

briefly touched on by Dr Goldsmith, but I am sure he would be the first to admit that the time when we shall have an adequate supply of these critic-communicators is far distant. The remaining 60 per cent of the book consists of two appendices, the first of which is concerned with some of the nuts and bolts of science journalism, and the second with examples of popular science writing.

I enjoyed reading this book and I think many others would too. The trouble is that it touches upon many topics, none of which is explored in any depth, and the main conclusions seem to be so miniscule.

Going into a trance

Anthony W. Clare

The Induction of Hypnosis. By William E. Edmonston, Jr. Wiley: 1986. Pp.432. £42.25, \$43.95.

THERE are those, most notably Leon Chertok, who argue that the therapeutic element in psychoanalysis, in so far as there is one, is suggestibility, and that psychoanalysis, through its intermediary the transference, has not disengaged from hypnosis but has merely changed the terminology. Freud himself declared in 1921 that "we still have no explanation of the nature of suggestion itself, that is to say of the conditions in which one is subject to its influence". It is indeed the case that ever since then many analysts have retained a lively interest in the subject of hypnosis.

Contemporary hypnotists stress the importance of eye fixation and the attention-rivetting techniques employed to bring about the hypnotic state. They do so with the same degree of purist vigour as analysts emphasize the crucial importance of free association and interpretation, and behaviourists insist on the essential therapeutic features of conditioning and deconditioning. The real question, however, is the emotional aspects of the therapeutic relationship, the affective content of the procedures rather than the actual theoretical procedures themselves; yet it is this affective component of therapy, bound up as it is in notions such as suggestibility and susceptibility, which is poorly studied and indeed rarely considered.

The fact remains that it was the nineteenth-century developments in hypnotherapy that facilitated the growth of modern psychotherapy, and it does not seem too far-fetched to believe that in the unravelling of hypnosis lies the answer to the thorny question of the efficacy of psychotherapeutic procedures in general. Such issues are not the subject matter of Edmonston's book any more than they seem to be the concern of many psychotherapists. But the contents of the book

Glancing at it again after my first reading, it seems to me that it was probably written, if not in Dr Johnson's record-breaking time, then very quickly from pieces that had already been published or were lying about nearly finished on the author's desk. No criticism of Dr Goldsmith for that, but merely to say that whilst it is a good read it is not a great book. □

Lord Dainton is Chancellor of the University of Sheffield, Sheffield S10 2TN, UK, and was, among other appointments, formerly President of the Association for Science Education and Chairman of the British Library Board.

make it abundantly plain that such a state of affairs cannot last.

If the author of this detailed text on the subject is to be believed, the history of hypnotic induction is the history of medicine. It is true that the induction of sleep has been a mainstay of therapeutic interventions since before Hippocrates. References to what sound like hypnotic trance states can be found in Vedic medicine, in the Papyrus Ebers of Egyptian medicine fifteen centuries before Christ and in the healing rituals of the Irish Druids before the arrival of St Patrick. Not surprisingly, in the revised history of hypnosis Mesmer ceases to be the pivotal figure he seemed and is deemed to be not so much a pioneer as a catalyst, giving hypnosis a vital nudge forward at an opportune time.

Edmonston devotes a great deal of space to a historical review of the role of hypnosis and to an enumeration of the many, varied and elaborate ways of inducing a hypnotic trance. But at times the list of treatments falling under the rubric of hypnosis becomes rather elastic. It is doubtful, for example, that the methods of Valentine Greatrakes, a contemporary of William Harvey, were truly hypnotic, given that he relied upon the laying on of hands and the smearing of his patients at St Bartholomew's Hospital with spittle!

The real issue in contemporary hypnosis is not its historical roots, nor its induction methods. It is the precise relationship between classical hypnosis, with its emphasis on the induction of a trance or sleep-like state, and the newer task-orientated forms of behaviour therapy with their emphasis on relaxation, concentration, the relief of anxiety and the induction of tranquillity. A related question is to do with the relationship between the analytic transference, so stressed within psychodynamic psychotherapy, and the notion of suggestibility which lies at the heart of hypnotic methods. These, however, are matters that are scarcely touched upon in this book. □

Anthony W. Clare is Professor in the Department of Psychological Medicine, St Bartholomew's Hospital Medical College, West Smithfield, London EC1A 7BE, UK.

Our lady of radium

H.W. Paul

Marie Curie: A Life. By Françoise Giroud. Translated by Lydia Davis. *Holmes & Meier, New York: 1986. Pp.291. \$34.50.*

ROENTGEN'S discovery of X rays in 1895 led directly to the discovery of radioactivity by Henri Becquerel. Unlike X rays, radioactivity did not excite scientists or the public; no lead-lined knickers were sold to protect prudent women from its scrutiny. Then, in 1898, Marie and Pierre Curie announced their discovery of polonium and radium, and a radium craze soon infected the world. The public had not been so interested in science since the publication in 1859 of Darwin's book on the origin of species.

Marie ("Manyad") Sklodowska, a polyglot positivistic Pole from Warsaw, went to the University of Paris in 1891 to study science. Polish nirvana: freedom from the Russian yoke, cheap education, even for women, the opportunity to work for the improvement of mankind through science, and freedom to discuss the Polish condition without the threat of arrest. Marie was a brilliant student and immediately attracted the attention of Sorbonnard mandarins such as Paul Appell, Edmond Bouty and Gabriel Lippmann.

In 1895 she married into the tribe of French physicists, a rather inbred group. The marriage changed Pierre Curie's career, for he was seduced into collaborating with Marie on the scientific obsession of the day, radioactivity. Working in a shed at the municipal school of industrial physics and chemistry, they made their famous discoveries. International fame led to success in Paris: Pierre was given a chair at the Sorbonne, to prevent his going to Geneva, and after his death in 1906 the chair went to Marie. The science faculty's radical precedent of opening its ranks to women was not followed by the Académie des Sciences, which narrowly preferred physicist Edouard Branly of the Institut Catholique—a minor triumph for Catholicism over republicanism. Nearly a century before, women interested in science had been excluded from the newly-created faculty on the grounds that men would be more interested in them than in the professors' lectures. That must rank as one of the world's worst academic administrative decisions. In her long career Marie Curie won two Nobel prizes, one, with Becquerel and Pierre, in physics, and one for herself alone in chemistry. Amongst the many virtues of the Third Republic (1871–1940) was that it made possible, if improbable, a career in science for women.

In this book, Françoise Giroud has given us a very touching portrait of Marie