

Charlie and the chocolate factory

CHARLES Myers (1873–1946) was undoubtedly the most important British psychologist of the first half of the 20th century. ‘He, more than anyone else’, wrote Cyril Burt, ‘has assisted in turning British psychology from a branch of mental philosophy into a branch of experimental science’ (Burt, 1947, p.5). In terms of ‘his flair for organization’, as his former student and protégé Frederic Bartlett put it, Myers had a tremendous impact: ‘He built a laboratory, a society, an institute’ (Bartlett, 1948, p.769; 1965, p.9): the Cambridge Psychological Laboratory; the British Psychological Society; and the National Institute of Industrial Psychology. Although Myers did a great deal to establish psychology in Britain, he was forced to make a terrible personal sacrifice in the process.

Myers had qualified as a doctor in 1902 before settling in Cambridge and devoting himself to psychology. He established a laboratory at King’s College London, published *A Textbook of Experimental Psychology* (1909), and lobbied for the replacement of the ‘damp, dark, and ill-ventilated cottage’ that then served as the Cambridge psychological laboratory (Myers, 1936, p.221). Funded largely from his own considerable wealth, the new laboratory opened in 1912. Myers assisted in the creation of the *British Journal of Psychology* in 1904 and became its sole editor in 1914, the year in which it was acquired by the British Psychological Society. Although initially rejected for military service, he made his way to France and was appointed a hospital registrar. It was Myers who introduced the term *shell shock* into the medical literature, a term he later regretted.

According to Bartlett (1965), Myers was never to be the same again after the war: ‘The radiant smile was seen less frequently, he tired more easily. Much of his natural buoyancy and liveliness had gone’ (p.5). Nevertheless, on demobilisation Myers returned to England



At the Centenary Conference in Glasgow **GEOFF BUNN** gave the C.S. Myers Memorial Lecture on Myers himself and his role in the establishment of psychology in Britain.

‘fired with the desire to apply psychology to medicine, industry and education’. Increasingly disgusted ‘with the old academic atmosphere of conservatism and opposition to psychology’ in Cambridge, Myers decided to give up his academic career in order to further the cause of applied psychology (Myers, 1936, pp.224–225).

The National Institute of Industrial Psychology

Myers co-founded the National Institute of Industrial Psychology (NIIP) in 1921 with Henry Welch, a company director. Its ambition was ‘to promote by systematic scientific methods a more effective application of human energy in occupational life and a correspondingly higher standard of comfort and welfare for the workers’ (Welch & Myers, 1932, p.5). Myers insisted that the non-profit institute should be scientific, impartial and commercially neutral. The NIIP quickly became the most significant source of employment for psychologists in the country. ‘Its service to British psychology was of incalculable importance,’ one historian later asserted, ‘without which the expansion of psychology in the Second World War and after would have been virtually impossible’ (Hearnshaw, 1964, p.277).

Armed with his manifesto *Mind and Work: The Psychological Factors in Industry and Commerce* (1921), Myers set about seeking financial support from Britain’s leading industrialists. A number of companies made generous donations and substantial grants were secured from the

Carnegie United Kingdom Trust and the Rockefeller Trust.

Psychology at Rowntrees Cocoa Works

Seeböhm Rowntree was conversant with and supportive of industrial psychology, having been appointed by his ‘political hero’ Prime Minister Lloyd George to chair the Health of Munitions Workers Committee during the war. Known for its progressive labour policies, the Quaker chocolate company was keen to mobilise scientific expertise in the promotion of those twin ideals of efficiency and welfare (Hollway, 1993). With the confectionery business experiencing a period of rapid expansion, benevolent paternalism was no longer an appropriate mode of governance for an expanding workforce. An alternative model was required, one that would be simultaneously scientific and humanistic (Fitzgerald, 1995).

Rowntree was to become a major influence on the establishment of psychology in Britain. As he concluded in his book *The Human Factor in Business*, ‘careful and systematic attention to the human and psychological aspects of industry’ could benefit all participants in the industrial process (Rowntree, 1921, p.155). Rowntree asked Myers to recommend someone to give a course of psychology lectures to his workers. Myers had a better idea: Why not appoint a full-time psychologist at the factory instead? A factory psychologist ‘would...give advice to those existing workers who feel they are round pegs in square holes, and would select those suited for particular

posts'; he would also be 'an expert adviser in motion study, fatigue study, [and] the effects of monotony in occupation' (Rowntrees Central Works Council, 1919).

In 1922 the company appointed a Works Psychologist, the first post of its kind in the country. V. Moorrees immediately set about drawing up training schemes, performing time-and-motion studies and devising tests for vocational selection. 'Instead of Hipp Chronoscopes and the like expensive apparatus measuring accurately and minutely,' he explained, 'we have home-made apparatus which we check up frequently so as to eliminate as far as possible the liability to error which we do not deny may exist' (Moorrees, 1933, p.161). Ironically, the most 'home-made' piece of apparatus – the Moorrees form board – was also the most enduring. It was successfully used for vocational selection for 30 years from the early 1920s. Job candidates were asked to fit wooden shapes into their appropriate slots on a board in the correct sequence as quickly as possible. By 1932 the Psychological Department had tested nearly six thousand potential chocolate packers with it.

Pleased with the successes of the in-house Psychological Department, Rowntrees also commissioned research from the NIIP on a consultancy basis. In August 1931 Seebohm Rowntree received the NIIP's third report on the factory. It had been written by Nigel Balchin, one of Bartlett's former students. His recommendations included the centralisation of instrument control panels, better lighting and ventilation, and a change in the method of hand-packing (NIIP, 1931).

In 1934, under the pseudonym 'Mark Spade', Balchin published a satirical account of industrial psychology, *How to Run a Bassoon Factory*, which had previously been serialised in *Punch*. But Seebohm Rowntree was most impressed with Balchin's psychological approach to market research (Balchin, 1933). The fact remains, Balchin wrote in 1933, 'that until recently the importance of the customer's exact requirements was not realized. Design in manufacture was determined by convention and usage, by the opinion of factory experts, by manufacturing limitations – in fact by anything but the view of the man who was expected to buy' (Balchin, 1933, p.376).

Beginning in the late 1920s Rowntrees had started to lose market share to Cadburys, whose Dairy Milk assortment was the market leader. Rowntrees needed

a new product to compete with its great rival. Perhaps Balchin could help? In July 1932 the Rowntree board of directors sanctioned £3000 for an NIIP investigation into the chocolate assortment market (Fitzgerald, 1995). The Institute took six months to interview 7000 consumers in seven northern towns. Retailers were questioned about profit margins and price maintenance. The psychologists discovered that chocolate assortments were primarily bought by men for women; that a simple, austere box design was preferred; and that it might be a good idea to include a chart in the box identifying which chocolates had which centres.

Black Magic

Psychological knowledge of the consumer's attitudes and values made it possible to link a product's sales with its production (Balchin, 1935). Balchin bluntly articulated the importance of social class in understanding the connection between a product and its market. 'If our main market consists of intellectually self-conscious, upper middle-class women,' he wrote, 'we shall do no good at all with a label representing Highland cattle at Sunset.' Likewise, 'The artistic design in silver and black in abstract forms which we evolve for this market will not help our product much if our chief market is textile mill hands' (Balchin, 1934, p.234).

The resultant new product initiated a period of financial recovery for the company. Black Magic was the first to be launched by Rowntrees that emphasised the product's intrinsic qualities rather than the company name. A golden age of KitKat, Aero and Smarties — all of which were

developed and marketed by techniques first pioneered with Black Magic — followed from the abandonment of the traditional distinction between production and sales (Fitzgerald, 1995).

Black Magic was arguably one of the NIIP's greatest successes, but it quickly became a liability. Myers's guiding principle that industrial psychology should be an impartial and commercially neutral enterprise had been profoundly compromised. Cadburys had been giving the Institute £700 a year in the 1930s, even though its chief competitor was a beneficiary of the psychological expertise. Furthermore, Rowntrees' Company Director was a member of the Institute's executive committee. Black Magic thus proved to be the NIIP's first and final market research triumph. Despite the financial rewards it so clearly promised, the Institute's leadership banned any further commercially sensitive research.

'A not unnatural depression'

The prohibition came at a difficult time. By the mid-1930s, the Institute's grants had been spent and drastic economies became necessary. By late 1937 the Institute faced a deficit of £4500 and the executive committee ordered salary cuts, terminated contracts and halted contributions to the pension fund.

Seebohm Rowntree was asked by the chair of the NIIP's executive committee to prepare a report on the Institute's problems. Discovering a significant level of dissatisfaction with the Institute's work among its clients, Rowntree was doubtful whether the Institute was justified 'in carrying out highly technical investigations

which depend for their successful accomplishment on industrial rather than psychological knowledge'. Poor leadership, inadequate time keeping, and inefficient office practices meant the Institute was being run opportunistically on a 'hand to mouth' basis. Rowntree was convinced that 'nothing short of a drastic re-organisation' along lines then being devised by consultancies like Urwick Orr & Partners would prevent failure: 'The Institute should call in a capable efficiency expert to put its own office organisation on a sound footing!' (Rowntree, 1936.)

The Institute's Director, George Miles, who had been with the Institute since 1921, resigned. A new General Director was hired, but in 1938 an emergency meeting was called to discuss the possibility of closing down the Institute. Rowntree thought that 'it was absolutely essential' that the industrial investigations branch – potentially the most lucrative of all the Institute's activities – should not be run by Myers, whose skills were better used 'on the social and publicity side' of things. The new Director agreed with Rowntree: Myers was 'hopeless', lacking inspiration and slow at making up his mind on any executive question. Nearly 65, Myers was out of touch with mainstream developments.

Rowntree's report singled out Myers for criticism: 'I have abundant evidence that [he is]...not an organiser, and...lack[s] the power of inspiring a staff to work with energy and efficiency...honestly, I would

rather have a man who was a good administrator and a bad psychologist than vice versa.' (Rowntree, 1936.)

Rowntree did not show his damning report to Myers, who, according to Cyril Burt, was pitched into 'a not unnatural depression' as a result of the efforts involved in running the Institute (Burt, 1947). It wasn't long before Myers was eased out of the organisation that he had created. The final humiliation came in 1938 when he was invited to surrender his salary and become 'Honorary Principal' (NIIP, 1938). In establishing the NIIP, Myers had done much to provide British psychology

with a solid foundation for expansion. In theory, industrial psychology was to apply knowledge derived from the laboratory to the solution of practical industrial problems. In practice, however, as the NIIP discovered at Rowntrees Cocoa Works and elsewhere, this was not so simple a task. Industrial psychology was situated between psychology and industry, between capital and labour, between the laboratory and the factory, and between sales and production.

From the macro-level of organisation of the NIIP to the day-to-day workings of selecting chocolate packers, industrial psychology had to accommodate a variety of divergent interests. The Institute had itself been established as a joint collaboration between a psychologist and a businessman. Furthermore, as Myers had said, the impartial, systematic work of the Institute must secure 'the approval of the employer and of the worker alike'. Capital and labour confronted each other through the enabling medium of psychology. The chief task of this applied science was to 'oil the wheels of industry'.

Myers embodied industrial psychology's interstitial character. 'Myers was an eclectic,' wrote Alec Rodger, 'and he disliked comprehensive theorizing and "schools of thought"' (Rodger, 1971, p.180). 'He saw most of the leading problems of psychology as forking off in two directions but very nearly always set himself to find middle paths,' wrote Bartlett. 'His predilections were, in theory, towards a wholly uncompromising spirit of compromise between two extremes' (Bartlett, 1965, p.8). 'Very nearly every

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specifically psychological paper that he...wrote revealed a strong interest in fundamental general problems, and he continued to see two opposed sides and to try to bring them together.'

The arduous tasks of organisation

From Bartlett's vantage point Myers's desire for compromise was a weakness, not a strength. 'The very qualities which made him successful in many fields', the former pupil wrote, 'robbed him of any complete and final personal success in any' (Bartlett, 1948, p.774). Bartlett's obituary attacked Myers's intellectual achievements with an almost Oedipal force. That which was not dismissed as being no longer scientifically valid was damned with faint praise. Having initially offered the possibility of 'very great distinction', Myers's ethnomusicology, for example, remained 'more of the nature of fugitive pieces, full of interest, full of promise, but never fully developed' (p.772). In the final analysis, Bartlett concluded, Myers was a man of style and not substance: 'though several of [his works] will remain of great historical

interest, they will not win for him a place in the front rank among those who have permanently influenced, by their own discoveries, the theory or method of psychology' (p.773).

Bartlett had no doubts about the cause of Myers's sad demise: practical interests had diverted him 'from what might have been a brilliant experimental career... Could he have reconciled himself entirely to the life of laboratory investigation,' he wrote, 'there is no telling what he might have done' (Bartlett, 1948, p.773). 'He was indeed a great man,' wrote Alec Rodger, but more perhaps, a man of science than of business' (Rodger, 1971, p.184).

That Myers had become 'a square peg in a round hole' was a tragic irony. According to Bartlett, moving to London was the fatal mistake that brought about 'the end of his scientific life in any ordinarily accepted sense'. Myers had lectured widely in the metropolis, sat on numerous committees and had raised enormous sums for the Institute. But 'organization, administration, with their necessary attention to publicity had got the upper hand. He carried them on with

consummate ability, but at a price' (Bartlett, 1948, p.771).

For Bartlett, who had now become the most powerful psychologist in Britain, this was a price not worth paying. In 1944 he established the Applied Psychology Unit in Cambridge, funded by the Medical Research Council. The Unit went on to have a major impact on post-war British psychology. Yet Bartlett's 'human factors' model of applied psychology was diametrically opposed to the one pioneered by Myers. The critical category for researching problems of cockpit dynamics and gun and radar control was 'skill'. Real-world problems were now to be studied in the laboratory. It was here, Bartlett hoped, that experimental conditions could be carefully controlled and unruly variables governed. Charles Myers had taken psychology out of the laboratory and into the factory. Frederic Bartlett, rejecting his mentor's vision, took it back.

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