

## EDITORIAL COMMENTARY

EDOARDO CASIGLIA

*Department of Medicine, University of Padua*

The modified state of consciousness known as hypnosis has a long and disputed history (see Table 1). Hypnosis was certainly practised in ancient times both as a painkiller in surgery and in religious ceremonies (Kuijsten, 2012), as documented by manuscripts, archaeological finds, and images like those showing arm levitation. For a long time, archaic people were only instinctive (until 30,000 BC), then only unconscious (until the late Bronze Age), and it was only recently (Jaynes, 1976) that the egoic consciousness made its appearance. Being a modification of consciousness, hypnosis requires consciousness, and must therefore date back to 1300 BC. However, the modes and actual in-depth knowledge with which ancient hypnosis was practised are unknown.

*Table 1.* Historical phases of hypnosis

Phase	Period
Archaic	After 1300 BC
Ancient	Until 17th century
Modern	19th to 20th century, at the age of psychoanalysis
Contemporary	21st century

More recently (after Mesmer, Charcot, Freud, and Jung), hypnosis was mainly practised in the field of psychotherapy and as a painkiller before anaesthetics were made available (this is well documented by many surgeons who operated with the aid of hypnosis at our University of Padua). In the 19th century, hypnosis sank into oblivion due to the development of psychoanalysis, the growing emphasis on the unconscious, and psychoanalysts' fear of being too intrusive, and was rightfully revived only after the Second World War. Ignored by psychologists, it was exploited by medical doctors who realized it was a powerful, versatile, and rapid tool (Casiglia et al., 1994)—sharp like a razor, embrocating like an ointment, and curative like penicillin.

Contemporary hypnosis, which we practise in our laboratories today, is very different from the ancient, the old, and even from the modern types. First of all, it is strongly experimental and evidence-based rather than theory-based. It is developed in laboratories and its results are statistically analysed. When we started dealing with hypnosis in our laboratory, we

immediately realized that experiments performed with the 'hypnosis' tool would necessarily be experiments in human physiology (Casiglia et al., 2012b, 2012c). Most of our research group activity in hypnosis aims at adopting the scientific, Galilean method of 'try and retry'. In order to carry this out, we first have to construct all our experimental models—which, in hypnosis, generally do not exist—just like Galileo built his own telescopes. Like a telescope, a conceptual model is an optical tube that employs a privileged point of view to observe the unknown (these metaphors perfectly suit hypnosis, a discipline that speaks a symbolic language whose terms are metaphors (Casiglia, 2008)).

We adopted Galilean methods to demonstrate that hypnosis-induced hallucinations (Casiglia et al., 1997, 2006), negligence (Casiglia et al., 2010; Priftis et al., 2011), analgesia (Facco et al., 2009, 2011; Casiglia et al., 2007), and age regression (Giordano et al., 2012) are not mere subjective feelings but true, objective phenomena that can be reproduced, counted, and numerically measured. We have demonstrated that, when we give the command 'you are unable to speak' or 'to read' or 'you are unable to move the right part of your body' or 'you are 6 years old', participants essentially become physically mute or alexic (word blind), paralytic, amusic (tone deaf), affected by neglect, or children outright (Casiglia et al., 2010; Priftis et al., 2011; Giordano et al., 2012). And, if the command is to become insensitive, painful stimuli are indeed blocked at a certain level of the ascending nervous system and not simply dissociated from consciousness. Obviously, far from providing all the answers, this experimental evidence gives rise to many questions about the physiological mechanisms of hypnosis and shows that hypnosis is based on weak theories. The neuroimaging techniques we are currently applying are certainly useful but do not answer all queries (Priftis et al., 2011; Casiglia et al., 2012a).

Contemporary hypnosis is also translational, as lab experimental discoveries always—and I mean, always!—have a positive clinical outcome, and are immediately applied to ailing or distressed people. As a matter of fact, patients who undergo hypnosis in an experimental setting invariably feel better, emotionally richer and brighter. What a wonderful procedure! Quick, cheap, straightforward, and tailored for *Homo sapiens* (Casiglia, 2008; Kuijsten, 2012b).

Finally, contemporary hypnosis is teamwork. Although psychologists tend to work alone, medical doctors generally work in teams, even when dealing with hypnosis. Hypnosis is just a field where different areas of expertise are welcome. Our staff members are made up of neurologists, psychiatrists, and psychotherapists as well as physiologists, radiologists, pharmacologists, cardiologists, and anaesthetists.

As mentioned above, contemporary hypnosis is experimental in nature. However, I must emphasize the fact that there is also a branch of contemporary hypnosis that is to lab practice as theoretical physics is to experimental physics. A closed circle of researchers (see for instance Casiglia, 2008; Facco, 2012; Kuijsten, 2012a, 2012b; Tosello, 2012) is actually trying to develop theories that might explain hypnosis and its phenomenology on the basis of philosophic concepts, archaeological data, anthropology, and the study of the language and quantum mechanics. After all—like hypnosis itself—these sciences pertain to consciousness. This branch of research has important ethical implications.

When I was unworthily offered to succeed John Gruzelier as Editor of *Contemporary Hypnosis* (now *Contemporary Hypnosis and Integrative Therapy*), I had in mind what I summarized above. Consequently, readers now know in advance what I think the future editorial line of this journal should be: very experimental, contemporary, multidisciplinary, open not only to

scientific requirements but also to philosophic, literary, and anthropological themes; a journal that attracts scientists of different backgrounds.

Everybody is required to take part in this project, not only the editorial committee and my local co-workers, but also and particularly readers and all the scientists operating in the field of hypnosis. I hope they will contribute by writing innovative papers. As far as we are concerned, we will make this more appealing by speeding up the selection process and by increasing the worldwide visibility of the journal and its impact on the scientific community.

So, let's get down to work, dear colleagues and friends! We look forward to receiving your papers.

## REFERENCES

- Casiglia E (2008). Hypnosis in the theory of the bicameral mind. *The Jaynesian* 2: 12–14.
- Casiglia E, Mazza A, Ginocchio G, Onesto C, Pessina AC, Rossi AM, Cavatton G, Marotti A (1997). Haemodynamics following real and hypnos-simulated phlebotomy. *American Journal of Clinical Hypnosis* 4: 368–375.
- Casiglia E, Rossi AM, Mazza A, Cavattoni G, Colangeli G, Ginocchio G, Di Menza G, Marotti A, Onesto C, Pegoraro L, Pessina AC (1994). Hypnosis as a tool for evaluating the cortical component of haemodynamic variations. Pilot study during blood letting. *High Blood Pressure* 3 (Suppl. 3): 8.
- Casiglia E, Rossi AM, Tikhonoff V, Scarpa R, Tibaldeschi G, Giacomello M, Canna P, Schiavon L, Rizzato A, Lapenta AM (2006). Local and systemic vasodilation following hypnotic suggestion of warm tub bathing. *International Journal of Psychophysiology* 62: 60–65.
- Casiglia E, Schiavon L, Tikhonoff V, Haxhi Nasto H, Azzi M, Rempelou P, Giacomello M, Bolzon M, Bascelli A, Scarpa R, Lapenta AM, Rossi AM (2007). Hypnosis prevents the cardiovascular response to cold pressor test. *American Journal of Clinical Hypnosis* 49: 255–266.
- Casiglia E, Schiff S, Tikhonoff V, Schiavon L, Bascelli A, Haxhi Nasto H, Facco E, Tosello MT, Gabbona A, Rossi AM, Avdia M, Amodio P (2010). Neuropsychological correlates of post-hypnotic alexia. A controlled study with Stroop test. *American Journal of Clinical Hypnosis* 52: 219–234.
- Casiglia E, Tikhonoff V, Giordano N, Regaldo G, Facco E, Marchetti P, Schiff S, Tosello MT, Giacomello M, Rossi AM, Amodio P (2012a). Cardiovascular response to hypnotic deepening: relaxation vs. fractionation. *International Journal of Clinical and Experimental Hypnosis* 60: 338–355.
- Casiglia E, Tikhonoff V, Giordano N, Regaldo G, Facco E, Marchetti P, Schiff S, Tosello MT, Giacomello M, Rossi AM, Amodio P (2012b). Cardiovascular response to hypnotic deepening: relaxation vs. fractionation. *International Journal of Clinical and Experimental Hypnosis* 60: 338–355.
- Casiglia E, Tikhonoff V, Giordano N, Regaldo G, Tosello MT, Rossi AM, Bordin D, Giacomello M, Facco W (2012c). Measured outcomes with hypnosis as an experimental tool in a cardiovascular physiology laboratory. *International Journal of Clinical and Experimental Hypnosis* 60: 241–261.
- Facco E (2012). Near-death experiences and hypnosis: two different phenomena with something in common. *Contemporary Hypnosis and Integrative Therapy* 29(3): 284–297.

- Facco E, Casiglia E, Masiero S, Tikhonoff V, Giacomello M, Zanette G (2011). Effects of hypnotic focused analgesia on dental pain threshold. *International Journal of Clinical and Experimental Hypnosis* 59: 454–468.
- Facco E, Casiglia E, Zanette G, Masiero S, Bacci C, Lapenta AM, Manani G (2009). Effects of hypnosis on dental pain threshold. Preliminary report. *Pain Practitioner* (Suppl. 1): 47–48.
- Giordano M, Tikhonoff V, Tosello MT, Lapenta AM, Casiglia E (2012). An experimental approach to hypnotic age regression. Controlled study over 10 healthy participants. *Contemporary Hypnosis and Integrative Therapy* 29(3): 271–283.
- Jaynes J (1976). *The Origin of Consciousness in the Breakdown of the Bicameral Mind*. Boston: MA: Houghton-Mifflin.
- Kuijsten M (2012a). Hypnosis as a vestige of the bicameral mind. *Contemporary Hypnosis and Integrative Therapy* 29(3): 213–224.
- Kuijsten M (2012b). Introduction. In *The Julian Jaynes Collection*. Henderson, NV: Julian Jaynes Society, pp. 1–22.
- Priftis K, Schiff S, Tikhonoff V, Giordano N, Amodio P, Umiltà C, Casiglia E (2011). Hypnosis meets neurosciences: simulating visuospatial neglect in healthy participants. *Neuropsychologia* 49: 3346–3350.
- Tosello MT (2012). From conditioning to state-dependent learning. *Contemporary Hypnosis and Integrative Therapy* 29(3): 225–235.