

DIVAN COUCHES AND GURUS

THE ORIGIN AND DANGERS OF CLINICAL PSEUDOPSYCHOLOGY

ANGELO FASCE

Pseudoscience is alarmingly present in the context of clinical psychology and is also very dangerous. As a set of pseudoscientific ideas, clinical pseudopsychology has a peculiar characteristic: it has established an entire tradition parallel to psychology, with numerous branches and interrelated theoretical and practical developments. In this paper we will review that tradition, from pseudoscientific hypnosis to psychoanalysis, and from New Age to present-day neuropsychology. We will then review some of the dangers of pseudoscience related to mental disorders.

Keywords: pseudoscience, psychology, psychoanalysis, New Age, psychotherapies.

Clinical psychology has a serious problem with pseudoscience (Lilienfeld, Lynn, & Lohr, 2003), understood as practices and ideas lacking epistemic warrant which, taking a rhetorical strategy, present themselves as science (Fasce, 2017; Hansson, 2009). Although it is true that psychology faculties, at least in our context, usually present good scientific standards regarding the content of official degrees, the unfortunate truth for the many accomplished professionals in the field is that psychology institutes and professional practice suffer from a high level of pseudoscientific penetration.

Traditionally, the gap between psychological research and practice has been commonly pointed out (Lilienfeld et al., 2003), with rigorous researchers well-trained in the methodology on the one hand, and practitioners with little interest for the scientific basis of their interventions on the other. This situation seems to continue today, with a considerable number of psychologists still being willing to incorporate pseudoscientific practices into their work (Stapleton et al., 2015).

A quick search on the websites of institutions that offer clinical psychology training or who ensure compliance with their code of ethics, allows us to immediately note this lack of attachment to evidence-based practice. For instance, the Professional Association of Psychologists of the Region of

Valencia (COP-CV in its Spanish abbreviation) offered, and will again offer, courses on bioenergetic analysis, dream interpretation, psychoanalysis, family constellations, and gestalt therapy, among others. In fact, nearly 15% of the courses organised by COP-CV between 16 March and 23 November 2017 contain explicit pseudoscientific content.

One explanation for this phenomenon is the generally poor preparation psychologists have in the methodology and philosophy of science. This knowledge gap is conducive to the propagation

and maintenance of so-called *psychomyths* among students and professionals, both in the Spanish and English-speaking contexts (Hughes, Lyddy, & Lambe, 2013). For example, the idea that people with schizophrenia have multiple personalities or that polygraphs are a reliable tool for detecting lies are both psychomyths.

Given that psychology is a science, albeit a young one, and that its practice and research therefore require a properly trained capacity for scientific evidence-based reasoning obtained through empirical and reliable methodologies, psychologists should receive explicit training in pseudoscience detection. There is no clear correlation between knowledge of scientific data and greater scepticism (Johnson & Pigliucci, 2004; Majima, 2015), indicating that more solid training in the

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conceptual foundations of critical thinking must be offered (Lilienfeld, Lohr, & Morier, 2004).

This need to sharpen scientific reasoning is reflected in the Spanish body of psychology's code of ethics, which, in several of its articles, establishes that both practitioners and researchers must base all their statements and actions as psychologists on scientific evidence. Articles 5, 22, and 33 are particularly relevant in this respect. They unequivocally state that psychology must be based on scientific evidence, that only those approaches deserve respect from people involved in the field, and that everything a psychologist communicates in class should be based on this evidence. Of course, the code does not state that hypotheses are not to be considered, nor that opinions cannot be expressed: it indicates that these should not be presented as psychology unless they are duly supported – and it is in this requirement that the epistemic vigilance mechanisms of the psychology community are failing.

Some of those who choose to ignore these professional demands often hide behind what has been called «the Dodo bird verdict», referring to a passage from *Alice in Wonderland* in which all participants in a race are considered winners. The proponents of the Dodo bird verdict maintain that all psychotherapies have the same effectiveness because the most important factors are the psychotherapist's aptitude and the common factors shared by all of them, with specific techniques being purely anecdotal. This idea, however, has been widely refuted by the available evidence (Marcus, O'Connell, Norris, & Sawaqdeh, 2014) which concludes that some psychotherapies have no proven efficacy while others have type I and II evidence in their favour (randomised clinical trials, or RCTs, and RTC meta-analyses), which should be considered as truly reliable. It is worth mentioning that cognitive behavioural therapy has the most type I and II evidence in its favour for the overwhelming majority of mental disorders listed in the official and unofficial guidelines of evidence-based ethical clinical practice.

■ FROM HYPNOSIS TO PSYCHOANALYSIS

Pseudopsychology has some very peculiar characteristics that make it a somewhat different case within the vast list of pseudosciences found in

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Nearly 15% of the courses organised by the Professional Association of Psychologists of the Region of Valencia (COP-CV in its Spanish abbreviation) between 16 March and 23 November 2013 contain explicit pseudoscientific content. The image above shows the publicity for a bioenergetic analysis conference, held in 2013 and declared of professional scientific interest by the COP-CV.

society. One of its most striking features is that it is a vast array of ideas and techniques which are usually related to each other. Contrary to pseudobiology or pseudophysics, pseudopsychology is a tradition that has developed over the last century in parallel with psychology. Thus, it can be traced back to a fairly well-defined origin, usually

resting upon the figure of Franz Mesmer, a German physician who developed a theory called «animal magnetism» or «mesmerism», a type of medical astrology that considered diseases to be an imbalance in an assumed ethereal medium (Darnton, 1968). Mesmer followed the ideas, albeit in a secular version, of the priest, exorcist, and healer Johan Joseph Gassner, with whom he disputed the origin of the latter's supposed healings. Mesmer claimed that the real reason behind them was his postulated magnetism, rather than divine intervention. The highly suggestive mesmeric sessions, unlike exorcisms, were wrapped in a mantle of pseudoscience using metal rods that were introduced into hydroelectrolytic solutions to send faint electrical currents into the patient's body.

However, when Mesmer tried to put his ideas into practice by trying to cure a young blind musician, he failed completely and was forced to leave Vienna and seek refuge in Paris in 1777. Although the official stance of France was to reject Mesmer's

ideas, according to the resolutions issued by the Royal Academy of Sciences and the Royal Academy of Medicine, King Louis XVI expressed interest in these peculiar practices and wanted to know their real value in greater depth. To this end, he appointed four members of the Faculty of Medicine to investigate them, although at the request of these four members, five additional people from the Faculty of Sciences were also appointed, including such notable names as Jean Bailly, Benjamin Franklin, and Antoine Lavoisier. After a detailed analysis of Mesmer's theory and practice, carrying out many experiments and observing his sessions, they determined that it was mere quackery and that the alleged animal magnetism was nothing more than an invention. They determined that their supposed results were based only on the imaginations of both the practitioners and patients. Because of this research, Mesmer also had to leave Paris and his subsequent biography is largely unknown to us.

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A significant number of scholars accepted the verdict of the expert panel, forgetting Mesmer's ideas and finally basing scientific psychology on psychophysiology techniques. On the other hand, another group continued to organise Mesmerian sessions until they developed what we now call *hypnosis* (Gauld, 1992). James Braid was especially relevant in this context. He coined the term in the

mid-nineteenth century and, rejecting the Mesmerian idea of animal magnetism, defined hypnotic states as a «nervous sleep». Hypnosis gradually developed until two schools were created: one in Nancy and the other in Paris. The Nancy school, headed by Hippolyte Bernheim and Ambroise-Auguste

Liébeault, defended hypnosis as a technique of mere suggestion, while the Paris school, led by Jean-Martin Charcot, explained hypnotic states based on a somatic theory that directly related them to a form of latent mental disorder. Charcot's experimental hypnosis was already closely related to clinical practice, in which he applied the technique to women whom he described as «hysterical» but whom actually suffered with a variety of mental disorders or were highly suggestive patients.

This second screening, however, helped to further radicalise Mesmerian hypnosis, which had by then already been endowed with greater theoretical content, and so its influence did not decline. It is, in fact, the basis of the main pseudopsychological construct: psychoanalysis. Indeed, among Charcot's disciples in Paris was a young Sigmund Freud, who practised hypnosis by following his theories about the phenomenon in relation to hysteria (Gelfand & Kerr, 1992). Together with Charcot, the other major influence of the young Freud was Josef Breuer and his «cathartic method», also based on hypnosis, although Freud decided to abandon its practical use in favour of what he called «free association». The shadow of psychoanalysis was and continues to be long and between the 1920s and 1950s dozens of different schools appeared, each guided by Freudian interpreters (including Carl Gustav Jung, Wilhelm Reich, Fritz Perls, and Jacques Lacan). Thus, psychoanalysis came to have the greatest influence on practically every type of pseudopsychology now on offer, with now refuted ideas such as the repression of memories as a defence mechanism (Loftus & Ketcham, 1994), the emotional and infantile origin of mental disorders, or catharsis as a form of healing.



Alejandro Tovar



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Indeed, most of Freud's ideas lack scientific support, both as a model for the functioning of the human mind (Meyer, 2005) and when used in the form of psychotherapy (Smit et al., 2012).

After this period dominated by psychoanalysis, in which pseudopsychotherapies such as the famous character-analytic vegetotherapy, orgone therapy – a type of vital energy postulated by Wilhelm Reich and refuted personally by Albert Einstein – or gestalt therapy – not to be confused with the «Gestalt psychology», which studied the laws of the mental construction of experience – the next great source of clinical pseudopsychology arrived: the New Age.

■ FROM THE NEW AGE TO NEUROPEUDOSCIENCE

The New Age was a counter-cultural movement in the United States based on the astrological belief that the Earth would enter the age of Aquarius and a new age would begin for humanity (Heelas, 1996). Although astronomy explains that this will not happen until the twenty-seventh century, the followers of the New Age situated the transition on 4 February 1962. Since Aquarius is a sign characterised by scientific thought and intuition, this was supposed to be reflected in knowledge and moral changes among the inhabitants of its era. The connection with the hippie movement was immediate; its syncretism with Christianity was also important, considering that this new era would represent Christ's second coming, not so much in person but rather in terms of his message. While it is true that the New Age began with a series of purely esoteric ideas, although with clear traces of pseudoscience based on spiritual exploration, mysticism, eastern exoticism, and alternative medicine, their subsequent development radicalised these questions to the extreme. The movement gradually slid towards the development of highly manipulative spiritualistic pseudosciences with a high risk of becoming cults, usually led by one of the abundant emerging gurus of the time.

The New Age thus functioned as a catalyst for the emergence and distribution of pseudoscience, especially psychological variants. Despite the fact that the New Age promoted many previous or exotic pseudosciences, such as reiki or homeopathy, many of them were inventions developed through the Esalen

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«Mesmerism» or «animal magnetism» is a theory developed by the German physician Franz Mesmer (1734–1815), who considered diseases to be an imbalance in an assumed ethereal medium. His highly suggestive mesmeric sessions were wrapped in a mantle of pseudoscience, using metal rods that were introduced into hydroelectrolytic solutions to send faint electrical currents into the patient's body. This 1780 engraving by an unknown author shows a «baquet» – a therapy procedure used by Mesmer's group – with several people sitting around a table. A man with a cane has an iron ring around his ankle; other members of the group wear similar rings; on the left, a man has hypnotised a woman.

Institute, a crystallisation of what Aldous Huxley called «human potential movement», or, in a less radical way, through the Palo Alto Mental Research Institute – the close relationship between the two centres is embodied in the central figures who worked in both of them throughout their lives, such as Virginia Satir and Gregory Bateson. These two centres were the source of «humanistic psychology», a trend that lacks scientific evidence to support almost all its approaches to psychotherapy – except for family therapy. Among the typical New Age pseudopsychotherapies (Lilienfeld et al., 2003) – there are dozens of them and several are quite radical (Singer & Lalich, 1996) – we find transpersonal psychology, rebirthing, and coaching, which is closely linked to a Hinduist sect called the «Divine Light Mission», primal therapy, hypnotic age regression, past-lives therapy, family constellations, and neuro-linguistic programming (NLP).

The reason for the special abundance of New Age-related pseudopsychology compared to other fields is twofold: the very nature of the movement itself and the great advances made in psychology and the discoveries made in neuroscience during its gradual



maturation process. Thus, they entered the tradition initiated by pseudoscientific hypnosis and continued by psychoanalysis, and incorporated large doses of mysticism and exoticism, employing techniques such as deep or «holotropic» breathwork – which causes altered states of consciousness due to hypocapnia – aquatic immersion, the use of hallucinogens, or group cathartic suggestion.

New Age pseudoscience is still very successful, although many of its complex theories have been adapted to today's most popular language, in what we can call neuropsychosciences, such as neurocoaching, brainspotting, neuropsychanalysis, or eye movement desensitization and reprocessing (EMDR) – a technique based on a false imitation of the saccadic movements of REM sleep, which contradicts basic neurophysiology and works by covert visualisation (Herbert et al., 2000; Salkovskis, 2002). There was even a time during the 1980s when bulky wonder

machines with names that exploited the language of neuroscience in an almost chaotic fashion, such as the «transcutaneous electro-neural stimulator», the «brain supercharger», or the «whole brain wave form synchro-energizer», became fashionable (Lilienfeld et al., 2003). Thus, the market of pseudopsychology went from the privacy of psychoanalysis to the spiritualist collectivism of the New Age, and from there to what we now see as a very commercial form of pseudopsychology, fleeing from the image of enlightenment, trying instead to camouflage among the most orthodox psychological and neuroscientific forms and words.

In light of the entire process of pseudopsychology cultural evolution which allowed it to adapt to the scientific environment of each time, we must seek an explanation for the great penetration into scientific psychology of, for instance, EMDR or NLP, both in their refined rhetorical tactics and in the habitat they currently occupy.

This habitat presents a dangerous combination of low deontological pressure and a political correctness attitude towards these types of practices which, based on the rhetorical impact of the vocabulary of the long pseudopsychological tradition, are capable of softening the critical capacities of psychologists and users.

«THE NEW AGE FUNCTIONED
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■ PLAYING WITH FIRE (AND GETTING BURNED)

Pseudopsychology is not a set of harmless practices. It has an impact on the quality of the health system and can be dangerous for several reasons (Lilienfeld, 2007). The first source of danger is the contamination of psychology and the loss of prestige of the discipline. Finding people, even other scientists, who do not give psychology the respect it deserves as a discipline is commonplace; this causes mistrust and leads the psychology community to become isolated and debilitated compared to its local competitor, pseudoscience. This loss of prestige also affects the level of confidence that other health professionals place in psychotherapy. Doctors, for example, often refuse to refer patients to psychologists even though for some disorders, such as certain cases of depression, psychotherapy is more effective and efficient than the use of psychotropic drugs (Cuijpers et al., 2013). In fact, in Spain the rate of public recruitment of clinical psychologists



Mladifilozof

The market of pseudopsychology has gone from the privacy of psychoanalysis to the spiritualist collectivism of the New Age. In the picture, a Rainbow Gathering in Bosnia, 2007. Rainbow Gatherings are defined as temporary communities who gather annually in remote locations around the world for one or more weeks to share an ideology of peace, love, harmony, freedom, and respect. These events are connected to the New Age movement and beliefs.

is clearly deficient, with nearly four psychologists per 100,000 inhabitants, a figure that is several times lower than the European average of eighteen. The direct consequence of the low number of clinical psychologists and the lack of confidence in the field is that many people with mental disorders end up resorting to unqualified therapists.

Another risk, shared with any other pseudotherapy that considers itself an alternative to proven treatments, is treatment avoidance. An individual who is suffering from a mental disorder can lose a lot of time seeking help in pseudopsychological techniques while their problem worsens, or they are forced to suffer unnecessarily. For example, patients who see a psychoanalyst for more than five years for an anxiety problem, without seeing any improvement over time. There have been documented cases of treatment avoidance since the time of Freud, the case of the young Ida Bauer (Dora) being especially clear. The intervention noted how dangerous and highly counterintuitive her point of view was. When Dora developed colon cancer, she did not receive a timely diagnosis because she thought she had been somatising her emotional problems, as Freud had told her she would. According to him, the aetiology of her emotional problems would be based on incestuous cravings for her father and a latent homosexuality, since Dora had resisted when a friend of her father sexually harassed her. Hence, supporting misguided ideas can lead us to make incorrect decisions about our health.

Of course, direct harm can also occur. These techniques are usually carried out by people without sufficient training to work in clinical settings and who often do not follow the appropriate protocols, whether for this reason or simply because they choose not to, in cases such as patients with suicidal tendencies or comorbidities. A bad psychotherapist can worsen any clinical picture, a possibility that can only be aggravated when their techniques are not subject to scrutiny in the context of the available evidence and that allow the therapist to act in a deregulated manner. One of the most unfortunate and shocking cases was that of Candace Newmaker, a ten-year-old girl who died of asphyxiation during a rebirthing therapy session. Candace was rolled into blankets and pressed under the weight of two adults for about an hour in her mother's presence while she screamed for help, until she finally stopped breathing. Candace's case, because of its extreme seriousness, was taken to court, and today the «Candace law» prohibits rebirthing therapy in the states of North Carolina and Colorado.



Beatriz Fernández

Candace Newmaker, born in 1989, passed away when she was ten, asphyxiated during a rebirthing therapy session. The case was brought to court and led the states of Colorado and North Carolina to ban this therapy. The picture shows a rebirthing therapy session.

**«SUPPORTING MISGUIDED IDEAS
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Another very common case is that of false memories, either by confabulations to fill a gap or by distorting real memories. False memories have been widely studied and anyone with sufficient expertise can generate them. An experiment that successfully managed to convince subjects that they had seen Bugs Bunny in the Disney theme parks (Braun, Ellis, & Loftus, 2002) – Bugs Bunny is a Warner Bros property – is particularly famous. When we manipulate a memory, it reconsolidates with the change and it is virtually impossible to differentiate between the original memory and what was added to it, unless we can deduce it based on some other information. There are countless documented cases of people affected by false memories – some of whom have their own associations, such as the False Memory Syndrome Foundation. Cases of epidemics of false memories of satanic ritual abuse in some parts of the United States in the 1980s were well documented. A person in whom a false memory of terrible sexual abuse is induced, a common occurrence in several practices influenced by the psychoanalytic idea of repressed memories (Lilienfeld et al., 2003), can suffer severe emotional harm, not to mention the (also documented) possibility of legal action against an innocent person based on these false testimonies.

For all these reasons, pseudopsychology is dangerous and should not be taken lightly. It is also a large family with a long tradition, high penetration into contemporary psychology, and an enormous unifying theoretical construct that appears in all its branches with different variations and nuances. We must not underestimate its resources and sophistication. It is a formidable challenge for psychology, and indeed, many of us would like to see this branch of knowledge carry out a cleansing: Besides being necessary, it is now becoming urgent. ☉

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Angelo Fasce. Philosopher of science with a neuroscience background. He is currently a doctoral student at the Department of Philosophy in the University of Valencia (Spain). He is an expert on the demarcation problem and the psychological mechanisms that give rise to irrational thinking. He is also an active disseminator of science and its philosophy.