australia. In the manufacturing sector, tariff support for local industry had been in place for many years. Then the Australian government announced a five-year 'steel industry plan' that entailed a progressive reduction in tariffs as a means of forcing the industry to improve its competitiveness in world markets.

Within the steel industry, John Lysaght Australia had dominated the manufacture of metal coated and pre-painted sheet steel for many years, and loss of market share in an emerging environment of global competition dawned as a very real prospect. Lysaghts (later acquired by BHP Steel and more recently established as Bluescope Steel) set about benchmarking practices and performance of potential competitors around the globe. This work showed that by any measure — productivity, quality, safety, cost — Australian industry would not be able to compete in an open market. Further, since local sheet steel manufacturing facilities were state-of-the-art and technologically advanced, the cause of inferior levels of performance lay elsewhere, and attention turned to the company's out-dated management concepts and techniques.

Teams of senior managers were sent to the USA, Japan, Germany, Korea and South Africa to learn more about their management practices. The findings led to a major initiative to reform Australian management practices, particularly at the level of executive leadership. In particular, recognised international experts were brought to Australia. One of these was Myron Tribus.

Myron's first visit in the mid-1980s was profoundly influential. In meetings with the most senior officers of the company, his direct questioning approach (*e.g.* asking the Board Chair and

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the CEO “What are you doing, personally, to drive change through the organisation?”) led to profound rethinking by the leadership about their roles and how they discharged them, and laid the foundation for moving to a culture of continuous improvement for which he also provided practical tools, knowledge and knowhow. (At the shopfloor level, he would ask a foreman “What is your second-highest improvement priority?”)

The company also arranged for him to deliver a series of “Tribus Lectures” for managers and employees of BHP Steel’s customers. These were not actually lectures. When asked what he would charge, he responded “If I’m simply to give a lecture, then I should be paid as an entertainer. However, if I can run them as question-and-answer sessions, then there is no fee”. So, the condition of entry was a question about management written on a file card. Myron would then study the cards in advance of the lecture and respond to the principal issues.

In fact, he had been employing this approach for many years, and so had acquired a collection of some 60,000 questions. In analysing these, he found that they could be classified under six broad headings relating to Leadership, Customers, Suppliers, People, Processes and Planning. It was this remarkable insight that provided the basis for the development in the late 1980s of the Baldrige Awards in the USA and, in parallel, the Australian Business Excellence framework, with their Principles focusing on just these areas.

Myron Tribus was born in San Francisco on 30 October 1921. His father, Edward Lefkowitz, from an Austrian or German Jewish immigrant family, had enlisted in the army and died when Myron was just a baby; his mother Marie Kramer, from a family of Hungarian Jewish immigrants, was a short-hand typist who subsequently married Julius Tribus, but had no other children.

An outstanding student, Myron completed secondary school 2 years early and enrolled at the University of California in Berkeley at the age of 16, graduating at the age of 21 with a BA in Chemistry (and a black-belt in Judo). Following this, he was a Captain in the US Air Force during World War II, working as a design-development officer at Wright Patterson Air Base in Dayton, Ohio (and being awarded the Thurman H Bane, for an outstanding achievement in aeronautical development). During the war, he had also met and married his wife Sue, who was studying at a university nearby. He completed a PhD in Engineering at UCLA in 1949, and took a job at General Electric designing gas turbines. A few years later, he returned to UCLA as a faculty member, teaching thermodynamics, fluid mechanics, and heat transfer. During this period, he hosted *Threshold*, a series of hour-long television programs dealing with science and its impact on society that aired in 1958 on CBS.

His remarkably varied career included: Dean of Dartmouth College's [Thayer School of Engineering](#) by the age of 40 (where he was responsible for the introduction of a new curriculum based on engineering design and entrepreneurship; a named chair founded in 1997,

the Myron Tribus Professor of Engineering Innovation); Assistant Secretary of Commerce for Science and Technology in the Nixon administration (during which he funded the first weather modification experiments); Senior V.P. for Research & Engineering in [Xerox](#) Corporation; Director, Center for Advanced Engineering Study, MIT (during which period the Center published W Edwards Deming's path-breaking book, *Out of the Crisis*) and Co-founder, Exergy Inc. (whose business is the construction of geothermal power plants).

Myron knew Deming well, admired his philosophy, and in typical engineering fashion, found practical language and actions (knowhow, as Myron would probably have expressed it) to communicate Deming's Quality Management theory, for example, in his widely-read article *The Germ Theory of Management*. A man of great scholarship, he traced the origins of Quality Management, discovering and interviewing Homer Sarasohn, the central figure in launching Japanese industry on the path of good management immediately post-war; and also finding the earlier figure of Tomáš Baťa, who established the T & A Baťa Shoe Company at the end of the 19th Century and ran it on early Quality Management principles, and co-authoring a biography of Baťa.

Later in life, he worked extensively with schools, convinced that Quality Management had much to offer, collaborating in particular with David Langford. He also developed a great interest in the work of the Israeli psychiatrist Reuven Feuerstein, travelling to Israel in the early 1990s to study Feuerstein's revolutionary methods for helping children – and, indeed, adults, improve how they learn. His *Letters from Jerusalem*, emailed to friends around the world, provide fascinating insight into Feuerstein's work.

Stories about Myron are legion.

One of us was preparing to assist an American professional society to adopt Quality Management and asked Myron to collaborate. He agreed to do so but then declined to be the leader, saying: "No, no, you're ideal! Firstly, you've done it yourself. Secondly, you come from overseas. And thirdly, you speak with a slight foreign accent."

Each year he was Dean of Engineering at Dartmouth College, Myron arranged a project for the incoming class of students to work on collectively, during their 4 years of graduate study. On one such occasion, he addressed the class along the following lines. "Welcome to Engineering, ladies and gentlemen. I have to congratulate you for selecting this noblest of professions. Every aspect of your daily existence is touched by engineering genius – the auditorium you're seated in, how you travelled here today, what you ate for breakfast, I think this deserves a toast. In front of each of you there's a glass containing water. Ideally, it would be champagne, but some of you are below the legal age and also, consumption of alcohol is illegal on campus. So, please raise your glasses and join me in a toast to your mutual success." Everyone started drinking, and many spat out the water immediately. "Exactly", said Myron. "That's the current

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drinking water for [a nearby town]. Your class project, over the next four years, is to provide the town with potable drinking water.” Subsequent, Myron told us that four start-up companies were spawned by this project alone. And he posed such a challenge each year.

Numerous awards included honorary doctorates from Rockford College and Oakland University, election to the US National Academy of Engineering , the Thurman Bane award, the Wright Brothers Medal, the Alfred Noble Prize for his work developing a thermal ice protection system for aircraft, and the Deming Lecturer Award.

Myron passed away on 31 August 2016, at the age of 94. He is survived by his two daughters Kamala Tribus and Lou Andreas Tribus and five grandchildren. He was predeceased by his wife of 66 years, Sue, and by one grandson.

