



Rage, rage against the dying of the light: Lyndall Urwick's scientific management

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Abstract

Purpose – The purpose of this paper is to analyse and critique Lyndall Urwick's long-term advocacy of scientific management and its influence upon management thought.

Design/methodology/approach – An analysis and critique of Urwick's published writings across 60 years, on the subject of scientific management and organizations, particularly linking his work and arguments to the influence of Frederick Taylor, also positioning him relative to the thinking of leading thinkers such as Henri Fayol.

Findings – This paper argues that the key to understanding his legacy lies in his unique and changing definition of "scientific management". This was broader than the definition applied by most of his contemporaries and inspired his integrationist project of assimilating Taylorist scientific management into a raft of developing schools of management thought.

Research limitations/implications – Urwick's legacy included a lifetime campaign to reconcile scientific management with succeeding schools of thought, today's management literature stereotyping of some of his contemporary thinkers, and a contribution to management literature's predilection for the labelling of theories and principles.

Practical implications – The paper argues for returning to original sources to accurately understand the intentions and arguments of early founders of many aspects of today's management practice. It also alerts us to the proclivity of management theory and practice to opt for convenient labels that may represent a variety of historical and contemporary meanings.

Originality/value – The paper offers a critical reflection and assessment of the longest standing advocate of scientific management in the management literature.

Keywords Scientific management, Management theory

Paper type Research paper

Do not go gentle into that good night,
Old age should burn and rage at the close of day;
Rage, rage against the dying of the light (Thomas, 1957 [1951]).

Introductory management texts sometimes offer a brief history of the management discipline, often identifying the emergence of Frederick Taylor's scientific management as

The authors gratefully acknowledge advice and reflections on this project from Professor Trevor Boyns, Cardiff University Business School as well as comments from participants in presentation at the 2008 American Accounting Association annual meeting, Anaheim, California, and at the University of St Andrews, Scotland



a key developmental event. Typically, developments in European organizational theory and practice are acknowledged in terms of writers such as Henri Fayol and Max Weber joining Frederick Taylor in laying the foundations for the classical management school of thought. Invariably, in the aftermath of the Hawthorne experiments, this classical approach is portrayed as being superseded in the 1920s, 1930s and 1940s by a human relations or behavioural approach that focussed on issues such as group and social functioning in organizations, human motivation, and participative decision making. These latter developments are almost exclusively represented as a reaction to and the antithesis of the classical school (Dessler, 1977; Hodgkinson, 1978; Appleby, 1981; Griffin, 1984; Ivancevich and Matteson, 1993; Stoner *et al.*, 1994; Davidson and Griffin, 2002; Robbins *et al.*, 2003). The problem with such textbook treatment of the history of the management discipline is that it usually oversimplifies and obscures what these early theorists actually wrote and advocated. For example, through a detailed analysis of Henri Fayol's writings, Parker and Ritson (2005b) argued that labelling him as a classical theorist fundamentally misrepresents his work. In their view, far from being a narrowly focussed classic writer in Taylorist vein, Fayol was a precursor to the subsequent emergence of the human relations movement, as well as systems and contingency theory, elements of management by objectives, total quality management and knowledge management.

On those occasions when Lyndall Urwick is referenced in any account of the development of management thought, he is usually identified as a classical management thinker who popularised the works of Henri Fayol in the English-speaking world and integrated Fayol's administrative approach with Taylor's scientific management (George, 1972; Robbins *et al.*, 2003). However, Urwick was a prolific management writer whose publishing career spanned six decades, and whose contribution to the practice of management, both professionally and in the academies, was far-reaching and profound. Indeed, when one turns Urwick's original writings, one finds that not only was he attempting to integrate Taylor's (1903 [1916]) scientific management with Fayol's (1937, 1949) administrative management, but also with elements of the newly emerging human relations movement.

This paper sets out to revisit the identity and philosophy of Lyndall Urwick as a historic management thinker and prolific management author. Accordingly, it sets out to understand his intellectual loyalty to Frederick Taylor, his shifting conception of scientific management, and his contribution to management thought. In doing so, this paper argues that far from being a narrowly focussed classical management writer, Urwick actually embarked upon an integrative approach to management practice and theory that to some extent anticipated the subsequent emergence of systems and contingency theory. Though a staunch and unapologetic advocate of Frederick Taylor's work, Urwick employed a broad definition of scientific management that allowed him to assimilate and absorb an eclectic and wide range of diverse management approaches in his idiosyncratic vision for scientific management. In addition, this paper contends that by identifying his integrative approach with scientific management, Urwick unwittingly became the originator and victim of stereotypes that have not only obscured the significance of his own work, but also the work of several of the theorists he cited and so greatly admired.

The paper begins with a brief sketch of Urwick's background and career, his view of the science and art of management, and his intellectual debt to Frederick Taylor.

His embracing of other management thinkers' work into his world of scientific management and his response to his critics is then considered. The paper finally addresses Urwick's positioning and contribution to the history of management thought.

A brief portrait

Lyndall Urwick had a remarkable career. Notable for its duration, its international reach, its contribution to both thought and practice, and the stream of management literature it produced, it spanned 60 years. Born an only child in England in 1891[1], Lyndall Fownes Urwick was educated in Malvern, Boxgrove School Guildford, Repton and then New College Oxford, graduating with a degree in modern history. After initial employment in his father's family glove-making firm, he served as a second lieutenant and then major in First World War, earning the military cross and subsequently an order of the British Empire. He read Frederick Taylor's (1903 [1947]) *Shop Management* in the trenches and served in several administrative staff officer positions in the military. After a brief period of post-war service as partner, he left his former firm, having been unable to convince his family partners to try his newfound approaches to management. In 1922, he joined the organizing office[2] of Rowntree & Co., chocolate and confectionery manufacturers, there being influenced by two management thinkers, Seebohm Rowntree and Oliver Sheldon (serving a period as Sheldon's assistant). While there, he participated and lectured in the Oxford Management Conferences, assisted Rowntree in establishing informal national management research groups for exchanging ideas on new management developments, and embarked on professional writing in management, by 1927 attracting readership in the USA and the UK (Bedeian, 1972; Jeremy and Shaw, 1986; Matthews and Boyns, 2001).

In 1928, he became director of the world's first international management body, the International Management Institute in Geneva (Wren, 2003), serving until early 1934 when the institute closed due to withdrawal of funding by the institute's sponsor. The institute's main purpose was the promotion of scientific management, and his work there connected Urwick to a wide range of scientific management and other management thinkers throughout Europe and the USA, not least through his role as honorary secretary of the International Council for Scientific Management. Returning to London, along with Scottish engineer and consultant J.L. Orr, he established the British Management-Consulting Firm Urwick Orr & Partners. Apart from his absence from the firm due to his government service in Second World War, Urwick served as founder, managing partner (1945-1951) and chair (1934-1961), and subsequently president, even after his move to Australia in the early 1960s. His Second World War service included consultant to the British Government Treasury, Deputy Director of the Petroleum Warfare Department, and member of the Mitcheson Committee of the Ministry of Pensions, completing his military involvement at the rank of Lieutenant Colonel. In his management consulting career, Urwick not only built his firm to national and international prominence, but was also the first president of an informal international association of management consultants, and leader of the British Management Consultants' Association (Urwick, 1968; Bedeian, 1972; Jeremy and Shaw, 1986; Matthews and Boyns, 2001; Thomson, 2001).

In addition to his voluminous writing and publication in the management field, Urwick was prominent in promoting management education and the management profession. He was founding member and then Chairman (1947-1952) of the British

Institute of Management and of its Education Committee. Chair of the Education Committee of the Institute of Industrial Administration (Urwick, 1944), and Chair of the Ministry of Education Committee on Education for Management (1945-1946) (a committee that proposed a national syllabus for teaching management in the UK), and Chair of the Anglo-American Productivity team on Education for Management in the USA (1951). In addition, he was first President of the Federation of European Management Consultants (1960). He was also a driving force behind the 1948 launch of the Administrative Staff College at Henley-on-Thames (now Henley Business School, University of Reading, UK). His lecture tours and management advisory work, particularly from the 1950s, took him to many countries. He held visiting professorships in business in universities in the USA, Canada and Australia, and on his "retirement" to Australia, he continued his writing, publishing and speaking career. He advised and made presentations to the American Management Association, the Indian Planning Commission for an Institute of Management, and the Australian Institute of Management (Urwick, 1957b, 1960, 1968; Bedeian, 1972; Jeremy and Shaw, 1986; Trinkaus, 1992; Matthews and Boyns, 2001).

As will already be evident, Urwick was internationally prominent. His awards and accolades were many, mostly achieved during the zenith of his career in the 1950s and 1960s. They included the International Committee of Scientific Management gold medal, the Wallace Clark International Management medal, the American Management Association's and American Society of Engineers' Henry Laurence Gantt memorial gold medal, the Taylor key, the British Institute of Management's Bowie medal, and Knight first class of the Order of St Olaf (Norway). He was made fellow or honorary member of numerous organizations and associations (Urwick, 1968; Bedeian, 1972; Jeremy and Shaw, 1986; Matthews and Boyns, 2001).

Urwick's last published work appeared in 1980, two years before his death (in 1983) in Sydney, Australia, at the age of 92. He left a legacy of more than 14 books[3] that he authored, co-authored or edited, and hundreds of published journal articles, conference papers, lectures, seminar presentations and addresses covering a plethora of management subjects including scientific management, management history, leadership, control, business/government management and relations, human resource management, office organization, management semantics, organization structures and committees, and management education. The volume and scope of his published output, the extent of his international involvement and impact, and the length of time over which he strode the international stage is arguably unrivalled amongst his peers in the twentieth century.

Towards a scientific art

Within the scope of a wide range of subjects, Urwick particularly devoted much of his intellectual energy to the development and synthesis of a general theory and associated principles of organization and management (Wren, 2005; Wren and Bedeian, 2009). He conceived of organizational management as a social philosophy and discipline dictated by what he saw to be an economy based upon power-driven machinery which he wished to study in a fashion borrowed from the physical sciences. For him, the solution to the effective management of society, government and business lay in a scientific approach that addressed their technical leadership, economic control, and social direction (Urwick, 1938, 1956b; Urwick and Brech, 1945a). Science, he saw

as a codified body of knowledge, and argued for its development in management to provide insights into “the laws and causes which rule the world” (Urwick, 1933, p. 24, 1956b). He repeatedly talked of using a scientific “temper” and method: approaching every management issue through definition, analysis, measurement, experiment, and proof, as in the physical or “exact sciences” (Urwick, 1933, p. 30, 1952). Consistent with his view of management as a social discipline, he advocated a social engineering approach that required managers to think “scientifically” about themselves and other people (Urwick, 1942, 1943).

This social engineering philosophy was prompted by a view of the economic, social, and organizational world tailored to the demands of “power-driven machinery” (Urwick, 1953, p. 375). For him, the technological revolution had brought an array of changes and forces, primarily through “machine industry” that required acceptance, discipline, planning, direction, supervision, and control (Urwick, 1933; Urwick and Brech, 1945a, p. 9). His philosophy of science and management was machine focussed, whereby machinery imposed a mental discipline that emphasized quantitative analysis of objectively determined facts. This analysis of objectively determined facts was essential if managers were to master their machine environment (Urwick, 1933; Urwick and Brech, 1945a). While occasionally alluding to the organization as being akin to a living biological organism, Urwick (1942, 1947) immediately re-asserted his mechanistic view of the organization, at times referring to his as an “engineering approach”. Seeing people as the social groups that assisted in production and distribution of economic goods, he therefore aimed to control people as the power behind (or adjuncts to) machines (Urwick, 1933; Urwick and Brech, 1945a).

Consistent with his predisposition to record and encompass the full spectrum of developing management thought, particularly in the 1930s and 1940s, Urwick attempted to retain his mechanistic social engineering approach to management while formulating a scientific philosophy that purported to be all-embracing. Scientific management, according to Urwick, is an art: the art of managing human beings, practised in accordance with scientific methods and standards (Urwick, 1943, 1952, 1956b, 1957b). For Urwick, the medical profession was the exemplar for management to follow. The practice of medicine, he argued, is the art of healing: one requiring clinical experience and judgement based on a scientific body of knowledge. Medicine’s scientific body of knowledge draws on a range of underlying scientific disciplines such as biology, physiology, anthropology, sociology, individual, and social psychology, as well as the physical and statistical sciences (Urwick, 1928, 1943, 1952, 1956b, 1957b). As will be seen in this paper, such a definition allowed Urwick, while continuing to champion a predominantly Taylorist view of scientific management, to claim competing schools of thought as part of his own scientific management philosophy.

A Taylor apologist and proselytiser

Throughout his professional life, and long after most writers had abandoned Frederick Taylor, Urwick advocated Taylorism as a guiding light for management practice. At times, Urwick was an apologist for Taylor’s shortcomings, conceding that Taylor failed to “generalize with sufficient precision”, but simultaneously arguing that Taylorism implicitly contained “substantially every feature which has come to be recognized as essential to modern practice” (Urwick, 1928, p. 170). As an apologist, he repeatedly claimed that Taylor had been the victim of jealousy amongst his peers,

undue rigidity by his disciples, and misunderstandings and misrepresentations by his critics and that he and his ideas had suffered ongoing abuse, particularly from academics in the USA (Urwick, 1929, 1956b, 1969).

Urwick argued that Taylor's use of the term "scientific" could be understood in broad terms. The term "scientific management" is usually understood as meaning the "one best way" to manage and control shop floor practice. This "one best way" approach is the meaning we usually associate with Frederick Taylor's work and the principles of scientific management (Parker and Ritson, 2005a). However, Urwick remained convinced that Taylor had used the term "scientific" in a quite different sense, one that embraced any systematic and organized body of knowledge when referring to higher levels of organization and their management. In essence, Urwick's approach drew on this second meaning of the word "scientific", to respond to claims that Taylor's approach only applied engineering solutions to the complexities of managing people (Urwick, 1956b, 1969). Repeatedly, Urwick denied that Taylor had ever suggested his principles were an exact science. To Urwick, Taylor simply advocated a spirit of scientific enquiry and the study of common organizational problems by people trained in scientific method. Consistent with his own view of scientific management, Urwick promulgated his own understanding of Taylor as a man who had advocated an attitude and philosophy rather than a detailed set methods or devices. Taylor had merely approached management problems scientifically: defining, measuring, analysing, and producing a stock of knowledge "with a foundation in the exact sciences and, where exact knowledge ended, still using a scientific methodology in its approach to its problems" (Urwick, 1928, 1929, 1952, p. 12, 1943; Dale and Urwick, 1960). Urwick attributed the origins of his own machine-related social engineering philosophy to Taylor, arguing that the latter was simply propounding a broad-spectrum approach to the general issue of exercising control over organizational members (Urwick *et al.*, 1937; Urwick, 1952).

Taylor's approach to the management of people attracted much criticism and remains a controversial approach to management to this date. Whilst admitting that Taylor had undertaken little research into the human element in management, Urwick (1956b) nonetheless defended Taylor by arguing that Taylor had understood its fundamental importance and the limitations of scientific experiment and proof regarding human behaviour. To illustrate, Urwick forgave Taylor for his approach to motivating individuals, one that emphasized monetary piece-rate payments for performance, arguing that this approach merely reflected the conventions of its day[4]. Similarly, Urwick (1956b, p. 39) admitted to the "meticulous discipline and training" required by Taylor's approach to management, while at the same time claiming that Taylor had recognized the value of "giving the individual a sense of growth and opportunity".

Urwick also acknowledged the strength of union resistance to Taylorism (Wren, 2005). However, he attributed that resistance not to Taylorism's inherent weaknesses but to a general societal readjustment to peacetime conditions, to incorrect imitations of its methods, to misunderstandings of Taylor's actual practices and experiences, and finally to agitation by professional rivals. Indeed, Urwick pointed out that no strikes had ever taken place in shops in the USA in which Taylor was directly involved (Urwick, 1928, 1929, 1952; Urwick *et al.*, 1937). Urwick also blamed initial US union resistance for an antipathy to Taylorism within the British Trade Union Movement,

and an accompanying reluctance of British employers to openly embrace its principles (Urwick, 1929). Claiming that British managers' longer term focus had been on "technical issues", personnel management and industrial psychology, Urwick (1938) and Urwick and Brech (1945b) argued that British management's resistance to Taylor's philosophy lay in an unfounded fear that a pre-existing humanistic perspective would be supplanted by a scientific perspective of organizations and life. Indeed, such was the antipathy of British labour and management to Taylorism, that Urwick and Brech (1945b) devoted an entire chapter to examining the detailed history of this rejection under the contradictory title *The Acceptance of F.W. Taylor by British Industry*. No doubt, Urwick's staunch defence of Taylorism had its origins in debates undertaken during his early management career. Urwick's one-time employer, Seebohm Rowntree, was noted for the strength of his critique and rejection of scientific management. Urwick's exposure to Rowntree's humanitarian concerns and the work of Rowntree's first industrial psychologist may well have motivated Urwick's attempt to humanize Taylorism (Roper, 2001).

Urwick's work proffers a strangely disjointed amalgam of management thought. His is an idiosyncratic reinterpretation scientific management and the thoughts, ideas, beliefs, and philosophies of its founding figure, Fredrick Taylor. The weight of international critique and incontrovertible evidence of British management and labour's rejection of Taylorism induced Urwick to develop both an apologia for Taylor's shortcomings alongside a new interpretation of aspects of his philosophy. Urwick crafted this interpretation to yield a more humanistic form of scientific management, one that was consistent with pre-existing British managerial practices and his own beliefs. In so doing, Urwick was able to apply the label "scientific management" to a broad range of management thinkers and theorists.

Square pegs into round holes?

Urwick bestrode the management discipline particularly in the 1940s and 1950s by virtue of a number of major management compendiums for which he was responsible. These were a three-volume set which he co-authored with Brech entitled *The Making of Scientific Management*, and also *The Golden Book of Management*, for which he was sole editor (Urwick and Brech, 1945a, b, c; Urwick, 1956a). They were reprinted in revised editions many times and facsimile versions appear in three languages and are held in libraries around the globe to this day. These volumes offered a summary overview of what Urwick saw to be the field of management. Urwick and Brech (1945a) outline the lives of 13 management pioneers, while Urwick and Brech (1945b) provide a history of management in British industry and Urwick and Brech (1945c) offer an account of the famous Hawthorne investigations. An expanded history of the lives of 70 management pioneers is presented by Urwick (1956a). Within these volumes, he gathered a variety of emerging management schools of thought, bringing them within the ambit of his own reconstructed version of scientific management.

Urwick's (and his co-author's) treatment of several prominent management figures illustrate his strategy of integrating potentially oppositional streams of thought into his scientific management vision. The French industrialist Henri Fayol, for many years neglected in the USA but ultimately recognized internationally as a leading management thinker, was classified and represented by Urwick as a scientific management pioneer: a European counterpoint to Frederick Taylor. Indeed, Urwick was

strongly influenced by his interpretation of Fayol's (1918, 1937, 1949) writings, often outlining Fayol's concepts in considerable detail (Urwick, 1937, 1944, 1952, 1956b). However, it is debatable whether Fayol easily or justifiably fits into our present day understanding of the phrase "scientific management". For example, some have argued that Fayol's theories on management included and anticipated many elements of subsequent developments in management thought such as the human relations movement, systems-based contingency approaches, employee participation in decision making, and knowledge management. Fayol was arguably a unique thinker whose degree of divergence from scientific management principles may well have been far greater than Urwick cared to admit or portray (Lamond, 2003, 2004; Parker, 1986, 1999; Parker and Ritson, 2005a, b).

Nevertheless, however, Urwick viewed or chose to categorise Fayol, as well as being an ongoing apostle of Taylor, he was also influenced by Fayol's ideas, philosophy, and focus. The primary underlying influences upon his thinking about scientific management were his early reading of Taylor's (1903) *Shop Management* and then his reading of Fayol's (1918) *Administration Industrielle et Générale*. Indeed, he arranged Fayol's first translation into English when at the International Management Institute in Geneva. His interests had clearly extended beyond shop floor management by the time he started up the consulting firm Urwick, Orr & Partners whose work spanned shop floor, office administration, and senior management issues. So again, Urwick metamorphosed his notions and definitions of scientific management to embrace the North American and European perspectives as well as all levels of the organization.

Similarly, Urwick (1947, 1956a, b) drew the North American management thinker, Mary Parker Follett into his fold (Urwick and Brech, 1945a). Later in her life, he had met Follett, befriended her, and later published her collected papers. Recently, we see Follett's work as representing a major break with the scientific management school, rejecting both Taylor and Urwick's authority-based specification of management principles, offering instead a humanistic, negotiable vision of management that advocated flexibility, communication, decentralized power, and industrial democracy. She has increasingly been recognized as anticipating major elements of the behavioural and systems school of management thought, as well as more recent ideas on stakeholder theory, strategic alliances, and network organizations (Eylon, 1998; Graham, 1987, 1995; Parker, 1984, 1986, 1999; Parker and Ritson, 2005a; Roper, 2001). However, Urwick experienced little difficulty incorporating Follett into his reinterpreted vision of "scientific management", even writing that Follett had, "[...] pleaded, as Taylor had pleaded before her, for a fresh outlook, for discarding of old prejudiced and worn-out ideas, for a 'mental revolution'" (Urwick and Brech, 1945a, p. 55).

Urwick (1956a) also incorporated his former employer, Seebom Rowntree, into the scientific management fold (Urwick and Brech, 1945a). However, Rowntree (1921) had published his own book *The Human Factor in Business* in which he advocated a humanistic approach to management strongly oriented towards industrial democracy, rejecting the Taylorist scientific management as dehumanizing (Roper, 2001). Mary Parker Follett herself was highly interested in and sympathetic to Rowntree's ideas. Yet Urwick, though closely associated with Rowntree (just as he became with Follett), implicitly denied this rejection and divergence, acknowledging his experiments in industrial democracy, but representing them as "more a question of spirit than of material arrangements" (Urwick and Brech, 1945a, p. 64). For Urwick,

Rowntree's greatest contribution was his willingness to take "great risks" in the application of democratic principles "[...] in all matters directly affecting the employee" (Urwick and Brech, 1945a, p. 64).

One of Urwick's most tantalizingly apparent contradictions lies in his willingness to embrace the human relations movement. Roper (2001), for example, sees him as having attempted to combine Taylor's scientific management with the human relations movement rather than admit to the human relations movement being an alternative to scientific management. Indeed, Urwick and Brech (1945c) devoted an entire book to providing an account of Elton Mayo's Hawthorne experiments in the Western Electric Company[5]. These experiments focussed on the power and role of human attitudes, perceptions and behaviours, and ushered in a new era in management thinking that stood in direct opposition to Taylor's scientific management. Yet, in the volume dedicated to this experiment, Urwick and Brech (1945c, p. 2) characterize the company and the researchers as "having a true appreciation of what is meant by the scientific approach". In his biographies of Elton Mayo, Urwick (1956a, 1960) even likened Mayo's background in some respects to Taylor and subsequently acknowledged Mayo's criticisms of employing scientific techniques to examine social behaviour. However, in a further rationalisation of his claim that scientific management encapsulated the human relations movement, he argued that Mayo's approach focusing on human behaviour had become appropriate due social change. In essence, society had changed from the formal traditional respect for hierarchy to what he called "an adaptive society", that rejected authority, was driven by continuous technological change, and required new concepts of authority, and workers trained in new social skills (Urwick, 1956b, 1960). Notably, this reinterpretation of the human relations movement relied on Urwick's social engineering philosophy, his commitment to rational-scientific enquiry, and his ideas of machine-related management. In his 1960 biography of Mayo, Urwick (1960, pp. 13, 21) still attributed to him "a scientific approach to the problems of management, [...] [one which] Frederick Winslow Taylor [would have] recognized" and having a "claim to a place in the evolution of scientific management".

Urwick's work in classifying and historicizing management leaders and their theories through the eighteenth to twentieth centuries has been engraved in contemporary and historical management thinking and conventional wisdom, particularly through the influence of his major books that classified the management field and its writers. These included Urwick (1956a, b) and Urwick and Brech (1945a, b). His reinterpretation of a host of leading management theorists as apostles of scientific management has been recognized by management historians including Child (1969), George (1972), Sheldrake (1996) and Parker and Ritson (2005a). As Parker and Ritson (2005b) have argued in relation to Henri Fayol, management textbook writers have invariably stereotyped such founders of the discipline in simplistic classifications apparently inspired by compendiums such as Urwick's (Hodgkinson, 1978; Lock and Farrow, 1982; Armstrong, 1990; Holt, 1993; Rue and Byars, 1983; Schemerhorn *et al.*, 2004). In addition, Urwick's personal longevity and stream of publications spanning over 60 years, during which he maintained his advocacy of this all-embracing revisionist form of scientific management, has arguably reinforced contemporary managers', teachers', and researchers' misperceptions and misinterpretations of these figures and their contributions to the discipline. Thus, while throughout his career, Urwick tirelessly promoted the ideas of leading theorists such as Taylor, Fayol, and Follett, his labelling

of Fayol and Follett as apostles of scientific management may have unwittingly done their work a disservice and contributed to contemporary management thinkers' neglect of their ideas.

Rebutting the critics

Urwick probably remained unique in his long and consistent battle to promote his version of scientific management and to defend it against its critics. Very early in his writing career, he acknowledged industrial psychologists' criticisms of the Taylorist neglect of individual differences and its "one best way" approach to work standardization. As mitigating circumstances, he argued that Taylor preceded the emergence of the discipline of psychology discipline's development and therefore conceded the need for further study of worker motivation[6]. Nonetheless, he accused psychologists of overstating the significance of individual motivation in their eagerness to disavow scientific management (Urwick, 1928, 1929). Through into the 1950s, he went on to maintain that psychology was in its infancy "as a modern inductive science" and that it "may well be another couple of centuries before it is a precise guide to action in dealing with individuals" (Urwick, 1957a, p. 2). His jousting with behavioural management theorists continued, as he critiqued the ideas of figures such as March and Simon and McGregor (Urwick, 1969, 1970).

University researchers and teachers in management in general came in for Urwick's criticism. He saw them as disconnected from organizational practice, relying on logic rather than observation, unduly specialized, interested in abstractions rather than organizational experience, dividing into multiple schools of thought and proliferating their own jargon (Urwick, 1956b, 1960, 1963, 1964). Thus, he saw management academics as out of step with the practical concerns of professional managers, pursuing fragmented ideas of interest to themselves rather than developing a holistic practical approach needed by the practising manager (Urwick, 1971; Trinkaus, 1992). What he perceived to be a dislocation between behavioural science research and teaching, and managers' practices and experiences, was for Urwick a major source for his rebuttal of scientific management's critics. Consistently he declared that management must rely on "organised experience" (Urwick, 1952, p. 5; 1964, p. 50) rather than await the completion of sociological and psychological "researches a century or so later" (Urwick, 1963, p. 325).

Again, consistent with his shifts and reinterpretations of scientific management over time, Urwick appeared to shift his approach to what he saw to be the predominant source of criticism. Through to the 1960s for example, he had been critical of the behavioural sciences for mounting what he saw to be a bid to supplant "the only 'true' teachers of management", contending that particularly in the USA they had turned "classical" and "traditional" approaches to management into epithets meaning "obsolete" or "superseded" (Urwick, 1964, p. 48). Indeed, he went as far as branding them as having "invaded the management field in the past twenty-five years" (Urwick, 1966, p. 11). Subsequently, in responding to a published critique of classical management, he argued that conflict between behavioural scientists and classical management theorists was unnecessary. In making his case, he reinterpreted scientific and classical management definitions of "organization", contending that they had not been referring to "institutions as a whole or human group behaviour at large", but rather writing about a "special aspect of that behaviour" involving the pursuit of co-operation and collaboration through formal communication. "By using the term 'organization' in its colloquial meaning

of an institution as a whole”, Urwick (1971, p. 11) argued that behavioural scientists had “created an entirely false conflict”. Yet again, we see a revisionist Urwick at work: reinterpreting and revising the received conception of scientific management to defend it.

Making the case

Urwick's case for scientific management lay primarily in logical argument and practical application. His advocacy was founded in an admiration for the Taylorist model of developing worker co-operation through requiring a common objective and a common method of thinking (Urwick, 1956b). The path to this end lay for Urwick (1929, p. 32, 1933, 1956b) in the engineering, inspired commitment to exact analysis and standards of measurement, and “the inexorable logic of facts” in preference to traditional managers' reliance on opinion. However, Urwick can be found at times to have offered contradictory justifications for scientific management. When defending it against the behavioural science critics, as observed above, he contended that the behaviouralists were substituting experimentation and theory for practical experience. However, when making the case for scientific management in comparison with traditional management methods, Urwick (1929, p. 32) argued that:

[...] the man who has ceased to talk about 'my experience' and is beginning to talk about 'my experiments' is at least beginning to understand the full significance of the scientific approach.

Once again, his interpretation of scientific proves to have been malleable, depending upon the alternative school of thought with which he was comparing it, and upon the audience he was addressing.

Repeatedly, Urwick retailed the message that scientific management was not a set of techniques, but a way of thinking about and managing work and organizations, an accumulated understanding of laws and causes governing the world, and in particular a solution to management problems conditioned by scientific methods (Urwick, 1933, 1937). The benefits of these solutions were “outputs, comfort in work, sales, profits, and relations with employees”. This was consistent with his professional consulting orientation and career. From this standpoint, he made efforts to publicize organizational case studies that demonstrated the successful application of scientific management principles and methods. These included applications across the private and public sectors such as in the engineering firm Hans Renold & Co. Ltd, Rowntree company's sales office reorganization, optical manufacturers Taylor, Taylor & Hobson Ltd, tapestries manufacturer Arthur H. Lee & Sons Ltd, machine builders Mavor & Coulson Ltd, the Dunlop Rubber Company, Lever Bros, Unilever Ltd, Imperial Chemical Industries, United Steel, the London Midland and Scottish Railway, the London Passenger Transport Board and the British Post Office (Urwick *et al.*, 1937; Urwick, 1938; Urwick and Brech, 1945b).

Urwick stands as unique amongst his management contemporaries in his multifaceted approach to management theorizing and practice. While sharing a principles and methods orientation with Taylor, and drawing from the writings of Fayol (1918, 1937, 1949), and Mooney and Reiley (Bedeian, 1972), he developed a philosophy and language that emerged and metamorphosed in response to his changing environment and critical pressures. In addition, he straddled both the worlds

of management consulting practice and management lecturing and writing. His was an advocacy based upon an unshakeable conviction that Taylor's fundamental principles could stand the test of time and offer tangible practical outcomes to professional managers.

Visionary or charlatan?

It is easy to portray Urwick as something a charlatan. Having committed to himself to such an unpopular figure as Frederick Taylor, who had the kind of reputation that would see him emerge as one of the popular press's favourite bogeymen (Bedeian and Wren, 2001, p. 222), Urwick appears to engage in intellectual sleights of hand by defining scientific management as a spirit of enquiry giving rise to systematic and organized bodies of managerial knowledge, rather than as a narrowly defined managerial practice. He seems to have developed an artificially robust form of scientific management that was capable of withstanding and absorbing virtually any well-made criticism thrown at it by almost any management thinker. Alongside the works of Taylor, Urwick was able to incorporate the works of a number of divergent management thinkers, such as Fayol, Follett, Rowntree, and Mayo into his unique and idiosyncratic approach to scientific management. Given Urwick's prolificacy, longevity, and undoubted influence over the management profession, one also might argue that Urwick's reinterpreted vision for scientific management bears some responsibility for a legacy of confusion that has deprived a number of theorists, such as Fayol and Follett, their rightful place in the pantheon of influential management thinkers (Parker, 1984; Parker and Ritson, 2005a, b). At the very least, one might claim that by embracing elements of the human relations movement and integrating those elements with the Taylorist scientific management project, Urwick merely contributed to an ongoing softening of scientific management's worst excesses whilst leaving its core, fundamentally exploitative, principles intact (Friedmann, 1977; Sewell and Wilkinson, 1992).

However, it is possible to portray Urwick in a different light. One of the central themes running through Taylor's writings is a commitment to the value of knowledge, as opposed to mere tradition and personal opinion, and this commitment ensures that, even today, *The Principles of Scientific Management* remains one of the most, if not the most, influential management books of the twentieth century (Bedeian and Wren, 2001, p. 222). Many early management theorists shared Taylor's commitment to the primacy of systematically derived knowledge; for example, Fayol cites the precisely same commitment as one his prime motivators for having written *General and Industrial Management* (Fayol, 1949, p. 15). What marks Urwick out, as being unusual amongst his contemporaries, was his ability to ally himself to Taylor's call for the rule of knowledge, whilst seeing value in any contribution that, to his mind, increased our understanding of the practice of management. In so doing, Urwick appears to have applied a unique degree of intellectual flexibility that allowed him to see the works of diverse management thinkers in complementary terms even though most of his contemporaries only saw irreconcilable differences and conflict (McGregor's (1960) Theory X and Theory Y). The origins of this intellectual flexibility lay in willingness to confront openly and honestly, classical scientific management's shortcomings and weaknesses. For example, Urwick openly credits Follett, Rowntree, and Mayo with having developed insights into the inner workings of social groups and authority,

the need for employee participation, and the causes of human motivation that are missing from Taylor's writings (Urwick and Brech, 1945a, c).

In addition, Urwick allied himself to Taylor's and Fayol's desire to develop an all encompassing and systematic theory of management that could be taught to aspiring managers (Bedeian and Wren, 2001; Parker and Ritson, 2005a, b). Seen in this light, his commitment to experiment and scientific enquiry seems natural. However, Urwick also understood that management theorists had to communicate with busy management practitioners in "real world" settings. As we have seen, as the behavioural sciences began to colonize management academe, he became increasingly critical of a style of management inquiry that was, to his mind, too conceptually difficult to communicate to management practitioners and too removed from the realities of management practice to hold those practitioners' interest.

In a sense, Urwick's tragedy is that he anticipated the subsequent emergence of systems and contingency theory because he, like systems and contingency theorists, appears to have pursued an integrative approach to management theory (Luthans, 1973; Davidson and Griffin, 2002; Robbins *et al.*, 2003). However, Urwick conceived of societies and organizations in machine-like or mechanistic terms (Urwick, 1953, p. 375; Morgan, 1986). Inevitably, his predispositions meant his analysis would privilege static, rational, and universalistic relationships, the very same relationships that characterized much early management thought (Morgan, 1986). Deprived of meaningful access to and understanding of the importance of adaptation and contingency, Urwick was ill, equipped to embrace organic metaphors, the very same metaphors that characterized much subsequent management theorizing (Morgan, 1986). He was unable to comprehend the significance of organizational-environmental interactions and the organization's potential for evolution, adaptation, and change. Put simply, the metaphorical tools at Urwick's disposal denied him access to the systems and contingency theorists' great insight that the inherent value of apparently irreconcilable management practices lies in their application at the right time under the right circumstances (Luthans, 1973; Lee *et al.*, 1982). His favourite metaphor may have been the medical practitioner, but he failed to grasp that the key to medical practice is the capacity to select and apply the right scientifically derived knowledge base for the patient's condition and circumstances. In essence, Urwick placed too much emphasis on the "science" as opposed to the "art" of management.

Perhaps, we should remember Urwick as a frustrated visionary whose major contribution to the management discipline lay in his attempts to reinterpret, translate and promulgate the ideas of others. He was a prolific management writer who devoted his career to an agenda that a subsequent, more fortunate, generation of management theorists pursued far more successfully. Certainly, we can say, with the benefit of hindsight, that his choice of the label "scientific management" to denote any body of systematic and organized managerial knowledge was, given Taylor's waning reputation, both ill-judged and confusing. We can also say that Urwick's attempt to integrate scientific management with elements of the emerging human relations movement was ultimately doomed to failure because his time and place had not equipped him with the metaphorical tools needed undertake such a venture. Nevertheless, his integrative vision for management theory eventually proved to be an important, valuable, and enduring contribution. At a time when many of his management contemporaries embarked on an all or nothing, winner takes all battle between the scientific management and human

relations approaches to management, Urwick refused to “throw the baby out with the bathwater” and devoted his entire career to the identification, promotion, and reconciliation of valuable insights drawn from these competing camps. For that at least we should remember Urwick fondly.

Conclusion

Lyndall Urwick was an active contributor to the management literature in the twentieth century. Though an open and unapologetic advocate of Frederick Taylor’s principles, he was able to earn the admiration and respect of a range of important management thinkers who, to the contemporary mind, appear to have advocated ideas that are the very antithesis of Taylorism. Amongst such figures, we can include the likes of Seebohm Rowntree, Mary Parker Follett, and Elton Mayo. These personal relationships are indicative of a man whose career, at first glance, appears to be full of confusion and contradictions. Urwick was a man who, in the words of Dylan Thomas, could “rage, rage against the dying light” of Taylor’s reputation and influence. Yet, Urwick could also extol the Hawthorne experiments, the very experiments that to many of his contemporaries appeared to deliver a near fatal blow to the Taylorist project, as an exemplar of Taylor’s commitment to the application of a scientific approach to the problems of management. Examining Urwick’s work and examining its legacy holds three important lessons for the contemporary management discipline.

First, such an exercise emphasizes the importance of reading early management writings in their original form rather than relying on secondary sources. For too long, Urwick’s classification of Mary Parker Follett as a scientific management practitioner blinded subsequent generations of management practitioners and theorists to the true value and contemporary relevance of her work (Parker, 1984; Parker and Ritson, 2005a). Similarly, Henri Fayol continues to be seen as some kind of European Taylorist. As Parker and Ritson (2005a, b) have argued, this is thanks in no small part to Urwick’s identification of Fayol with scientific management and through his focus upon and translation of Fayolian ideas solely in terms of Taylorist scientific management rather than recognizing Fayol’s prescient thinking and echoes of human relations, contingency theory, employee participation and more. However, to understand the reasons why Urwick classified Follett and Fayol in this way, one has to read his words in the original form. To Urwick, the term “scientific management” had a very broad meaning, one capable of embracing the works of an unusually broad and diverse group of management thinkers. A failure to understand this fact, that Urwick’s definition of scientific management was very different to the one employed by most other management thinkers, has caused a great deal of confusion and may well have given rise to a stereotyped and inaccurate perception of a number of early management writings (Parker and Ritson, 2005a).

Second, Urwick’s career gives us some insights into the evolution of management thought. Though no systems or contingency theorist, Urwick’s determination to pursue an integrationist path anticipated the subsequent emergence of the systems and contingency approaches to management. Sadly for Urwick, the machine-like metaphors he, like so many of his contemporaries, had to rely upon deprived him of the intellectual tools needed to effect a true reconciliation of the scientific management and human relations schools.

Third, Urwick's career exemplifies the power of labels in management theory and practice. The names we give to management theories and principles are not merely arbitrary identifiers of those theories and principles, they also help to sell them to the reader. Examples include "Theory X and Theory Y", "management by objectives", "total quality management", "Theory Z", "knowledge management" and the "learning organization". Perhaps, the most significant charge that we can lay at Urwick's door is that he had a poor understanding of the principles of labelling. Blinded by his personal admiration for Taylor, Urwick insisted on the continued use of the term "scientific management" to describe his integrative efforts in the realms of management theory and practice. He did so in the full knowledge that in the minds of many "scientific management" had a very specific meaning denoting a set of narrowly defined principles and put much effort into promulgating a much broader definition of this term. However, what seems to have escaped Urwick's mind was that the narrow meaning of the term "scientific management" was, by now, too strongly entrenched and that by identifying his project with such a strong and tarnished label, he virtually guaranteed that he would become both the originator and victim of damaging stereotypes.

And agenda of rediscovering Urwick carries a range of potential insights and implications for management research and practice. Throughout his career and his writings, Urwick passionately pursued the integration of theory and practice. He persistently swam against what he saw to be the tide of theorizing divorced from practical application. His concern signals to contemporary management theorists the challenge and importance of forging the connection between leading edge theoretical perspectives and management practice. In addition, with varying degrees of success, Urwick aimed to adapt his theoretical ideas to emerging schools of thought in the management discipline. For both research and practice, this presents an option for contemporary consideration whereby both researchers and practitioners may more consciously decide upon the extent to which they discard the old in uptaking new ideas, or meld the old with the new. It also raises the question of the degree to which contemporary management theories and practices already represent an albeit unconscious adaptive hybrid of earlier and contemporary management theories and their underlying schools of thought. Of course, Urwick's experience, for example in extolling the Hawthorne experiments while rebutting the emerging behavioural school, also provides a cautionary tale of the risks involved in attempting to adapt historical concepts to currently emerging theorizations, especially in terms of managing the potential contradictions involved.

The Urwick story also points both management theorists and practitioners towards recognizing the importance of developing a sound understanding of the historical roots of management concepts in contemporary favour and use. This may better contribute to the clearer and more precise definition of today's management concepts and their associated visions. As this paper demonstrates all too clearly, the task of reaching agreed conceptual definitions also often involves labelling and classification of concepts and associated ideas. This is a recurring theme in today's management literature and practice and carries the concomitant risks of stereotyping ideas, their associated schools of thought and advocates. Yet, in attempting to connect emerging theorizations with the management and organizational cultures and practices of the period, management theorists arguably face the challenge of implementing language and terminology that communicates with the audiences they are trying to reach. Again, Urwick's history

highlights the importance of the management theorist role as interpreter and promulgator of ideas and concepts to both the research and practice communities. It is a role that carries opportunity for instigating change, responsibilities for justification and clear communication, and risks of misinterpretation and misrepresentation.

While some historians have already accorded Urwick their attention, further research opportunities await in mining his prolific writings to investigate the contemporary implications of his concerns with language and communication in management, the relationship between his ideas on management education and contemporary educational practice, and the contemporary application of his particular biological and machine metaphors to high-technology organizational life today. Further consideration to contemporary messages that may be induced from his unwavering attention to the issues of organization and management control may yet yield dividends in terms of identifying contemporary theory and practice vestiges of his ideas. Finally, his interest in rationalisation merits further critical investigation and reflection in the light of contemporary trends in re-engineering, downsizing and benchmarking. Despite his frustrations and critics, Lyndall Urwick has been for too long ignored. His record of contribution to the management literature has been undeniably prolific and longstanding. He awaits rediscovery by management theorists and practitioners of the twenty-first century.

Notes

1. Born 3 March in North Malvern in the county of Worcestershire.
2. Moving subsequently to that firm's sales office.
3. Indeed, Roper (2001) claims Urwick's published books to have totalled more than 30, although his count may include booklets and monographs.
4. Being rewards for success and penalties for failure.
5. Elton Mayo wrote the foreword to this volume.
6. Much later, in the 1960s, Urwick (1963) was still asserting that Taylor would even have welcomed much of the research produced by behavioural researchers.

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