

WILLIAM STEPHENSON AND THE QUEST FOR A SCIENCE OF SUBJECTIVITY

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RESUMEN

Nuestro trabajo se centra en el esfuerzo de William Stephenson (1902-1989) en desarrollar una ciencia de la subjetividad que le preocupó a lo largo de toda su vida. Desde su famosa carta (1935) a "Nature" acerca del análisis factorial hasta su muerte en 1989, su trabajo refleja una reacción en contra de las ideas dominantes en Psicología. Nació en 1902 en Chopwell, Country Durham, England e inició su carrera en Físicas (PhD Physics, Durham, 1927). Stephenson abandonó Durham para seguir sus estudios en el University College de Londres, donde recibió su Ph.D. en Psicología en 1929. Fue el asistente de Charles Spearman antes de la jubilación de éste. En los debates de Charles Spearman y Cyril Burt que tuvieron lugar en los años 30 acerca del análisis factorial, Stephenson fue una figura importante. El servicio militar interrumpió su carrera que reanudó como Reader en Psicología Experimental y Director del Instituto de Psicología Experimental de la Universidad de Oxford. Stephenson tuvo intereses muy amplios y estudió Psicoanálisis con Melanie Klein. En 1948 emigró a los Estados Unidos donde fue profesor del Departamento de Psicología de la Universidad de Chicago. En 1958 aceptó un cargo en la Escuela de Periodismo de la Universidad de Missouri – Columbia. La "metodología Q" surgió fruto de un intento para poner las bases para una ciencia de la subjetividad. A pesar de numerosos esfuerzos institucionales para promover el interés por la metodología Q –una revista (*Operant Subjectivity*), una sociedad internacional (*International Society for de Scientific Study of Subjectivity*), una conferencia anual, una página Web, una lista de E-mail, Stephenson se mantiene como figura marginada en la Historia de la Psicología tanto en Gran Bretaña como en EEUU. Este trabajo investiga las posibles razones de esta marginación y denota las implicaciones potencialmente revolucionarias de sus ideas para la disciplina de la psicología, que deberían haber sido ampliamente aceptadas.

ABSTRACT

The focus of this paper is the life-long quest of William Stephenson (1902-1989) to develop a science of subjectivity. From his famous (1935) letter to Nature about factor analysis to his death in 1989, his work was a reaction against then current ideas in psychology. Born in 1902 in Chopwell, County Durham, England, Stephenson initially trained in physics (PhD Physics, Durham, 1927). Stephenson left Durham for University College, London where he received his PhD in Psychology in 1929. He was Charles Spearman's assistant prior to the latter's retirement. In the 1930's Stephenson was a central figure in debates about factor analysis with Charles Spearman and Cyril Burt. War service interrupted his career which was resumed at the University of Oxford where he was Reader in Experimental Psychology and Director of the Institute of Experimental Psychology. Stephenson's interests were broad and he underwent psychoanalysis with Melanie Klein. In 1948 he emigrated to the United States moving first to a Professorship at the Department of Psychology, University of Chicago. In 1958 he took up a position at the School of Journalism, University of Missouri-Columbia. Q-methodology was the fruit of his attempt to lay the foundations for a science of subjectivity. Despite numerous institutional developments promoting the interests of Q-methodology - a journal (*Operant Subjectivity*), an international society (*International Society for the Scientific Study of Subjectivity*), an annual conference, a Web Page, and a e-mail list, Stephenson remains a marginal figure in the history of psychology in both the UK and the USA. This paper explores some of the reasons for this marginality and notes the potentially revolutionary implications of his ideas for the discipline of psychology, were they to be widely adopted.

INTRODUCTION

The aim of this paper is to examine the origins and initial development of the ideas of William Stephenson, founder of what has come to be known as Q-Methodology. Stephenson was an significant figure in British Psychology during the second quarter of this century. Trained in both physics and psychology, he was a doctoral student of Charles Spearman, a pioneer in the development of psychometrics and factor analysis (its principal research tool). In keeping with one of the themes of this Symposium I shall focus on Stephenson as an important (though neglected) figure in the psychology of the first half of this century, arguing that his radical ideas were essentially all in place by the time of the publication of his second book in 1953. I shall suggest that Stephenson's work was ignored or misunderstood and, as a consequence, its potential to redirect the course of psychological investigation into the nature of subjectivity and shared meaning has not been realised. I shall also suggest that the lasting significance of Stephenson's work lies in his attempt to establish a scientific approach to the study of human subjectivity that builds on the pioneering ideas of William James (1912), Arthur

Bentley (1935), John Dewey (1929), and Jacob Kantor (1933, 1959) to develop an anti-Cartesian approach to human experience that seeks to avoid such dualisms as body/mind, subjective/objective, and fact/value. Stephenson can thus be seen as part of an intellectual tradition in the human sciences that seeks to emphasize the mutuality of person and environment (Pronko and Herman, 1982; Still & Good, 1992, 1998).

I begin with a brief sketch of Stephenson's life, noting the four principal locations in which he worked. I draw attention to the significance of his training in both physics and psychology. I then show how the principal elements of his radical approach to the development of a «science of subjectivity» were in place before he left the United Kingdom for the United States in 1948. In the final section of the paper I explore some of the reasons for the neglect of his work and for Stephenson's marginal status in psychology.

WILLIAM STEPHENSON - A BRIEF BIOGRAPHICAL SKETCH

Born in 1902 in Chopwell (near Blaydon), County Durham, England, Stephenson initially trained in physics (BSc Physics, 1923; PhD Physics, Durham, 1927). Stephenson began his studies at Armstrong College, Newcastle in 1920 (then part of the University of Durham) having been a pupil teacher the previous year (being too young to attend university). He obtained his Master's degree in 1923 and his Ph.D. in 1927 (title - «*On the effect of the shape of the cathode on the glow discharge. The 'hetero-norma' current density effect*). While at Durham he also completed a Diploma in the Theory and Practice of Teaching (1924). It is likely that this brought him into contact with another of the pioneers of factor analysis - Godfrey Thomson - who had taken up an appointment in Education at the University of Durham in 1919. In his contribution to the collection of essays offered to Stephenson on his retirement Cyril Burt notes that Stephenson arrived in London with a letter of introduction from Thomson (Burt, 1972).

It is significant that Stephenson had been studying physics at a time when the implications of quantum theory were being hotly debated and he clearly was excited about the possibility of exploring the significance of such ideas for psychology. But there is at least one other possible influence on Stephenson which might have led him to abandon physics in favour of psychology. Stephenson notes in a 1979 paper that the first psychologist he ever met (circa 1925) was Kurt Koffka who had been passing through Durham on his way to Smith College in Massachusetts (Stephenson, 1979). Stephenson and Koffka were also to meet again later in 1939-40 at Corpus Christi College in Oxford where Koffka was on sabbatical leave.

In 1926 Stephenson left Durham for University College, London where he received his PhD in Psychology in 1929. As Spearman's last research assistant (Spearman retired in 1931) and his brilliant protégé, Stephenson was during the early 1930s a central figure in debates about psychometrics and factor analysis. He was also a research assistant and colleague to Spearman's successor Cyril

Burt. Stephenson was an early editorial board member of *Character and Personality* (later to become *Journal of Personality*) and of *Psychometrika* in both of which his early papers on Q methodology were published. In an unpublished manuscript (Stephenson 1970/1980) Stephenson acknowledges the influence on his ideas about subjectivity of the Scottish Common Sense School of philosophy - especially the work of Thomas Reid and William Hamilton - an influence that was mediated through his mentor Charles Spearman in his two volume book *Psychology Down the Ages* (Spearman, 1937). During this time Stephenson wrote on test theory with William Brown, helped found the British Rorschach Society, and (on the recommendation of Ernest Jones) underwent analysis with Melanie Klein.

Stephenson moved to Oxford in 1936. Experimental Psychology had come late to Oxford in comparison with Cambridge and the experience of German and American universities. Provision for the teaching of psychology had been available from 1898 when the Wilde Readership in Mental Philosophy was founded but it took almost fifty years before there was a chair in experimental psychology (Morrell, 1997). In 1936 Stephenson became Assistant Director of the Institute of Experimental Psychology. During his time at the Institute Stephenson extended his interest in mental testing by developing tests for Oxford County Council and for other educational committees. Although it is now clear that Stephenson played a central role in the establishing the Honours School in Oxford (Zangwill, 1972; Morrell, 1997), in the standard history of British Psychology (Hearnshaw, 1964) he does not merit even a mention.

War service interrupted his career and thus the development and dissemination of his ideas about Q-methodology. He served from 1939-1943 as a consultant to the Central Trade Test Board, Royal Air Force and from 1943-1948 as Consultant Psychologist to the British Army (War Office), rising to the rank of Brigadier-General. On his return to Oxford where he had already become Reader in Experimental Psychology he succeeded William Brown as Director of the Institute of Experimental Psychology. Despite his successes at Oxford and the innovative nature of his work in factor analysis, Hearnshaw (in his biography of Cyril Burt) notes that with the death of Spearman in 1945, Burt and Godfrey Thomson were left as the standard-bearers of factor analysis in Great Britain (Hearnshaw, 1979, p.167). There is no mention of the contributions to factor analysis of William Stephenson.

In 1948 having failed to secure the newly established Chair in Psychology at Oxford (this was filled by George Humphrey - a former Oxford philosopher brought back from Canada) - he emigrated to the United States moving first to a Professorship at the Department of Psychology, University of Chicago. Stephenson was recruited to the Chicago Department by the then new Department Chair James G. Miller. Among his colleagues at Chicago were Riesman in sociology, Carnap in philosophy, Thelen in group dynamics, and Janowitz in the social sciences (Lipgar, 1995). A kindred spirit in what was predominantly an experimental department was Carl Rogers. Rogers was subsequently to use Q-sorting as a technique for the investigation of therapeutic change but he was never to embrace Q-methodology as such (Rogers, 1972). Although Stephenson was

recommended for tenure several times, this was not approved. Nonetheless Stephenson, for a time at least, felt at home intellectually in the university of John Dewey and George Herbert Mead.

Before taking up a position as Distinguished Professor of Advertising Research at the School of Journalism, University of Missouri-Columbia in 1958, Stephenson spent three years as director of advertising research for Nowland and Company. Stephenson became Professor Emeritus at Missouri-Columbia in 1972 and spent a very full retirement further developing his ideas about a science of subjectivity. In 1989 (the year in which he died) he returned to England to take part in the first British Q-methodology conference at the University of Reading. William Stephenson's principal publications include *The Study of Behavior: Q-Technique and its Methodology* (1953), *The Play Theory of Mass Communication* (1967), *Quantum Theory of Advertising* (1986b).

THE EMERGENCE OF Q-METHODOLOGY

In a celebrated letter to the prestigious British journal *Nature*, Stephenson wrote:

«[Factor analysis] is concerned with a selected population of n individuals each of whom has been measured in m tests. The $(m)(m-1)/2$ intercorrelations for these m variables are subjected to either a Spearman or other factor analysis.

The technique, however, can also be inverted. We begin with a population of n different tests (or essays, pictures, traits or other measurable materials), each of which is measured or scaled by m individuals. The $(m)(m-1)/2$ intercorrelations are then factorised in the usual way.

This inversion has interesting practical applications. It brings the factor technique from group and field work into the laboratory, and reaches into spheres of work hitherto untouched or not amenable to factorization. It is especially valuable in experimental aesthetics and in educational psychology, no less than in pure psychology» (Stephenson, 1935a, p. 297).

It was thus that Stephenson set out the contrast between the Q approach and the traditional R approach to the use of factor analysis in the study of human ability and personality. The distinction between Q and R had also been coined by Godfrey Thomson in July of the same year (Thomson, 1935). Indeed they both independently proposed the possibility of correlating persons rather than traits, and both acknowledged that Cyril Burt had much earlier explored a similar idea (Burt, 1915). But neither Burt nor Thomson shared Stephenson's conviction that the Q approach offered something substantially new.

The essence of the Q approach is identified in the above paragraphs. Individuals scale (or rank order) a set of items (pictures, statements, objects) in relation to some condition of instruction («*how characteristic this item is of my point of view*»; «*how much I like this item*» etc.). These rankings are then inter-correlated across persons and factored. The resulting factors express shared perspectives or points of view (nowadays some would use the term «*social representations*») about the

world. Essentially the technique taps the idiosyncratic organization of a person's views and then relates that to the views of others. Thus the ranking exercise is both self-referential and holistic. It is the patterning of items that matters and not the values assigned to individual items as such. Given this emphasis on self-reference, Stephenson believed his approach was much truer to the new physics than R methodology - he was attempting «*to bring the method of physics into the realm of personality measurement*» (Stephenson, 1936 p. 299), a matter he was to explore further much later in his life in a series of papers (Stephenson, 1981, 1982, 1986a, 1988). It is clear from these early papers that Stephenson believed that he was offering a radically new approach to subjectivity. As he was later to express it in his (1953) book:

«*Our concern, however, is not to be with Q-technique alone, or even principally. Rather, it is with a challenge to psychology, in certain of its aspects, to put its house in scientific order*» (Stephenson, 1953, p. 1).

«*....we are to deal with concrete behavior as such, of the kind described by humanists, historians, playwrights and novelists....the total person-in-action is our concern....what is subjective, such as thinking, and what is observable to others, such as playing golf, are in no way distinguishable for scientific purposes. Dreaming is as much behavior as is jumping a stile or dashing a hundred yards. All is a matter of interacting with this or that situation. Inner experience and behavior are thus alike. Both are matters for objective, operational, definition and study*» (ibid, p. 4).

SOME CONCLUSIONS

Despite his early successes as a brilliant protégé of Charles Spearman, a research assistant to Cyril Burt, a Consultant Psychologist to the British Armed Forces and his postwar appointment as Director of the Oxford Institute of Experimental Psychology, Stephenson was lost to the discipline of psychology when he moved from the University of Chicago to a research professorship in the School of Journalism, University of Missouri, where he remained until his death in 1989. Stephenson's marginality in UK psychology can be seen to reflect at least four considerations. Firstly his geographical isolation for the last forty years of his life. Secondly his disciplinary isolation from psychologists in his normal working institutional environment. Thirdly a tendency for Q-methodology (and Q-sorting) to be dismissed as just another «*technique*» rather than being seen as a fundamentally different way of approaching and assessing human subjectivity. This was a problem from the beginning of Q research and is reflected in Burt's insistence that the Q technique is simply an inversion of R (a matter which was the focus of a long-running debate about the «*reciprocity principle*» cf Brown, 1997; Burt, 1937, 1972). A further contributing factor is the use of the term «*subjectivity*» itself. Despite Stephenson's attempt (very clearly enunciated in Ch. 2 of *The Study of Behavior* - noted above) to overcome the dualisms of subjectivity and objectivity. body/mind, the continuing emphasis by Q-methodologists on just one pole of this duality tends to perpetuate the dualism.

The contemporary legacy of William Stephenson is remarkably similar to that of another marginal figure in the history of the psychology of the first half of the twentieth century - James Gibson. Their students and colleagues have established institutional structures to perpetuate and develop the traditions - a scholarly society, a journal, annual conferences, and an e-mail list or Web Page. Moreover, the ideas of both Gibson and Stephenson are sufficiently radical to be seen as revolutionary if they were to be adopted successfully. Perhaps we can leave (almost) the last word to Stephenson:

«*Unhappily, much of what is proposed in these chapters may be so dubbed [i.e. as controversial] because subjectivity remains infra dignitatem in the halls of scientific institutions. My theories will haunt these halls, for due process in due course*» (Stephenson, 1986b, p. 110).

The recent revival of interest in meaning that has arisen under the influence of the «*turn to discourse*» (Harré, 1992a) and the «*second cognitive revolution*» (Bruner, 1991; Harré, 1992b) together with attempts to develop a non-Cartesian account of experience (Reed, 1996) may ensure that these ghostly manifestations of Stephenson's ideas about subjectivity may no longer haunt our premises, intellectual or otherwise.

Some principal events in the life of William Stephenson

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| 1902 | Born Chopwell, County Durham, England, May 6. |
| 1918-1919 | Pupil-teacher at Blaydon Secondary School |
| 1920-1923 | B.Sc. Physics, University of Durham |
| 1924 | Obtains Diploma in the Theory and Practice of Teaching |
| 1926 | Moves to UCL (University College London) to study with Charles Spearman. |
| 1927 | Ph.D. Physics Durham |
| 1929 | Ph.D. Psychology University of London
Appointed Research Assistant, University College London |
| 1936 | Joined staff at the Institute of Experimental Psychology at Oxford as Assistant Director. |
| 1939-1943 | Served as a consultant to the Central Trade Test Board, Royal Air Force |
| 1942 | Reader in Experimental Psychology, University of Oxford |
| 1943-1948 | Consultant psychologist to the British Army (War Office). |
| 1945 | Stephenson succeeds William Brown as Director of the Institute of Experimental Psychology. |
| 1947 | Establishing of first undergraduate combined degree in psychology, philosophy, and physiology at Oxford.
George Humphrey is elected to first Oxford Chair in Psychology |
| 1948 | Leaves Oxford to take up appointment as Professor of Psychology, University of Chicago. |
| 1949 | Publication of <i>Testing School Children</i> . |
| 1953 | Publication of <i>The Study of Behavior</i> . |
| 1958 | Appointed as Distinguished Research Professor in Advertising, School of Journalism, University of Missouri-Columbia. |
| 1967 | Publication of <i>The Play Theory of Mass Communication</i> |

1972	Professor Emeritus, University of Missouri-Columbia.
1977	<i>Operant Subjectivity</i> begins publication.
1985	Establishing of Stephenson Center for Communication Research, University of Missouri-Columbia.
1986	Publication of the <i>Quantum Theory of Advertising</i>
1989	International Society for the Scientific Study of Subjectivity is founded. Attends first British Q Conference at the University of Reading. Died June 14, following complications after a stroke.

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