# FROM THE 'PURE' TO THE 'APPLIED': C.S. MYERS AND BRITISH PSYCHOLOGY

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### **ABSTRACT**

C.S.Myers (1873-1946) is a neglected figure in the history of British psychology. Yet he was very influential in structuring the institutional framework of the new discipline. As his student, Frederic Bartlett, grudgingly conceded, he was very effective in getting things *started*. Largely on the basis of his own money and donations from his family, he established the Laboratory of Experimental Psychology at Cambridge in 1912. During the 1914-1918 war, as a trained physician, he enlisted for war work, and became deeply involved in defending soldiers from accusations of desertion, and summary execution. (It was Myers who coined the term "shell-shock") He had a harrowing time, and found that the military and medical authorities had obstructed him at every turn. At the end of the war, Myers was resolute that the new psychology should be taken more seriously.

His first significant move was to reform the British Psychological Society (BPS). The Society had been established in 1901 as an exclusive club for the small number of people in Britain actively involved in teaching and researching in the new academic discipline. In 1918, Myers opened up membership of the BPS to those working in medical, educational, and industrial psychology. The effect of Myers' reform, however, was to institutionalize an 'ideal' of an applied psychology whereby medical, educational, and industrial psychology are indeed regarded as applications of a more fundamental, academic psychology (see Doyle, 1979). "Pure"

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psychology would be taken more seriously, by demonstrating its relevance to practical affairs, and "applied" psychology would, in turn, gain credibility by drawing upon the resources and prestige of scientific psychology. Nevertheless, according to Myers' ideal of the relation between pure and applied psychology, the latter could only be regarded as the unequal, indeed, junior partner. Disregarding the fact that the reform of the BPS involved an alliance between academic psychology and existing professional practices, Myers came to assert that "Like every other Natural Science, Psychology as it developed gave birth to several Applied Sciences" (Myers, 1944, pp. 8-9; emphasis added).

In 1921, Myers, in collaboration with the industrialist, Henry J. Welch, set up the National Institute of Industrial Psychology in the centre of London. On the basis of his war experience, he had become convinced that there was whole field of medical and industrial psychology to be developed (Bartlett, 1945-1948). But he continued to be convinced that the development of these new fields should proceed according to a very particular model of the relation between academic and applied psychology:

I came to share Pasteur's view - "Il n'y a pas des sciences appliqués; il y a les sciences et les applications des sciences." (Myers, cited in Bartlett, 1945-1948, p. 771.)

The rhetoric of this position, however, demanded that there should be a well established science (or appearance of one) in relation to which applied psychology is (or could seem to be) the application.<sup>2</sup> Yet it was precisely because Myers had failed to establish such a secure academic base at Cambridge, that, in 1922, he decided in desperation to resign from the university.

<sup>&</sup>lt;sup>2</sup> Although they make no reference to Myers, Middleton and Edwards nicely capture the subordinate status of applied psychology implied in this conception of the 'pure'-'applied' relation:

There is currently a sense in which 'pure' psychology is psychology, while the 'applied' field is the point where psychology meets the real world. Such a conception is ruinous of both theory and of practice. (Middleton & Edwards, 1985, p. 146.)

But is this 'pure' science of psychology is to be defined, in terms of research findings and theories, or else in terms of its 'methods'? Myers himself seems to have made little use of the *content* of academic psychology. Rodger (1971, p. 180), in his account of working with Myers, suggests Myers became increasingly dismissive of theory: "his view was that people with 'theories' went too far." Rodger, for one, found Myers' reluctance to draw firm conclusions "dispiriting."

The prospects for the N.I.I.P. were unpromising from the outset. Lacking a secure academic base, Myers' scientific credibility was in question. On the other hand, his 'purist' conception of applied psychology raised serious doubts among potential clients about his commercial judgement. To make matters even worse, although British industry had plenty of problems, these were simply *too* serious to address:

The Institute began its work at a time of industrial uncertainty, when the disorganization consequent on the Great War was still keenly felt and considerable friction existed between employers and labour. A serious coal strike was in progress. Employers naturally hesitated to arrange investigations; several companies with which the Institute was negotiating for this purpose preferred to postpone their decisions until more peaceful times. (Welch & Myers, 1932, p. 32.)

Myers' considerable gifts both as a researcher and organizer were wasted. His time and energy were spent in chasing funds to keep the Institute in business, and engaging in battles with the business men on the executive panel who wished to see the Institute give way to yet further commercial pressures (anon 1946; Rodger, 1971; Shimmin & Wallis, 1994, p. 7). It all ended badly. The industrialists were unimpressed by the relevance of the research, and the academic psychologists appalled by its planlessness. By 1938, Myers was faced with the prospect of mutiny by the industrialists involved with the N.I.I.P., and was forced to resign. Myers had rushed into the trap he helped construct. Through his restructuring of the British Psychological Society, he had institutionalized the unequal alliance between "pure" and "applied" psychology, and then, with his rash departure from Cambridge, found himself on the wrong side of this unhappy divide.

# RESUMEN

C.S.Myers (1873-1946) es una figura habitualmente pasada por alto en la psicología británica. Y ello pese a que fue muy influyente en la estructuración del marco institucional de la nueva disciplina. Tal y como su estudiante, Frederic Bartlett, reconoció, Myers fue muy eficaz en lograr que los proyectos se pusieran en marcha. En gran medida sobre la base de su propio dinero y de donaciones familiares logró establecer el Laboratorio de Psicología Experimental de Cambridge en 1912. Durante la Primera Guerra Mundial (1914-1918), como médico, se alistó para contribuir al esfuerzo bélico, y llegó a verse profundamente involucrado en la defensa de soldados acusados de deserción, y amenazados de ejecución. (Fue precisamente Myers quien acuñó el término de "shell-shock").

Fue una época muy difícil para él, y se encontró con que las autoridades militares y médicas le habían obstaculizado una y otra vez. Al final de la guerra, Myers estaba convencido de que la nueva psicología debía ser tomada más en serio.

Su primer paso significativo en esta dirección fue reformar la Sociedad Británica de Psicología (BPS). La Sociedad había sido establecida en 1901 como una sociedad exclusiva para el pequeño grupo de personas que estaban activamente involucradas en la enseñanza y la investigación dentro de la nueva disciplina académica en tierras británicas. En 1918 Myers abrió la BPS a todos aquellos que estaban trabajando en psicología médica, educativa e industrial. Sin embargo, el efecto que tuvo la reforma de Myers fue institucionalizar un "ideal" de psicología aplicada, mientras tanto la psicología médica, educativa e industrial eran realmente consideradas como aplicaciones de una psicología académica más básica (ver Dovle, 1979). La Psicología "pura" se tomaría mucho más en serio, si se demostrara su relevancia en asuntos prácticos, y la psicología "aplicada". a su vez, ganaría en credibilidad al aprovecharse de los recursos y el prestigio de la psicología científica. No obstante, de acuerdo con el ideal de Myers sobre la relación entre psicología pura y aplicada, la última solamente se podría considerar como un hermano menor de la primera. Sin tomar en cuenta el hecho de que la reforma de la BPS implicaba una alianza entre la psicología académica y las prácticas profesionales existentes, Myers vino a establecer que "Al igual que cualquier otra Ciencia Natural, la Psicología que se había desarrollado dio a luz a varias Ciencias Aplicadas." (Myers, 1944, pp. 8-9; cursivas añadidas)

En 1921, Myers, en colaboración con el industrial Henry J. Welch, creó el Instituto Nacional de Psicología Industrial (N.I.I.P.) en el centro de Londres. Sobre la base de su experiencia durante la guerra, Myers había llegado al convencimiento de que tenía que desarrollarse todo el campo de la psicología médica y de la psicología industrial (Bartlett, 1945-1948). Pero todavía consideraba que el desarrollo de estos nuevos campos debería proceder según un modelo muy particular de relación entre la psicología académica y la psicología aplicada:

Compartía la perspectiva de Pasteur - "Il n'y a pas des sciences appliqués; il y a les sciences et les applications des sciences." (Myers, citado en Bartlett, 1945-1948, p. 771.)

Sin embargo, la retórica de esta posición requería la existencia de una ciencia bien establecida (o por lo menos la apariencia) en relación con la cual la psicología aplicada es (o podría parecer ser) la aplicación. Fue precisamente porque Myers fracasó en su intento por establecer una base académica firme en Cambridge, que, en 1922, se decidió, ya desesperado, a dimitir de la universidad.

Las expectativas de éxito del N.I.I.P. no era muy prometedoras desde el principio. Al faltar una firme base académica, la credibilidad científica de Myers se cuestionaba. Además, su concepción "purista" de la psicología aplicada levantaba serias dudas en relación con su juicio comercial entre los clientes potenciales. Para empeorar las cosas, aunque la industria Británica tenía muchos problemas, estos sencillamente eran demasiado serios para afrontarlos:

El Instituto comenzó a funcionar en un momento de incertidumbre industrial, cuando la desorganización consecuencia de la Gran Guerra aún se dejaba sentir bastante, y existía, además, un considerable enfrentamiento entre los empresarios y los trabajadores. Una dura huelga de mineros estaba en marcha. Naturalmente, los empresarios fueron reacios respecto de emprender investigaciones; varias compañías con las cuales el Instituto estaba negociando con este fin preferían posponer sus decisiones hasta una época más pacífica. (Welch & Myers, 1932, p. 32.)

Myers había derrochado considerables bienes tanto como investigador como organizador. Había empleado tiempo y energía persiguiendo financiación para mantener el Instituto a flote, y había participado en duras negociaciones con hombres de negocios no queriendo ceder a Isus presiones respecto del consejo ejecutivo del que debía dotarse el Instituto (anon. 1946; Rodger, 1971; Shimmin & Wallis, 1994, p.7). Todo terminó muy mal. A los industriales no les importaba la relevancia de las investigaciones, y los psicólogos académicos estaban descontentos con su falta de planificación. En 1938, Myers se encontró con la posibilidad de un *motín* por parte de los industriales que participaban en el N.I.I.P., y no tuvo más remedio que dimitir. Myers cayó en la trampa que él mismo ayudó construir. Mediante la reestructuración de la Sociedad Británica de Psicología, había institucionalizado una desigual alianza entre la psicología "pura" y la "aplicada", y luego, con su insensata salida de Cambridge, se encontró en el lado equivocado de una división infeliz.

#### INTRODUCTION

Il n'y a pas des sciences appliques; il y a les sciences et les applications des sciences. (Louis Pasteur.)

A few years ago, when I was working in Sweden on a research fellowship, the institute of psychology where I was based was connected by a corridor to the neighbouring department of applied psychology. But the door of the corridor remained locked, and as far as I could determine nobody seemed to have the key. Complete disconnection is, of course, one possible model

of the relation between academic and applied psychology. There are others. In fact, the history of Swedish psychology presents one alternative model, where academic and applied psychology are indeed linked, but academic psychology is, in effect, a sub-department of the applied, and turned towards practical, primarily pedagogical, concerns (Agrell, 1951). Reflecting on his experience as Professor of Psychology and Pedagogy at Stockholm, David Katz complained that "one is always asked at the outset which practical use will come out of our science, to the point that one hesitates to devote oneself totally to theoretical questions" (Katz, 1946).

In many countries, however, the 'official' model of the relation between academic and applied psychology places the latter in the subordinate position. Applied psychology has been supposed to be secondary to - and derived from - academic psychology. Applied psychology might help set the agenda, but intellectually and scientifically the relation is essentially one-way: the application of the findings and theories of academic psychology to the solution of practical problems. In this chapter, I want to examine the important part played by Charles Samuel Myers in institutionalizing this idea of an applied psychology within the British scene.

## CHARLES SAMUEL MYERS

C.S. Myers was born in London on the 13rd March 1873. As an undergraduate at Cambridge, he attended the lectures of W.H.R. Rivers on sensory psychology, and later qualified in medicine at Saint Bartholomew's Hospital in London. Through the infuence of A.C. Haddon his interests turned to physical anthropology. In 1898, he took part in the Cambridge anthropological expedition to the Torres Straits, organized by Haddon and largely devoted to cross-cultural comparisons of psychophysical thresholds. The main impact of this expedition was to encourage Myers to make a definite move into the new discipline of psychology rather than combine his anthropological and psychological interests (Pear, 1947). In 1903. Myers set up a small psychological laboratory at King's College, and from 1906 to 1909 held the Professorship of Experimental Psychology there. Between 1907 and 1921 (initially retaining his London position) he was Lecturer in Experimental Psychology at Cambridge, and then, for a very brief period, Reader in Experimental Psychology, Myers came from a prosperous Jewish family involved in commerce, and when he founded the Laboratory of Experimental Psychology at Cambridge in 1912 the funding for the new department was largely contributed by Myers and his family (Bartlett, 1965).

Frederic Bartlett recalled his experiences as a student in the experimental classes at Cambridge, with Myers as director and Cyril Burt as assistant:

I doubt if we can have been a very rewarding class. Privately we grumbled and groused like anything. We vowed we would lift no more weights, learn no more nonsense syllables, strike no more tuning forks, cross out no more e's. Colour wheels were more fun. We threw ourselves at the dynamometer and the ergograph in the hope of beating one another or smashing the apparatus. Optical illusions were temporarily attractive, but we got a bit tired of the MŸller-Lyer. Everything that could be was in a strict pattern of psychological method, and now I know it was greatly to our good. ... [But] when we left the laboratory we promptly dropped it all. What had it to do with our daily life? It was indeed a laboratory game, boring in parts, engrossing in others, but just a laboratory game. (Bartlett, 1956, pp. 82-3.)

The seemingly futile game of experimental psychology was soon eclipsed by an even more futile and painful one, the First World War (1914-1918). As Myers explains in his book, *Shell Shock in France* (1940), he had been in Paris at the outset of the war, and found it impossible to settle down again to laboratory work when he returned to Cambridge. Instead, he went back to France and became deeply involved in defending soldiers from accusations of desertion, and summary execution. It was Myers who coined the term "shell-shock", even though he came to regret its mechanistic implications (Feudtner, 1993). His former student at King's College, Tom Pear and Pear's Manchester colleague, the medic and anthropologist, Grafton Elliot Smith, arranged for Myers (along with Rivers) to be summoned back to England to participate in a remarkable "academy" based at Maghull Hospital, Liverpool, devoted to the care of the increasing numbers of deeply disturbed soldiers being sent back from the front:

Here R.G. Rows, a pathologist, converted from a simple materialistic faith by studying Dèjerine, Janet and Freud, had collected a group of doctors whose belief in the importance of mental factors in disease was rapidly intensifying, as hundreds of cases, many complicated by months of neglect or purely physical treatment, presented their protean symptoms. Rows's staff included Grafton Elliot Smith, William McDougall, C. G. Seligman, Bernard Hart, Millais Culpin, T.A. Ross and R.G. Gordon. Perhaps never before or since has such concentrated, many-sided interest been taken by a group of widely travelled doctors, in somatic and psychological medicine, anthropology and ethnology. Had they not dispersed in 1919, part of the history of psychological medicine might have been differently written. (Pear, 1947, p. 3.)

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Maghull hospital, set up and supported by the new Medical Research Council, was a haven of psychological enlightenment. But, as Myers had discovered, elsewhere the medical and military authorities could be appallingly obstructive and punitive.<sup>3</sup> Although his book on his experiences in France is understated, and explicitly draws a veil over his more painful experiences, clearly Myers had had an awful time. Everyone who knew Myers agreed that the war changed him. According to Bartlett (1965, p. 5), he had lost his cheerfulness and energy, and "his sensitivity to opposition and criticism [became] far more marked". He was frustrated because he longed to see the new psychology achieve proper recognition and make a real impact on human affairs, and his deep frustration in turn helped channel whatever energy he had in that direction.

# MYERS AND THE REFORM OF THE BRITISH PSYCHOLOGICAL SOCIETY

The first significant move Myers made on his return from his war work was to shake up the British Psychological Society (BPS). The Society had been established in 1901 as an exclusive club for the small number of people in Britain actively involved in teaching and researching in the new academic discipline. As Pear recalled, "a member of the BPS was a psychologist, and not someone just interested in the study" (Pear, 1959, p. 11). By the end of the war, membership of the society was still very limited, to just 79 members (Hearnshaw, 1969, p. 5). Myers, noting the diverse psychological enterprises which had developed beyond the influence of the BPS, decided that they should be brought under its control. As the minutes of the Society for 1919 record:

A special general meeting of the Society was held on Wednesday, February 19th, 1919 at 8 p.m., at the London Day Training College, Southampton Row, London, W.C., for the purpose of considering the Report

<sup>&</sup>lt;sup>3</sup> The authorities could also be wonderfully silly. Myers, in addition to his medical work, also became involved in more 'basic', psychophysical studies on auditory localization concerning the new military problem of detecting submarines. Pear arranged for Myers to be brought back from France to help in this work at the research laboratory at H.M.S. Crystal Palace. Nevetheless, the Navy was not prepared to acknowledge their identity as psychologists. (In naval circles, it seems, psychology was the science that dare not speak its name.) Even though the research concerned *listening* for submarines, the authorities in their wisdom decided to give Pear and Myers the title of "oral specialists" (Pear, 1960).

drawn up by Colonel Myers on behalf of the Committee, and the proposed changes in the Rules of the Society. Prof. T.P. Nunn (in the Chair).

The minute books are held in the British Psychological Society Archives (presently based at the Department of Psychology, University of Liverpool). Attached to the handwritten minutes is the printed report prepared by Myers:

The following Report has been prepared at the request and with the approval of the Committee, partly owing to the great development of general interest in pure and applied psychology during the war and partly on account of three definite movements which are now taking place.

- 1. Arrangements are being made to found a Society by those who (after receiving a training in Psychology) have been engaged during the War in the treatment of cases of functional nervous and mental disorders. These physicians have expressed a keen desire to publish a Journal devoted to the subject. Indeed at one Military Neurological Hospital such a Journal has been started. Before the War there existed a Psycho-Medical Society, the officers of which are prepared to induce its members to join the proposed Society in its stead.
- 2. Similar efforts are being successfully made to found a Society of those interested in the application of Psychological principles to the investigation of certain problems of industry and commerce, particularly in regard to the relation of hours of work and rest to fatigue, and the selecting by Psychological tests, of workers for the task to which they are mentally best fitted.
- 3. A Society of those interested in educational research became almost defunct during the war. A general desire has been expressed by its members, and by others, to form a fresh Society, which shall have for its aim the encouragement of the application of the methods of experimental Psychology to pedagogical problems.

It is estimated that these Societies would initially consist of about four hundred members. The Committee, however, are very strongly of the opinion that it would be detrimental to the further progress of Psychology if they were independently formed, and recommend that an effort be made to constitute them as Special Sections of the British Psychological Society. If this were done, a large influential society would be created which could be suitably housed, with meeting rooms, and a common library for the use of the various Sections, between which joint meetings could be arranged when necessary.

Introducing these changes involved complicated negotiations not only within the BPS, but beyond. Many of the early members of the BPS, feared that that opening up the Society in this way would impair its academic

function.<sup>4</sup> Furthermore, even if its members were to agree to the change, the Society. had no power to insist that the "applied psychologists" join its ranks. Nevertheless, the reform of the Society's constitution was achieved, and over the following twenty years the membership increased to 704 (Hearnshaw, 1969, p. 5).

According to Lovie (1998), in making these constitutional reforms, Mvers had been driven by the need to increase the membership of the society and sort out its increasing financial difficulties. Numbers were indeed small. and there certainly were problems about funding the Society and the recently established British Journal of Psychology. In fact, Myers had been responsible for persuading the Society to contribute from 1914 onwards to its costs. (The Journal had been founded in 1904 by Myers, Ward and Rivers independently of the B.P.S. Initially, Ward and Rivers were the joint editors, but in 1911 Myers replaced Ward as the joint editor with Rivers. and from 1912 to 1924 he was the sole editor.) The enduring impact of Myers' reform of the Society, however, was to institutionalize an 'ideal' of an applied psychology whereby medical, educational, and industrial psychology are indeed regarded as applications of a more fundamental, academic psychology (see Doyle, 1979). And this surely was Myers' more fundamental purpose. It was at his own initiative that he had engaged in the war effort (at the outset of the war, he was already on the wrong side of forty and rather old for the army). And yet he had been thwarted at every turn. Returning from the war, Myers was intent that "pure" psychology would be taken more seriously, by demonstrating its relevance to practical affairs, and that "applied" psychology would, in turn, gain credibility by drawing upon the resources and prestige of scientific psychology. Nevertheless, according to Myers' ideal of the relation between pure and applied psychology, the latter could only be regarded as the unequal, indeed, junior partner:

Like every other Natural Science, Psychology as it developed gave birth to several Applied Sciences. From it arose Psycho-pathology and Educational Psychology, which are the very foundations of Psychological



<sup>&</sup>lt;sup>4</sup> These fears were well founded. Beatrice Edgell (1961, p. 12), who was president of the Society from 1929 to 1932, acknowledged that "the informal and intimate form of discussion which had characterized the early years was not possible in the larger gatherings of members who had varying interests and different levels of psychological training. Some of the older members with a background of philosophy felt that some of the papers read lacked breadth of outlook and were trivial in character, even though they purported to have some immediate practical interest. Dissatisfaction with the meetings led in some quarters to a proposal for a new psychological club with a restricted membership".

Medicine and Pedagogy. The most recent example of Applied Psychology is Industrial Psychology, which is concerned with the human factor throughout industry. (Myers, 1944, pp. 8-9; emphasis added.)

# MYERS AND THE NATIONAL INSTITUTE FOR INDUSTRIAL PSYCHOLOGY

After the war, Myers no longer felt at home at Cambridge and was looking for ways to move on. Tom Pear had told him about the lectures given by Bernard Muscio in 1916 in Australia on industrial psychology, and Myers began to promote the establishment of centres of applied psychology in Britain's main cities (Myers, 1918; see Hearnshaw, 1964, p. 276.) In 1921, while still at Cambridge, he took the ambitious step, in collaboration with the industrialist, Henry J. Welch, of setting up the National Institute of Industrial Psychology in the centre of London. This is how Welch and Myers begin their account of the first ten years of their new Institute:

In most people the very word "psychology" is apt to conjure up visions of cranks and charlatans or wild flights into "psycho-analysis" or "psychic research". Too few realize how valuable the application of the strictly scientific study of human experience and behaviour has already been to psychological medicine and to education, and how valuable it is now proving in the solution of many important problems of industry and commerce. (Welch & Myers, 1932, p. 1)

In the same year that Myers and Welch set up the N.I.I.P., the University of Cambridge promoted Myers to the post of Reader. But the University set petty conditions on the definition of the new post, limiting its title to a Readership in *Experimental* Psychology. Myers was outraged.<sup>6</sup> He felt he was once again confronting the kind of obstruction he had earlier

<sup>&</sup>lt;sup>5</sup> C.S. Myers hated being continually mistaken for his namesake at Cambridge, F.W.H. Myers, an enthusiastic proponent of both psychoanalysis and psychic research (Boyle, 1978, p. 409). By thirties, Myers, Bartlett, and many other British psychologists had reacted against the excesses of the British psychoanalysts. Yet it was the adoption of a broadly psychodynamic approach to the treatment of shell shock which, at the close of the war, had seemed the most obvious and important contribution of psychology to the war effort, and which promised to transform academic psychology and give it a higher status in relation to medicine (Pear, 1918; Rivers, 1919a & b).

There are two ways to take his reaction. The first is in protest to the idea that psychology is anything but experimental psychology (Bartlett, 1965). Indeed, Rodger (1971) claims that Bartlett himself had reacted against Myers' narrow

experienced during the war, the "stubborn refusal ... to recognize the real importance of psychological services" (Bartlett, 1945-1948, p. 770). Neither the medics, the physiologists, nor the philosophers seemed willing to support what he was trying to do:

On demobilisation I returned to Cambridge, fired with the desire to apply psychology to medicine, industry and education and becoming increasingly disgusted, after my very practical experience during the War, with the old academic atmosphere of conservatism and opposition to psychology. I found the wild rise of psychoanalysis had estranged the Regius Professor of Physics; I received little encouragement from the Professor of Physiology; and the Professor of Mental Philosophy, to my surprise, publicly opposed the suggested exclusion of the word 'experimental' in the title, now about to be conferred on me by the University, of Reader in Experimental Psychology. Thus medicine, physiology and philosophy had little use then at Cambridge for the experimental psychologist. (Myers, 1936, p. 224.)

Thus, in 1922, despite having invested so much time and even money in trying to develop psychology at Cambridge, Myers decided to move on, though not before ensuring that the Readership would be passed on to his student. Frederic Bartlett.

It was a rash move. Myers' departure from Cambridge put him in a highly precarious position. On the basis of his war experience, he had become convinced that there was whole field of medical and industrial psychology to be developed (Bartlett, 1945-1948). But, as I have already explained, he had also become convinced that the development of these new fields should proceed according to a very particular model of the relation between academic and applied psychology:

commitment to experimentalism. An alternative interpretation, however, is that Myers had a more *inclusive* notion of psychology. As Myers explained in his widely read textbook on experimental psychology:

We must regard experimental psychology as but one mode of studying psychological problems, not all of which, however, can be approached from the side of experiment. Far from being independent, experimental psychology has arisen as a refinement, of general psychology. (Myers, 1909, p. 1.)

Certainly, the latter interpretation accords with the claim made by T.H. Pear (1954) that, as medically trained psychologists, Myers along with Rivers and MacDougall had a much broader and sensitive notion of evidence. In my view, however, Myers (like Bartlett) never reconciled his aspiration that the new academic subject of psychology should have wide human relevance with the belief that its scientific credibility was nevertheless to be underwritten by relentless pursuit of the most narrow psychophysical research (Costall, 1992).

I came to share Pasteur's view - "Il n'y a pas des sciences appliqu\_s; il y a les sciences et les applications des sciences." (Myers, cited in Bartlett, 1945-1948, p. 771.)

The rhetoric of this position, however, demanded that there should be a well established science (or appearance of one) in relation to which applied psychology is (or could seem to be) the application.7 Yet it was precisely because Myers had failed to establish such a secure academic base at Cambridge, that he had, in desperation, decided to leave. Admittedly, Myers had placed his own man, Bartlett, in a senior position at Cambridge in the hope of continuing that side of his work, but Bartlett, virtually alone. was doing his best to promote psychology as an academic subject within the local Cambridge context (Costall, 1992), and could not provide much support for Myers' new enterprise. In any case, perhaps because of their conflicts of interest, relations between Myers and his proteg' cooled, as is evident in Bartlett's less than sympathetic obituary of his former teacher (Bartlett, 1945-1948). To some extent, Myers could rely on links with his other former student and proteg', Tom Pear, at Manchester (Costall, 1995). Myers had been instrumental in having Pear appointed there, and some of the laboratory-based work of Myers's new institute was conducted at Manchester, for example, on the elimination of after-images caused byh a new safety lamp for miners (Pear, 1948). But Pear's department was tiny, and not exactly prestigious.

By leaving academia, Myers was not only unable to ensure that academic psychology developed in such a way as to complement his efforts in developing an applied psychology, but he also compromised his own scientific credibility. After all, the model of applied psychology promoted by Myers entailed an intellectual power relation between science and its

Although they make no reference to Myers, Middleton and Edwards nicely capture conception of the subordinate status of applied psychology:

There is currently a sense in which 'pure' psychology is psychology, while the 'applied' field is the point where psychology meets the real world. Such a conception is ruinous of both theory and of practice. (Middleton & Edwards, 1985, p. 146.)

But is this 'pure' science of psychology is to be defined, in terms of research findings and theories, or else in terms of its 'methods'? Myers himself seems to have made little use of the *content* of academic psychology. Rodger (1971, p. 180), in his account of working with Myers, suggests Myers became increasingly dismissive of theory: "his view was that people with 'theories' went too far." Rodger, for one, found Myers' reluctance to draw firm conclusions and make pronouncements "dispiriting.

application which placed the application of psychology very much in the subordinate role. Even his ex-student, Bartlett, was unimpressed. His verdict was that Myers' move from Cambridge to the N.I.I.P. "marked the end of his scientific life in any ordinarily accepted sense" (Bartlett, 1945–1948, p. 771). As if to compensate for his questionable status as a 'real' scientist, Myers included a host of academics (such as Frederic Bartlett, Cyril Burt, James Drever, Beatrice Edgell, Tom Pear, Percy Nunn, Charles Sherrington, and Charles Spearman) along with commercial and industrial leaders among the unusually large number of members of the Council and Advisory Board of the Institute

In addition to its problematic relation to academic psychology, the difficulties of the N.I.I.P were further exacerbated by the condition of the British industry it sought to serve. The new Institute had been established as a private non-profit making foundation, but it could hardly have been set up at a less fortunate time to find work and hence funds for itself. As Welch and Myers, in their account of the first ten years of the N.I.I.P., and frankly admitted:

The Institute began its work at a time of industrial uncertainty, when the disorganization consequent on the Great War was still keenly felt and considerable friction existed between employers and labour. A serious coal strike was in progress. Employers naturally hesitated to arrange investigations; several companies with which the Institute was negotiating for this purpose preferred to postpone their decisions until more peaceful times. (Welch & Myers, 1932, p. 32.)

The paradoxical consequence of the very poor relations within British industry was that its conspicuous social problems were so serious they were simply too sensitive to address. It was only much later that investigators based at the Tavistock Institute (not the N.I.I.P.) began to make the human relations of industry the focus of their study. In addition, the scientific advisors called in by Myers surely cautioned the new Institute against appearing to engage in 'soft' science. This was certainly the line Bartlett came to take. As one of the scientists at the N.I.I.P. recalled, Bartlett's influence "from 1930 to 1960 was negative and harmful, in opposing any ventures into applied social psychology" (Duncan, 1995).

Myers did not subscribe to the crude application of time-and-motion study; he was concerned about the welfare of the workers and recommended that they ought to be involved in the management process and the application of the results of such study. "The aim of Industrial Psychology is primarily not to obtain greater output but to give the worker greater ease at his work" (Myers, 1944, p. 14; see also Myers, 1920). Because of the problems of access, the Institute's main work was mainly limited to a few paternalistic

companies, such as the chocolate manufacturer, Rowntree's, and to certain kinds of research. Indeed, one of the Institute's more notable contributions seems to have been to determine the contents of the "Black Magic" assortment of chocolates in 1933, even though Seebohm Rowntree (the owner of the company and a member of the advisory panel of the N.I.I.P.) and (yet again!) Bartlett discouraged such consumer and market research as an improper activity for the Institute (Duncan, 1994). The initial research of the Institute dealt mainly with ergonomic issues, but later it came to be increasingly centred upon vocational selection and guidance. This shift of emphasis was itself dictated by the Institute's own vocational dilemma-finding suitable work for its own workers in a time of unemployment and industrial strife.

Myers had left Cambridge in desperation hoping to apply his considerable scientific and organizational gifts to better effect elsewhere, to applied psychology. But his energies were almost immediately diverted away from research. He ruefully described himself as "one who has had to occupy himself largely with administrative work" (Myers, 1944, p. 8). His time and energy were spent in chasing funds to keep the Institute in business, and engaging in battles with the business men on the executive panel who wished to see the Institute give way to yet further commercial pressures (anon 1946; Rodger, 1971; Shimmin & Wallis, 1994, p. 7). It all ended badly. By 1938, Myers was faced with the prospect of mutiny by the industrialists involved with the N.I.I.P. who felt he was too academic and unworldly. He had little choice but to resign. Elton Mayo, who had been invited informally to consider replacing Myers as director, was not impressed by the state of the Institute, and concluded that its "planlessness" derived from its reliance upon highly limited industrial funding (Shimmin & Wallis, 1994). But Mayo's conclusion begs the question of why adequate funding from industry had not been forthcoming. After all, there was another organization in Britain devoted to applied psychology, the Industrial Health Research Board (established in 1918, initially named the Industrial Fatigue Research Board ), but this body did not depend upon industrial funding (being supported by the Government through the Medical Research Council and the Department of Scientific and Industrial Research). Nevertheless, its existence proved to be equally precarious, and its research activity just as piecemeal and unappreciated (Shimmins & Wallis, 1994, pp. 4-6). British industry was not prepared to make room for strategic research, nor were the governments of the time disposed to intervene in industry to make such strategic research possible.

The British Prime Minister, J. Ramsay MacDonald, addressed the Third Dinner of the N.I.f.P. in 1929 as follows:

I have long been interested in this Institute, and am profoundly convinced that unless we can apply science not only to industry but to our public activities this nation is bound to suffer. ... Industrial peace can neither be imposed upon employers nor upon employees. Industrial peace cannot be secured by the surrender of employers nor by the surrender of employees. Industrial peace can come only when both employers and employees show in their conduct to each other the successful operation of those selective processes and the fitting in of the peculiarities and specialities which are the special study of the Institute. (reprinted in Welch & Myers, 1932, 126-7.)

Whilst Ramsay MacDonald was arguing, optimistically, that industrial peace could achieved simply by applying the kind of the insights deriving from the Institute's research, Myers knew otherwise. The painful lesson he had learnt both during and after the war was that *organizational* peace was the *sine qua non* of applied psychology.

As if to add insult to injury, the Prime Minister went on to mention the painful subject of money (without offering any), and suggest that the Institute's activities were solely restricted to the field of vocational guidance. Indeed, he seems to imply that industrial peace is nothing more than a question of more careful attention to the selection of personnel:

If you, Dr. Myers, were endowed with something like a million a year, you could spend it in such a way that not a farthing of your endowment would be wasted. Wherever you turn you find some problem facing you, a problem that is sometimes expressed in the tragedy of the misfit - the greatest tragedy of our modern life - boys and girls put to occupations that they are no more fitted for than my shoe, but yet fitted for some occupation, for some interest. ... (reprinted in Welch & Myers, 1932, 126-7.)

Welch and Myers, in the book in which they reported the Prime Minister's speech, make no comment. Given the straitened circumstances of their Institute, they must have been thankful that Ramsay MacDonald and other worthies deigned to show up and acknowledge their existence at all. But Myers must have gritted his teeth. Even before he established the new Institute, he had been well aware that the application of psychology to industry would require the *political* restructuring of the work environment. His proposals were remarkably radical for the time, ranging from worker participation in management decisions to the government control of capitalism itself:

Of one thing there can be little doubt, that the unlimited profits hitherto absorbed by capital will be regulated by law. When capital has been paid a due reward for its services, the remaining profits must be equably divided among all concerned in its production. Thus capitalism and employment

will come to be rigorously distinguished - employment including both management and labour. To this end we are clearly approaching, the division being no longer between management and labour, but between capitalism and employment. (Myers, 1920, p. 156.)

The N.I.I.P. survived not only Myers' departure in 1938, but his death in 1946. It was finally wound up in the mid-seventies. At the time, I had just began my academic career in psychology, at University College London. When told the news by an older colleague about the Insitute's demise, I had to admit that I had never known of its existence.

### CONCLUSION

Myers and his National Institute for Industrial Psychology were faced from the outset with two dilemmas. The first was that his ideal of an applied psychology depended upon the existence and credibility of a securely established academic science of psychology. However, by becoming an applied psychologist, and removing himself and his co-researchers from the university setting, Myers found himself and his Institute on the wrong side of the academic-applied divide. The second dilemma concerned the state of British industry. The very troubles which existed within industry were a selling point for the application of psychology, just as the problems of the war had given psychologists a chance to prove their worth. But as Myers' experiences in the war had already taught him, psychology is not enough. The right political structures need to be in place, and in British industry and commerce they were not. Clearly there had to be problems for the new applied psychology to address, but the major problems of British industry were too serious and well beyond its scope; the deeply unsettled nature of industrial relations precluded anything other than the sporadic intervention of applied psychology.

When, through Bartlett's efforts, the Applied Psychology Unit was established at Cambridge in 1944, care was taken to ensure that it was closely locked into the University structure. Initially, its main clients were not private companies, but the military and the newly nationalized industries. Furthermore, as Kenneth Craik, its first director, stressed, its agenda was to be structured by academic rather than commercial interests, "the scientific ability of the members for basic research ... should not be swamped by work of transitory and local value" (Craik, 1945, p. 19). The Cambridge applied psychologists did their best to stay within the academy not only institutionally, but even in the very conduct of their research. The criticism by Edward Elliott, chief naval psychologist in the Ministry of Defence during the 1960s and 1970s, of the Cambridge approach rings true:

... the notion of the task of the experimental psychologist was to take a real life task and reduce it to some essential and simple core task which could be manipulated in laboratory experimentation. That noble sounding percept was at the heart of everything wrong with the earlier Cambridge experiments. (cited in Shimmin & Wallis, 1994, p. 74.)

In trying to maintain a safe distance from the 'real world', the Cambridge researchers must surely have had in mind the example of Myers' tragic excursion into the world of commerce and industry. To his scientific peers, the research of the N.I.I.P. appeared crisis-driven, intellectually unexciting, even menial. Indeed, simply by relinquishing his academic position at Cambridge, Myers already had compromised his status as a true scientist. On the other hand, as far as his potential clients in industry and commerce were concerned, the scientific pretensions of the Institute evidently compromised its credibility as a serious commercial enterprise prepared to get down to business and deal with the problems at hand. Either way, Myers could hardly win. Through his restructuring of the British Psychological Society, he had institutionalized the unequal alliance between "pure" and "applied" psychology, and then, with his rash departure from Cambridge, placed himself on the wrong side of this unhappy divide.

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