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MARGARET MASTERMAN: INNOVATOR

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It was not until 1972 that I first met Margaret Masterman, although I had knowledge of her work and of the existence of the Cambridge Language Research Unit (CLRU) through connections with other members of her family. My own interest in mechanical handling of language did, coincidentally, start in the same year as the founding of the Unit, 1956, when I was given the task of assessing the prospects for future machine translation systems by a large British electronics company.

My first meeting with Margaret was at a Birmingham University departmental evening organised by her son, Lewis. I have often since wondered if 'meeting' is the correct word - perhaps 'encounter' or even 'confrontation' would describe it better. It was certainly traumatic and was temporarily abandoned at three o'clock the following morning - solely due to the utter exhaustion of the participants - but continued intermittently over the next eight years, culminating in my joining the Unit in 1980. Over this period I became used to Margaret turning up expectedly - or unexpectedly - at my house in Leamington Spa, toting one, or more, bulging shoulder bags, crammed with the evidence of her thoughts and activities since our last session. Invariably, the sitting room floor was cleared; the contents of the bags were distributed about the place and battle commenced. I can, therefore, only claim to be a co-midwife of the rebirth of the Unit in 1980. Since then, until her last, severe illness, Margaret and I worked closely together so, even if only at second hand, I am keenly aware of the inspiration and motivation which created CLRU in the first place and I am equally conscious of the valuable, and sometimes unique, contributions made by the many people who Margaret gathered about her from the beginning and who have each, to one degree or another, contributed to the expertise and know-how accumulated over the years.

Margaret was the daughter of C.F.G. Masterman, the notable Liberal politician and writer, and Lucy Lyttleton, author and poet. She studied Modern and Medieval Languages and Moral Science at Newnham College and, later in life, Chinese, which she came to regard as almost the perfectly developed human means of communication. Amongst her many and varied interests, each pursued with vigour, enthusiasm and intensity, were the theatre (she herself wrote plays and novels), water colours and music, particularly religious music with an emphasis on the cadences of plainsong. From such a breadth of personal experience it is scarcely surprising that basic elements of all these interests were apparent to her in the most subtle and complex human attribute - language. She saw in language evidence of the colours, tones and nuances of shade necessary in painting

to catch and hold the human eye; the rhythms, contra-rhythms and subtle interplay of sounds essential to seize and interest the human ear; she saw in the rhetoric of the theatre the power of words properly and aptly used to seize hold of the collective mind of the audience and keep them in their seats. These influences, and many more, she was convinced, were present even in the simplest of everyday utterances.

All who met and conversed with Margaret had the opportunity to appreciate one of her most devastating but intriguing innate talents, that of suddenly prophesying future developments in a mind-rivetting way. Thus, in the 1950s she readily perceived the radical impact that the development of high-speed operating machines would have on all aspects of language handling. Unfortunately, one of her other facets, impatience, made it difficult for her to accept the time-scale that would be required for a real benefit to become apparent. Confident of the eventual ability of machines to handle language at a level of sophistication approaching the unique human ability, she was less than enchanted by the conventional wisdom which, invariably at that time, set about constricting, rearranging and generally butter-patting language into a form the existing machines could cope with.

Given the situation outlined, it is not difficult to envisage the attitudes facing Margaret by the mid-1950s. A radical, forceful personality with pronounced and insightful views on the handling of language, had to base the implementation of them, at least to some extent on far-in-the-future development of the equipment necessary. Conventional research on the subject quietly took to the shelters, At this stage, Margaret's husband, Richard Braithwaite, Knightsbridge Professor of Moral Philosophy at Cambridge, Oliver Zangwill, Professor of Experimental Psychology at Cambridge and Robert Thanless, Reader in Educational Psychology at Cambridge, felt that Margaret's philosophies could bear further investigation and funded CLRU, a research charity, with Margaret as Director of Research.

Over the next two decades a steady succession of linguists, mathematicians, physicists and representatives of many other disciplines found a sanctuary in which they could develop aspects of the basic CLRU natural language handling philosophies in a sympathetic climate. Mechanized parsing, mechanized thesauri, problems of information retrieval, machine translation and language theory received close attention. Tasks carried out for British and overseas government departments and institutions helped to add practical experience to the growing theoretical knowledge.

In conclusion, I wish to add my own personal appreciation of Margaret. She was a vivid, irascible, kindly, perceptive, impatient barn-storming character, who nevertheless had subtle insights over a wide range of subjects. She was infuriating at times, but never boring, and above all the innovator supreme. I enjoyed our work together and am unlikely to ever entirely come to terms with her absence.