I TRAINED in neuropsychology in the early 1980s. At that time (even more than today) the field was dominated by cognitive theory and methods. We learned a great deal about the manner in which the mechanisms of language, memory, visual recognition and the like were organised in the brain, but we learned very little indeed about those aspects of mental life that were less readily amenable to information-processing models. Subjects like emotion, motivation and personality were barely touched upon.

The great strength of scientific psychology in general, and neuropsychology in particular, is that it considers the mind objectively. The mind is, after all, just a part of nature – it must somehow be reducible to lawful mechanisms that can be precisely defined in objective, third-person terms. All the achievements of scientific psychology derive from this. Especially in the case of neuropsychology, the fact that the mind can be literally objectified in the form of a physical organ, is a great advantage. Studying mental mechanisms from the viewpoint of their physical basis in anatomy and physiology has enormous value from the natural-scientific standpoint, for it introduces into psychology all the possibilities of measurability and control that a physical science provides. The fleeting, fugitive stuff of the mind has always been an embarrassing handicap to scientifically minded psychologists. Neuropsychology changed all that; and that, no doubt, was part of its appeal for me as I entered the field.

The problem with this approach, however, is the obvious fact that the mind is also not just another object. It is in the very essence of what we call 'mind' that it is also a subjective thing. The mind could, in fact, perhaps best be defined as the subjective aspect of nature. When we say that the mind is just a part of nature, what we mean is that subjective experience – no less than other perceivable things – actually exists. We experience the world not only in the form of physical objects that we can see, hear and touch, but also in the subjective form of feelings, volitions and intentions. Such things, too, are therefore part of empirical reality. As such, they have causal, explanatory power. Much behaviour would be extremely difficult to understand without recourse to variables of this kind. Consider the case of suicide. How could one possibly explain the causal chain of events in a suicide without reference to emotional feelings and subjective thoughts – such as 'my life is too painful to endure'? Although it might be possible in some absurdly roundabout way to exclude such things from our explanatory accounts, it would clearly require disingenuous re-labelling of a great deal of what actually happened. And what is the point of that?

Unlike every other bodily organ the brain cannot be reduced to mechanisms alone; it cannot be adequately described as just a machine. In my view, the defining characteristic, the distinguishing feature of the brain is that – unlike the liver, lung or stomach – it possesses subjectivity; i.e. the capacity to feel what it is like to be a brain. Moreover, it has the capacity to communicate that feeling to other minds; the human brain can speak and tell us what it feels like to be what it is. These capacities provide us with an absolutely unique perspective on nature. And perhaps most important of all: the mind has agency. Unlike any machine, it is master of its own house, an intentional being in the world, possessed of that ineffable quality we call 'free will'.

Any science of the brain which ignores these facts will be ignoring the most essential distinguishing features of its object of study. And yet that was precisely what the neuropsychology of the 1980s seemed to want to do.

When I asked my professors about these things – about the neural basis of feeling, meaning, and the intentional self – I quickly learnt that one was not supposed to ask such questions in neuropsychology. I am sure I am not the only person who entered the field with the expectation that it concerned itself with exactly those things. If psychology is not concerned with them, then what science is?

I later realised (in analysis, as it happens) that I also had a more personal reason for wanting to understand these aspects of the brain. When I was four years old, my six-year-old brother sustained a traumatic brain injury as a result of falling from a clubhouse roof while our parents were yachting. Needless to say, this dramatically altered the course of his life as well as the lives of all of us in the family. No doubt this event, and its painful sequela, impressed upon me in a most direct way the real profundity of the link between mind and brain, between person and brain. It was, I am sure, the traumatic consequences that this connection caused my brother – more than any other single cause – that aroused my interest in the physical basis of the mind. And yet my teachers in the 1980s were telling me that things like personality and identity and self were not appropriate topics for a promising young student of neuropsychology to concern himself with. Such interests were in fact positively dangerous – at least as far as academic career prospects were concerned.

But still, my frustrations at the limitations of the discipline grew. This was the origin of my interest in psychoanalysis. A friend in the philosophy department – of all things – suggested that I attend a seminar on Freud's Project for a Scientific Psychology. I remember well the mixed feelings I had in that seminar. It felt as if I were committing treason. But I quickly learnt why I was there. Freud, for all his faults, was evidently a scientist of the kind that I aspired to be: he had clearly made a serious attempt to incorporate the mind (the real mind) into the realm of neurological science. He seemed to be a truth-loving
researcher who, when confronted with the enormous difficulties implied by the very idea of a ‘science of subjectivity’ decided that his methods had to be adapted to this subject matter, rather than the other way round. The other approach could only result in the exclusion of the human subject from science.

I was soon compulsively reading everything about Freud and his work that I could lay my hands on. To his enormous credit, my supervisor – while clearly disapproving – made no attempt to prevent me, while simultaneously making clear that nobody in neuropsychology today still took seriously the speculations that Freud laid out in his 1895 ‘Project’, and even more so his subsequent work.

I found it difficult to understand the prejudice. If Freud was wrong, or limited by the primitive scientific methods of his time, then surely all we needed to do now was subject his conclusions to modern scientific scrutiny. Using modern technology, such as neuroimaging, it would surely be possible to test, revise, and replace his findings where necessary. Surely that was preferable to excluding the subject matter of psychoanalysis from science.

My determination to take the former course was greatly strengthened by the knowledge that Freud himself had been a neuropsychologist. He had in fact made very valuable contributions to aphasiology, and had introduced the concept of agnosia in the early 1890s. He had only abandoned the study of the brain – very reluctantly – due to the lack of any valid methods for exploring the neural basis of the complex mental phenomena he discerned in his clinical work. This historical origin of psychoanalysis provided a useful foundation for re-integrating Freud’s later contributions with neuropsychology. Freud was, after all, one of us, he thought like a neuropsychologist, at least in what came to be known as his ‘metapsychological’ writings.

And so I decided to jump ship. In 1989 I began training at the Institute for Psychoanalysis in London. In the ensuing years I was gradually immersed in the methods and findings of that discipline – devoted to the study of real lived lives. Needless to say, there were once again many frustrations and disappointments along the way, but at least I was now among colleagues who were trying to understand the things that had interested me all along.

What was lacking, of course, was adequate scientific control, which was closely linked in my mind to the lack of any serious effort on the part of analysts to discover the neural basis of the complex mental processes that their clinical work had uncovered. This, then, was the contribution that I myself could make. Basing myself on the enormous advances that had occurred in neuropsychology in the intervening century, I could find the neural foundations that Freud had sought in vain. This could serve as a starting point for a new, deeper neuropsychology of the person. I immediately set out to research the brain mechanisms of dreaming, my rationale being that dreaming was the mental function that Freud (1900) has chosen to use as the starting point for his first attempts to conceptualise the overall structure and function of the mind. If I could establish the neural correlates of this aspect of his model, I assumed, I would have forged something of a Rosetta Stone for correlating the findings of psychoanalysis with those of modern neuropsychology. The results of my efforts in this direction quickly paid dividends (Solms, 1995, 1997, 2000).

Thereafter I broadened my focus in various directions, concentrating mainly on complex neuropsychiatric phenomena produced by focal brain injury, such as anosognosia and confabulation. It was possible to show, initially using psychoanalytic methods, that confabulation cannot be understood in terms of memory and executive deficits alone; disinhibited motivational factors are at work which positively distort memory construction in a wishful direction (Fotopoulou et al., 2004; Kaplan-Solms & Solms, 2000). Likewise anosognosia seems at least in part to involve ‘the repression phenomena that form the cornerstone of classical psychoanalytical theory’ (Ramachandran, 1994). The role of psychodynamic factors, here too, was initially demonstrated using psychoanalytic methods (Kaplan-Solms & Solms, 2000) and later confirmed experimentally (Turnbull et al., 2005).

The unfolding results of this exciting work have more than vindicated my decision to take psychoanalysis seriously. On this basis, I and a growing number of like-minded colleagues have established a new interdisciplinary area called neuro-psychoanalysis, the simple aim of which is to introduce the psyche into neuropsychology – to demonstrate that the brain cannot possibly be understood if the subjective aspect of its nature is neglected or even ignored (see www.neuro-psa.org).

In closing, if I may be forgiven for quoting a journalist in this context, I can think of no better description of what neuro-psychoanalysis aims to achieve than what Fred Gutel wrote in Newsweek: ‘It is not a matter of proving Freud wrong or right, but rather of finishing the job’. I am delighted to be participating in that task.

Mark Solms is Professor in Neuropsychology at the University of Cape Town, South Africa. E-mail: msolms@humanities.uct.ac.za.

References


