JOSEPH DELBOEUF (1831–1896): A FORERUNNER OF MODERN IDEAS ON HYPNOSIS

Alan Gauld

Department of Psychology, University of Nottingham

ABSTRACT

Delboeuf is chiefly remembered today for his lively and perceptive accounts of his visits in the 1880s to the hypnotic schools of the Salpêtrière and of Nancy. But he was himself an active and thoughtful practitioner and theorist in the field of hypnosis. His early position was close to that of the Nancy School, and during this period he carried out interesting experiments on post-hypnotic amnesia, on the so-called *veille somnambulique*, and on the healing effect of hypnotic analgesia on burns. Later, in part because of his increasing involvement in suggestive therapy, he moved away from the Nancy views, coming to hold, for instance, that 'hypnotic' phenomena do not depend on the induction of a supposed sleep-like hypnotic state. His changed views influenced the later Bernheim and his school, and to an extent foreshadowed certain modern writers, for instance Sarbin, Coe, Wagstaff and Spanos.

It has often been remarked that the nineteenth century was the last in which it was truly possible to be a polymath, a master of contemporary knowledge in many different areas. The term polymath, however, seems almost too feeble for the Belgian *savant* J.R.L. Delboeuf (1831–1896). Born at Liége of humble parentage, he spent much of his distinguished academic career at the University there. He studied, taught, and wrote extensively about such diverse topics as biology, mathematics, mathematical philosophy, Greek, Latin, philology and psychology (Leroy, 1969–1970). His character was no less striking than his attainments. Warm-hearted, poetic, charismatic, sociable, unconventional, full of interesting if often heterodox ideas, he could arouse great enthusiasm in his students, and produce dramatic effects on his hypnotic subjects.

In later life he became more and more interested in psychological questions. In the 1870s and early 1880s he carried out original work in psychophysics (see Boring, 1942, pp. 50–51) and in 1885 published a book on sleep and dreams (Delboeuf, 1885).

Delboeuf's interest in mesmerism and related matters went back to his student days (Delboeuf, 1869, 1886b, pp. 441–2, 1889, p. 5). About 1885 this interest was stirred by reports emerging from the Salpêtrière and from Nancy into serious practical endeavours which were sustained for the rest of his life.

Delboeuf figures in histories of the hypnotic movement chiefly for his vivid and perceptive accounts of visits to the Salpêtrière and to Nancy (Delboeuf, 1886c; 1889). His own ideas and practical work have usually been passed over (but see Carroy, 1991). This article will chart the course of Delboeuf's ideas, and show how some of them foreshadow modern developments.

VISIT TO THE SALPETRIERE

In December 1885 Delboeuf spent several days visiting Charcot's wards at the Salpêtrière in Paris. Charcot and his school held that hypnosis, in the narrow sense of

the *grand hypnotisme* shown by a small number of hypnotic prima donnas, had three phases, lethargy, catalepsy and somnambulism, each characterized by certain physiological signs and supposedly initiated by certain physical stimuli not involving suggestion (catalepsy and somnambulism were also characterized by enhanced suggestibility). These 'phases' were demonstrated for Delboeuf's benefit, as was a variety of more specific phenomena, suggested or otherwise.

These included hemilethargy, hemicatalepsy and hemisomnambulism (Delboeuf, 1886c, pp. 140–1); the *mariage à trois*, in which a young girl, persuaded that each of two males present was her husband, would assign one-half of herself to each, and repudiate advances made to the wrong side by the wrong husband (Delboeuf, 1886, p. 269); the hypnotic production of a blister (Delboeuf, 1886c, pp. 136–7); the induction of positive sensory hallucinations in two subjects (Delboeuf, 1886c, pp. 129–132, 137–139), one of whom was apparently in her ordinary waking state; and the so-called phenomenon of transfer (Delboeuf, 1886, pp. 140–7).

The basic phenomenon of transfer was this. In a subject suffering from, say, an induced or spontaneous limb anaesthesia on one side, or a hemicatalepsy, or any other unilaterally localized symptom, the symptom could be transferred to the opposite side by the application of a magnet to either side. It was the phenomenon of transfer above all others that Delboeuf had wished to see, but the demonstrations of transfer convinced him only of the incompetence of the experimenters. As he was later to say (Delboeuf, 1889, p. 7):

But when I saw how these experiments were carried out; when I saw that elementary precautions were neglected, for example not speaking in front of the subjects, that [the experimenter] would announce in a loud voice what was going to happen, that instead of using an electromagnet switched on unknown to both the subject and the experimenter, the latter was happy to take a heavy horseshoe magnet out of his pocket; when I saw that there was not even an electrical machine in the laboratory, I was assailed with mistrust which, insensibly, undermined my faith in all the rest.

EARLY EXPERIMENTS

On his return from the Salpêtrière, Delboeuf at once set out to experiment for himself. As can be seen from the quotation just given (cf. Delboeuf, 1886c, p. 272), he was well aware of the dangers of giving the subjects unintended cues and suggestions. None the less most of his experiments were very different from the carefully controlled and analysed inter- and intra-group comparisons of today. Delboeuf's experiments were conducted with one or a small number of highly susceptible subjects with whom *ad hoc* variations of procedure or suggestion might be introduced from trial to trial as seemed appropriate. Before one dismisses such experiments as quite without worth, one should remember that Delboeuf was an ingenious, intelligent and highly perceptive individual who came to recognize not just other peoples' erroneous assumptions, but his own as well; and that controlled experiments are only as sound as the experimenter's grasp of the possibly relevant variables – many controlled experiments were in fact carried out in the Salpêtrière.

Delboeuf's first hypnotic experiments were simply attempts to reproduce the phenomena he had witnessed at the Salpêtrière (Delboeuf, 1886a; 1887, pp. 6–24). In this he failed; or rather he succeeded only when he deliberately hypnotized subjects by the careless Salpêtrière methods just described. To his mind the explanation was simple – training. Salpêtrière subjects had been trained differently from Nancy subjects, and both from the subjects of the famous public demonstrator, Donato. Hence they all behaved differently.

In support of this assertion, Delboeuf carried out (1886a) a long series of experiments, many of them with two sisters, J. and M., healthy country girls and excellent subjects, who appear to have been servants in his own household. He showed how quickly subjects would learn to respond to the unspoken commands and expectations of the hypnotist, and how readily hypnotic behaviour could be shaped by allowing the subjects, in the waking state, to witness the behaviour of other individuals under hypnosis. Example, he remarks, is a kind of suggestion (Delboeuf, 1887–8, p. 289).

Despite his claims that hypnotists of all schools 'train' their subjects to conform to certain expectations, it is clear that Delboeuf's views at this period were close to those of the Nancy School. The concept of suggestion was central to his thinking, and his 'provisional conclusion' (1889, p. 58) is that 'hypnotic sleep' differs from natural sleep only in that at least one of the senses remains open to certain sorts of impressions (e.g., the voice of the hypnotist). In both states the imagination is powerful enough to substitute an imaginary world for the real one.

However, Delboeuf disputed some of the claims made by Beaunis and other members of the Nancy School, and investigated them experimentally. Passing by hypnotic rapport, which Beaunis regarded as existing only between subject and hypnotist, and Delboeuf as the artificial product of hypnotic training (Delboeuf, 1886a, p. 156), the two most important matters of dispute were the so-called state of somnambulic waking, and the prevalence of post-hypnotic amnesia.

According to Beaunis (Delboeuf, 1887b, p. 156), somnambulic walking (*veille somnambulique*) is a state intermediate between waking and hypnotic sleep, in which the subject, as the result of appropriate suggestions, appears awake, but responds to prior or present suggestions as comprehensively as he would have done in the hypnotic sleep and with a similar subsequent amnesia and state-dependant recall.

Delboeuf's view (1887b; cf. 1886–7b and 1890a) is that the state of somnambulic waking is no different from that of hypnotic sleep. A suggestion made to a subject in *veille somnambulique* contains an implicit sleep-suggestion which must be fulfilled before the explicit suggestion is obeyed. Delboeuf's reasons for making this claim were firstly his observation that subjects who have apparently awoken, and have just fulfilled a waking or post-hypnotic suggestion, may then have the experience of 'waking up' again, and secondly that persons who have been in the state of somnambulic waking report that they were transported into largely imaginary surroundings as in an ordinary dream or the suggested dreams of the ordinary hypnotic sleep-state.

With regard to spontaneous post-hypnotic amnesia, Beaunis holds it to be the most characteristic fact about hypnotized persons (Beaunis, 1886, p. 89). Delboeuf maintained that, as with the recall of ordinary dreams, the recall of 'hypnotic dreams' would be promoted by waking events which have links with dream events. A hypnotist can most readily establish such a link by making the last event of the 'hypnotic dream' the first event of the waking state. Delboeuf claimed to have demonstrated the efficacy of this method on numerous occasions (e.g., 1886c, p. 267; 1886b, pp. 454–555). In one such experiment (1886b, p. 464), J., who had been persuaded that persons present were wearing inappropriate clothes which she had to change around, was awoken in the act of removing a gentleman's trousers. Not surprisingly she remembered all.

Within a few years Delboeuf had considerably changed his views about post-hypnotic amnesia. He came to think of it not as something to be circumvented by appropriate stratagems, but as the result of covert and unintended suggestions. When he believed in it, his subjects showed it. Now he does not, and they do not (Delboeuf, 1889, pp. 67, 82). This change was part of a general shift in Delboeuf's views, a shift of which there were premonitory signs by the time of his first visit to Nancy (Delboeuf,

1889). Between then and his death in 1896 his views changed more radically. The changes were principally brought about not by his experimental findings, but by his growing involvement in therapy.

THERAPY AND THEORY I

Setting aside the use of hypnotic methods to procure analgesia for surgical purposes (e.g., Delboeuf and Fraipont, 1890-1; Delboeuf, 1886–7a; 1887a, p. 36), we can consider Delboeuf's hypnotherapeutic activities under two headings, namely treatment of physical afflictions, and treatment of psychological afflictions.

In the treatment of physical afflictions, Delboeuf was apparently successful with ailments ranging from retinal degeneration (Delboeuf, 1890a) to infantile paralysis (Delboeuf, 1895-6, pp. 230-232), but to discuss the proper interpretation of these cases would take us too far afield. Particularly influential on contemporaries were his experiments on the hypnotic treatment of burns and blisters (Delboeuf, 1887a), which, indeed, led to his growing involvement in therapy by suggestion. As mentioned above, he had been greatly struck with the suggested blistering which he had seen Charcot produce, and he was further interested by Focachon's recent report of similar phenomena (Beaunis, 1886, pp. 73–84). He supposed that in these cases the suggestions must have produced pain, and the experience of pain must have caused the blisters. It then occurred to him that the inverse might also hold true – in a case of actual burning or vesication, the absence of pain (as in hypnotic analgesia) might prevent or ameliorate the blistering. More generally (Delboeuf, 1887a, pp. 20–21), 'just as t he idea that one has an ailment can engender that ailment, so likewise, the idea that the ailment does not exist may, in certain cases, make it disappear, or at any rate contribute to its disappearance'.

To put these ideas to the test, Delboeuf made use of his devoted subject, J. He heated an iron rod, 8 mm in diameter, to a dull red heat. He then informed her that on her right arm, and her right arm only, she would suffer no pain, and applied the rod in turn to corresponding points of the back of each arm for a period of one and a half seconds. She felt the pain only in the left arm, and the left arm developed a much wider and more severe area of damage than the right, and healed more slowly. The experiments on J. were subsequently repeated with similar results by Delboeuf's medical colleagues, Professor von Winiwarter and M. Henrijean, who made use of a thermocautery, and burned corresponding places on either side of the vertebral column.

Before turning to consider Delboeuf's use of suggestive therapy for psychological disorders, and its influence on his thinking, it will be helpful to glance quickly at certain other aspects of his involvement with hypnosis.

THE DANGERS OF HYPNOSIS

Two related topics on which Delboeuf wrote quite extensively – much more extensively than can be properly indicated here – were hypnosis and the law and hypnosis and crime.

Delboeuf's interest in hypnosis and the law arose from the strong desire of an influential party within the medical profession to confine the use of hypnosis by law to qualified medical practitioners. Delboeuf, as an academic but not a medical hypnotist, was exceedingly annoyed by these proposals, which had particularly strong support in Belgium, and were eventually implemented there in the law of 30th March 1892. His own most extended controversies, however, were with E. Bérillon of Paris, editor of

the *Revue de l'hypnotisme*, and P.L. Ladame of Geneva (see especially Delboeuf, 1890b; also 1892b). In these controversies, Delboeuf's forthright combativeness and incisive phraseology are to be seen at their most unrestrained, and I shall largely pass them over. It is interesting to note that he was one of the few academic or medical hypnotists to defend at any rate the more respectable public demonstrators, who had, he felt, done more for the subject than any number of scientists and medical men - and it is certainly true that what might be called the agenda for hypnotic investigations has been largely set by the ingenuity of nineteenth-century public demonstrators.

The possibility that hypnosis might be deployed for criminal purposes was a topic of intense interest towards the end of the nineteenth century (Gauld, 1992, pp. 494-503; Laurence and Perry, 1988) and was the occasion of further dispute between the schools of Nancy and the Salpêtrière. Some members of the Nancy School, especially Liégeois and Beaunis (Liégeois, 1884; 1889; 1892), held that deeply hypnotized subjects were virtually automata, who would automatically carry out any commands they were given, even criminal ones. Charcot and Gilles de La Tourette disputed this, on grounds which we need not go into. Delboeuf was at first somewhat disposed to take the Nancy side (Delboeuf, 1886c, p. 262n; 1893-4b, p. 179), but soon changed his opinions. He never denied that hypnosis might in some circumstances favour crime (Delboeuf, 1890-1, p. 217). But he had strong doubts about most real-life examples of alleged hypnotic crime, and he carried on an extended controversy with Liégeois over the proper interpretation of the latter's experiments ostensibly proving the willingness of hypnotized subjects to commit violent crimes. Liégeois (1889) had arranged various demonstrations in which subjects, in the supposed state of veille somnambulique, 'poisoned' or 'shot' perfectly innocent persons, even their nearest and dearest, before witnesses. He even went so far as to supply a real pistol with bullets shown to be real. Surely, he argued, these experiments show the dangers of hypnotic crime. Here are individuals, of no known criminal propensities, homing in like automata on their 'victims', 'murdering' them without remorse, and afterwards exhibiting no recollection.

Delboeuf replies that hypnotized subjects are not imbeciles, and they are very well aware of the expressions and attitudes of persons around them, as his own experiments have shown. His experiments have also shown that hypnotized subjects can reason intelligently. Such a subject must know perfectly well that experimenters cannot possibly allow injuries or fatalities. If the experimenter is impassive and the witnesses do not appear anxious, he can go ahead and play out the comedy of hypnotic crime with perfect safety. Many observations, including Delboeuf's own, go to prove that hypnotized subjects will in fact bilk at carrying out actions (that is, 'real' actions) which are repugnant to them morally or in other ways.

In this connection Delbeouf cites (1893–4b, pp. 194–5) an experiment of his own with J. J. had already shown herself prepared to use the Delboeuf household revolver against an intruder. Delboeuf hypnotized her, and told her that his daughter, and another young lady present, were robbers. She was to take the revolver (normally kept loaded) and shoot them. J. took the revolver, but refused to shoot. She put the revolver down *with precaution* and backed away. She thought it was still loaded. Delboeuf had in fact surreptitiously unloaded it, but he had not given J. time to reflect. The situation was entirely parallel to one of Liégeois' staged hypnotic crimes except for the crucial point that J. believed she could actually cause injury.

THERAPY AND THEORY II

By the time of Delboeuf's first visit to Nancy (Delboeuf, 1889), his ideas were

manifestly in a state of flux, though he still held that subjects in the state between sleep and waking ('hypnagogia') are especially suggestible (Delboeuf, 1889, pp. 71, 75). Soon afterwards he changed tack completely, and began to assert that whereas 'most people imagine that sleep is the essential phenomenon of hypnosis . . . it is very much accessory and therefore in no way indispensable.'

These new views (adumbrated in Delboeuf, 1888, pp. 444–5) were more fully expressed in 'Comme quoi il n'y a pas d'hypnotisme' (Delboeuf, 1891–2), a most influential article, and in Delboeuf (1892–3). They were strongly influenced by his experiences in the suggestive treatment of patients, particularly those suffering from psychological and psychosomatic ailments. He found that by forceful suggestions he could obtain all the benefits of hypnotherapy without any need to put the patient into a sleep or sleep-like state. Indeed if the patient were sceptical about hypnosis, or had proved refractory to sleep induction by other hypnotists, Delboeuf would confine himself to waking affirmations, together perhaps with a demonstration of suggestive phenomena with another subject should a suitable one be available.

Delboeuf's interpretation of cases of successful waking affirmation, and of hypnotic cures in general – an interpretation which he admits (1892–3, p. 209) will need much modification and qualification – is as follows. All hypnotic effects are due to the subject and only to the subject. The function of the hypnotist is to convince the subject that he can do what he believed he could not do, or not do what he believed he could. In order to achieve this, the hypnotist must impose his authority, a belief in his special power, on the subject. The hypnotist's manner, his self-assurance and air of conviction, are very important here (cf. Delboeuf, 1889, p. 73), and so are the little hypnotic tricks and tests – for instance eye closure and arm rigidity - so popular with hypnotists. So too is sending subjects to sleep, or rather making them believe that they sleep. There are no clear signs which distinguish the hypnotic from the normal state, and there is no such thing as the state of hypnosis. There is nothing that can be achieved in the 'state' of hypnosis that cannot be achieved outside it.

As to how therapeutic suggestion actually works, what goes on in the subject when a suggestion takes hold, Delboeuf remarks that the patients could, if they willed, set themselves right; but they do not know how to will (Delboeuf, 1892–3, p. 204): 'I . . . give them a palpable proof of the power which, to their way of thinking, nature has bestowed upon me. Then [I make various therapeutic suggestions.] I awake in all of them a hitherto inactive will; only, they are not conscious that they will; they imagine not that I make them will, but that I will in their place. I began by striking their imaginations, and from then on, for them, all that goes on in them comes from me . . .' All this, and not least the idea that one may will without being conscious that one wills, at first sight seems, to say the least, somewhat obscure, though it has echoes in more recent views.

Delboeuf has another, very different, but not necessarily incompatible, approach to the understanding of hypnotic phenomena, which again has a modern ring to it. It originated more from the experimental than the therapeutic side of hypnosis, and centred round the notion of *complaisance* (compliance or obligingness). He detected signs of this as early as 1885 among subjects at the Salpêtrière. (Cf. on Liébeault's patients, Delboeuf, 1889, p. 40). A few years later (Delboeuf, 1888–9a) he argued, on the basis of experiments of his own, that subjects who act as though undergoing negative hallucinations are simply playing out a comedy from excess of *complaisance*. That they really see the things which they are supposed not to see is shown by the care with which they avoid them and by the many erroneous details which they report concerning objects behind and hidden by the

'invisible' items; and by the fact that when told to wake up by a voice they are not supposed to hear, they wake up (for other interesting findings of similar import, see Gauld, 1992, pp. 446–7).

It was above all to the experiments by Liégeois and others on hypnotically produced 'crimes' that Delboeuf applied the notion of compliance. Subjects in these experiments carry out through compliance actions which they know perfectly well are not reprehensible (Delboeuf, 1889, p.101). Often they play their roles with the most ludicrous insouciance and amateurishness, so much so that witnesses can hardly believe in their good faith (Delboeuf, 1893–4, p. 195). However the compliance concerned is not deliberate, it does not amount to conscious simulation (Delboeuf, 1889, p. 101). The subject is himself the dupe of his own simulation. His *complaisance* is unconscious. Without realising it, he himself wills and executes what has been ordered.

Once again Delboeuf's speculations end up by invoking the notion of 'unconscious' mental processes – unconscious *complaisance* and unconscious willing – and once again it is far from clear what he means. The phrase 'dupe of his own simulation' rather suggests that Delboeuf is entertaining some concept of self-deception, but he offers no further analysis. Certainly he was not thinking in terms of secondary streams of consciousness, concerning which he was sceptical (Delboeuf, 1886b, p. 445).

CONCLUSIONS

Delboeuf devoted much of the last 10 years of his life to hypnosis. He was a perceptive observer of and commentator upon the activities of others, and was himself an innovative and ingenious experimenter and theorist. In his time he was a considerable, though not a major, force within the hypnotic movement. What is most interesting about him today is that he was among the first to put forward ideas that are now widely accepted, or at least have fair currency. One might mention his views on hypnotic crime, his belief that post-hypnotic amnesia is a matter of training and tradition, his scepticism concerning negative hallucinations and concerning rapport, his rejection of a special sleep-like state of hypnosis, his emphasis on compliance and role-playing by the 'hypnotized' subject.

Let us consider Delboeuf's theoretical speculations little further, for, as already implied they have definite resemblances to theories now current. The most general and obvious resemblance is of course his denial that there is a special 'state' of hypnosis, whether conceived as a state of 'partial sleep', as was common at the time, or in some other way. He maintained, as we have seen, that even though a sleep-like state may ensue upon hypnotic induction procedures, or the subject may come to believe that he is asleep, this is in no way essential to 'hypnotic' phenomena. In the wake of the 'Barber revolution' (Barber, 1969) rejection of the idea that there is a 'state' of hypnosis has become widespread among academic hypnotists. Delboeuf rejected it 70 years earlier. His own explanatory ideas likewise foreshadow various contemporary positions. He is a forerunner of a modern tradition, which, in contrast to 'the heirs of Mesmer and Charcot', takes as its point of departure, 'the axiom that human beings are intentional, goal-seeking agents' (Sarbin, 1989, p. 400). The notion of compliance (complaisance) which he introduces a number of times has in recent years been developed most particularly by Wagstaff (e.g., Wagstaff, 1981, 1991); and Spanos and his collaborators (Spanos et al., 1996, p. 173) agree that 'compliant responding plays an important but not exclusive role in hypnotic responding'. Delboeuf links the concept of compliance with that of role-playing. Hypnotized subjects who carry out crimes at the experimenter's bidding, or act as though they cannot see objects which in fact they obviously can see, are 'playing out a comedy' from *complaisance* towards the hypnotist. It is hardly necessary to point out how pervasive has been the influence of Sarbin and Coe's role-playing theory of hypnotic responding (Sarbin & Coe 1972) on recent social-pychologically oriented approaches to the problems of hypnosis, especially the approach of the late N.P. Spanos and his school (e.g. Spanos, 1991). It is quite likely, too, that Spanos's recent interest in the influence of training on hypnotic susceptibility would have struck an answering chord from Delboeuf, who was writing about the 'education' of the hypnotic subject as early as 1886 (Delboeuf, 1886a).

One must not, of course, exaggerate the extent to which Delboeuf anticipated modern approaches. We are talking only of ideas which he floated and did not develop in detail. His views were always in progress and never finalised. They were somewhat loosely grounded in their observational bases. However, the kindred modern theories are by no means perfect in these respects, and if Delboeuf ends up with unanalysed notions of unconscious compliance and unconscious motivation, some modern theorists confronted with the fact that many hypnotic subjects will deny that they were merely pretending to be hypnotised, resort to incompletely analysed statements about the self-deceptive use of cognitive strategies in playing the socially defined role of 'good' hypnotic subject.

Though Delboeuf's speculations were largely forgotten after the First World War, and have had no direct influence on modern writers, they certainly affected the later Bernheim, whose thought was moving in similar directions (see especially Bernheim, 1911), and thus the new school which Bernheim in effect founded (Gauld, 1992, pp. 561–565). Bernheim took up Delboeuf's 'il n'y a pas d'hypnotisme' at a conference held in Moscow in 1897 (Bernheim, 1897, p. 9); Bernheim's pupil P. Hartenberg adopted it for an article of his own (Hartenberg, 1897–8). Those writers who, in recent years, have set up and then demolished a straw man account of traditional views about hypnosis – special sleep-like 'state' of hypnosis with heightened suggestibility, state-dependent memory, post-hypnotic amnesia, etc. – and have been regarded as revolutionaries for so doing, have commonly had little conception that there was a flourishing school of thought well before 1914 that rejected or questioned most of these 'traditional' assumptions and to an extent adumbrated some now fashionable ideas.

REFERENCES

Barber, T.X. (1969). Hypnosis: A Scientific Approach. New York: Van Nostrand Reinhold.

Beaunis, H. (1886). Le somnambulisme provoqué: Etudes physiologiques et psychologiques. Paris: J.B. Baillière.

Bernheim, H. (1897). L'hypnotisme et la suggestion. Paris: O. Doin.

Bernheim, H. (1911). Définition et valeur thérapeutique de l'hypnotisme. *Journal für Psychologie und Neurologie* **18**, 468–477.

Binet, A. (1886). Les diverses écoles hypnotiques. Revue philosophique 22, 532-533.

Boring, E.G. (1942). Sensation and Perception in the History of Experimental Psychology. New York: Appleton-Century-Crofts.

Carroy, J. (1991). Hypnose, suggestion et psychologie: L'invention des sujets. Paris: F. Alcan.

Delboeuf, J.R.L. (1869). Louise Lateau. Journal de Liége, 22nd December 1869.

Delboeuf, J.R.L. (1885). Le sommeil et les rêves, considerés principalement dans leurs rapports avec les théories de la certitude et de la mémoire. Paris: F. Alcan.

Delboeuf, J.R.L. (1886a). De l'influence de l'éducation et de l'imitation dans le somnambu-

lisme provoqué. Revue philosophique 22, 146-171.

Delboeuf, J.R.L. (1886b). La mémoire chez les hypnotisés. Revue philosophique 21, 441–472.

Delboeuf, J.R.L. (1886c). Une visite à la Salpêtrière. Revue de Belgique 54, 121-147, 258-275.

Delboeuf, J.R.L. (1886–7a). Cas curieux d'hypnotisation volontaire. Revue de l'hypnotisme 1, 339–340.

Delboeuf, J.R.L. (1886-7b). Les suggestions à échéance. Revue de l'hypnotisme 1, 339-340.

Delboeuf, J.R.L. (1887a). De l'origine des effets curatifs de l'hypnotisme. Paris: F. Alcan.

Delboeuf, J.R.L. (1887b). De la prétendue veille somnambulique. *Revue philosophique* 23, 113–142, 262–285.

Delboeuf, J.R.L. (1887–8). De l'analogie entre l'état hypnotique et l'état normal. *Revue de hypnotisme* 2, 289–292.

Delboeuf, J.R.L. (1888). L'hypnotisme et la liberté des représentations publiques d'hypnotisme. Liége.

Delboeuf, J.R.L. (1888–9a). Des hallucinations négatives suggérées. Revue de l'hypnotisme 3, 202–205.

Delboeuf, J.R.L. (1888–9b). Origine des effets curatifs instantanés de l'hypnotisme sur les maladies chroniques. *Revue de l'hypnotisme* **3**, 66–69.

Delboeuf, J.R.L. (1889). Le magnétisme animal. A propos d'une visite à l'école de Nancy. Paris: F. Alcan.

Delboeuf, J.R.L. (1890a). De l'étendue de l'action curative de l'hypnotisme. L'hypnotisme appliqué aux altérations de l'organe visuel. Paris: F. Alcan.

Delboeuf, J.R.L. (1890b). Magnétiseurs et médecins. Paris: F. Alcan.

Delboeuf, J.R.L. (1890-1). L'opinion de M. Delboeuf. Revue de l'hypnotisme 5, 216-218.

Delboeuf, J.R.L. (1891–2). Comme quoi il n'y a pas d'hypnotisme. Revue de l'hypnotisme 6, 129–135.

Delboeuf, J.R.L. (1892a). De l'appréciation du temps par les somnambules. *Proceedings of the Society for Psychical Research* **8**, 414–422.

Delboeuf, J.R.L. (1892b). L'hypnotisme devant les chambres législatives Belges. Paris: F. Alcan.

Delboeuf, J.R.L. (1892–3). Quelques considérations sur la psychologie de l'hypnotisme à propos d'un cas de manie homicide guérie par suggestion. *Revue de l'hypnotisme* **7**, 200–210.

Delboeuf, J.R.L. (1893–4a). Deux cas de diagnostic chirurgical posé au moyen de l'hypnose. *Revue de l'hypnose* **8**, 35–41.

Delboeuf, J.R.L. (1893–4b). Die verbrecherischen Suggestionen. Zeitschrift für Hypnotismus 2, 177–198, 221–240, 247–268.

Delboeuf, J.R.L. (1894). L'hypnose et les suggestions criminelles. *Bulletin de l'Académie royale de Belgique* 3me sér, **28**, 521–553.

Delboeuf, J.R.L. (1895–6). A propos d'une cure merveilleuse de sycosis. *Revue de l'hypnotisme* **10**, 225–233.

Delboeuf, J.R.L., and Fraipont, F. (1890–1). Accouchement dans l'hypnotisme. *Revue de l'hypnotisme* **5**, 289–298.

Gauld, A. (1992). A History of Hypnotism. Cambridge: Cambridge University Press.

Hartenberg, P. (1897–8). Il n'y a pas d'hypnotisme. Revue de l'hypnotisme 12, 211–221.

Laurence, J.R., and Perry, C. (1988). *Hypnosis, Will and Memory: A Psycho-Legal History*. New York: The Guilford Press.

Leroy, M. (1969–70). Delboeuf (Joseph-Remi-Léopold). In *Biographie nationale publiée par l'Académie royale des sciences, des lettres et des beaux-arts de Belgique*. Vol. 35. Brussels: Etablissements Emile Bruylant. Pp. 164–166.

Liégeois, J. (1884). De la suggestion hypnotique dans ses rapports avec le droit civil et le droit criminel. Paris: O. Doin.

Liégeois, J. (1889). De la suggestion et du somnambulisme dans leurs rapports avec la jurrisprudence et la médecine légale. Paris: O. Doin.

Liégeois, J. (1892). Hypnotisme et criminalité. Revue philosophique 33, 233–272.

Sarbin, T.R. (1989). The construction and reconstruction of hypnosis. In N.P. Spanos and J.F. Chaves (eds.), *Hypnosis: the Cognitive-Behavioral Perspective* (pp. 400–416). New York:

Prometheus Books.

Sarbin, T.R. and Coe, W.C. (1972). *Hypnosis: A Social Psychological Analysis of Influence Communication*. New York: Holt, Rinehart and Winston.

Spanos, N.P. (1991). A sociocognitive approach to hypnosis. In S.J. Lynn and J.W. Rhue (eds.), *Theories of Hypnosis: Current Models and Perspectives* (pp. 324–361). New York: The Guilford Press.

Spanos, N.P., Burgess, C.A., Wallace-Capretta, S., Ouaida, N., Streich, T. and Cross, P. (1996). Simulation, surreptitious observation and the modification of hypnotizability: two tests of the compliance hypothesis. *Contemporary Hypnosis* **13**, 161–176.

Wagstaff, G.F. (1981). Hypnosis, Compliance and Belief. Brighton: The Harvester Press.

Wagstaff, G.F. (1991). Compliance, belief, and semantics in hypnosis: A nonstate, sociocognitive perspective. In S.J. Lynn and J. W. Rhue (eds.), *Theories of Hypnosis: Current Models and Perspectives* (pp. 362–396). New York: The Guilford Press.

Address correspondence to:

Alan Gauld, Department of Psychology, University of Nottingham, Nottingham NG7 2RD, England

Received 23 May 1996; revised version accepted 31 July 1997