ORATION FOR PROFESSOR RAY TALLIS

Some of us have the courage to think differently. Some of us have the intellect to understand, in detail, the complexities of scientific endeavor. Some of us have the ability to inspire others. Professor Raymond Tallis does all. Ray is celebrated both for his philosophical contributions and distinguished medical career.

Since retiring as Professor of Geriatric Medicine at the University of Manchester in 2006 he has accelerated his career as a philosopher who contributes an important critique of current fashions in thinking. Accolades abound, and I’m sure that many of you have listened to, or read with interest, his inputs to public debate of issues important to all of us. Not widely known, is the important impact that Ray has made not just to advancing the science and practice of rehabilitation, particularly for people with neurological disability, but also to the development of the therapy professions. Those are the untold achievements. These untold achievements are what we celebrate today.

To understand Ray’s substantial contributions, let me take you back to the early 1990s. At that point, science held that if a person sustained brain damage then recovery was impossible. Consequently, it was thought that people needed to adapt to their disability. For example, if somebody had lost the use of an arm because of a stroke then they should just use the undamaged arm. But Ray had his eyes open. He saw contrary evidence from what therapists were doing in practice. He noticed that therapy techniques resulted in recovery against scientific understanding and expectation. Others dismissed these observations. Ray took them seriously. He embarked on a journey to enhance the science of rehabilitation.

This line of scientific enquiry was much welcomed by therapists. Especially as, at that point, most had not been able to benefit from degree courses. Diplomas were the norm. Consequently, therapists had limited opportunities for postgraduate education. For example, in 1994 only around ten physiotherapists in the UK had a PhD. So, having Ray as a champion of rehabilitation research was very welcome indeed.

Alongside support for others Ray also led his own research programme. Let me give you some examples of his scientific achievements.

A key focus was on the direct results of neurological pathology. In contrast, most researchers were concentrating on the end result of brain damage such as walking ability. But, people can walk abnormally because of adaptation to brain damage not just as a direct result of that brain damage. Ray’s insight was to concentrate
on the components required for tasks such as walking. For example, the inability to voluntarily contract a weak muscle because that is closer to the direct biological effects of brain damage.

This insight is evident in the seminal work he conducted into spinal cord stimulation which produced improvement in people with multiple sclerosis. Precise measurement showed that stimulation produced improvement not because people were trying harder or because being in a research study meant that their motivation had improved. They were biological improvements i.e. restoration rather than adaptation.

Ray conducted seminal work into enhancing the ability of people with neurological damage who find it extremely difficult to start to walk. He produced a new classification of different forms of difficulty initiating walking and found that physiotherapy interventions produced improvement. So more evidence towards a new scientific approach of restoring function.

On the basis of these and other discoveries Ray won funding for the first-ever Therapy Research Unit. This enabled a long-term programme of work into the development of restorative neurorehabilitation. This award in 1996 coincided with the discovery of neuroplasticity which is the biological process by which the brain recovers after injury. Neuroscience had caught up with Professor Raymond Tallis.

Following this, Ray initiated and led the Academy of Medical Science's report called: “Neurorehabilitation: putting the neurosciences to work in neurorehabilitation”. Thus, turning around the established view of neuroscience always being the leader. Others are now promoting the two-way translation of knowledge, but remember, Ray was there first.

In summary, Ray is a rehabilitation research pioneer. He has also championed the therapy professions which has facilitated the transition from remedial therapists to rehabilitation scientists. At a neurorehabilitation conference now, in 2017, it is difficult to distinguish the neuroscientists from the clinical rehabilitation scientists. Indeed, neuroscientists contribute to conferences led by therapists. A revolution.

So thank you Ray, you are a hero of rehabilitation.

_Vice-Chancellor I present to you Raymond Tallis for the degree of Doctor of Science honoris causa._