MEDICINA NEI SECOLI ARTE E SCIENZA, 31/1 (2019) 71-92
Journal of History of Medicine

Articoli/*Articles*

RETHINKING MESMERISM AND ITS DISSEMINATION IN THE 19TH CENTURY: AT THE INTERSECTION BETWEEN PHILOSOPHY, MEDICINE AND PSYCHOLOGY

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SUMMARY

MESMERISM AND ITS DISSEMINATION IN THE 19TH CENTURY

The thought and work of Anton Mesmer had a great dissemination in the last decades of the XVIII century and all along the XIX, a dissemination that differed in its theoretical and practical valences in line with the peculiar cultural, social and political contexts of the main European countries. On the basis of a new 'science of the mind' social reforms were invoked, ranging from education to ethics and to the treatment of mental disorders, obviously passing through the questioning of the legal and political organization of the various States. A new 'physiology' justified and at the same time required to replace with the 'scientific' knowledge the basic ideological and social assumptions upon which the whole society was based, from schools to prisons and asylums.
But does it really was 'scientific' knowledge? And who had the last word on this problem, a problem that was in the first place epistemological but had also enormous social implications?

"Her eyes are open but their sense is shut"

(Shakespeare, *Macbeth*, V.I)

Key words: History of bio-medical and cognitive sciences in the XIXth century - Hypnosis– psychoteraphy - Social and cultural history of medicine

Unity of the Self versus fragmented states of mind

In the last decades of the XVIIIth century, and all over the XIXth – "the neurosic [sic] century" (Paolo Mantegazza 1887) – Mesmer's thought and work had a great and controversial dissemination, in many different ways under the theoretical and practical profile in the specific cultural, political and social context of European Countries. The unitary dimension of the Self, the complexity of human mind and the neurobiological mechanism which are at the base of human behaviour were among the main topics of European philosophical, psychological and neuroscientific research. In that period, as we know, a complex process of epistemological definition was going on at the intersection between medicine and the raising scientific psychology (whose 'birth' we conventionally state in 1879, with the foundation of the well-known 'Experimental Psychology Laboratory' by Wilhelm Wundt at the University of Lipsia)[1].

Almost every philosopher, psychologist or scholar of the mind was deeply interested in the relation between the unity of consciousness, with its autonomous will, and the many states of psychical fragmentation that were appearing in different clinical contexts (from hysteria to hypnosis) and in many devotional practices as well (i.e. in exorcisms)[2].

From the point of view of the historian of science, particularly interested in the historico-epistemological development of the biomedical and psychological sciences, it's mostly interesting to analyze the many field trespasses and intersections between the work of scientists and literates, physicians and philosophers.

What was going on was a complex confrontation, often a clash, that opposed common sense and the traditional view of mind and body to the new methodologies in this field which were aimed to the scientific rigor and experimental practices. Especially in the second half of the XIXth century, many studies on occultism and paranormal

phenomena converged with the great question about madness as 'human condition'. Metaphorically, animal magnetism, spiritism, hypnosis… were like different tributaries converging in the great river of the study of mind that was feed by everyday life and by arts and culture in their different areas (literary in the first place). The question was how to 'handle' individual and collective behavior, under the educational, legal and medical profile. To study mind and behaviour, in their different normal/pathological states and functions, it was necessary to continuously redefine the nosographic categories on the epistemological ground. This 'opened' to intermediate spaces and multiple intersections between what was considered a normal mental state and alienation.

In the '80s of the century, a spiritualistic trend catalyzed against the materialistic dominant paradigm in science through the reprise of paranormal phenomena that in the previous century had 'freedomly' fathomed – in the absence of codified methods or shared practices – the abysses of human mind: in the first instance through the study of animal magnetism theorized by Mesmer.

The German physician Franz Anton Mesmer (1734-1815), graduated in medicine and philosophy, then also in law, at the end of the XVIIIth century and in the first years of the XIXth proposed a complex theoretical system, called Mesmerism, which had many heuristic valences to study the mind and, in the same time, to 'heal' anomalous mental and behavioural states that were 'non compatible' with the scientific theoretical framework of the time.

In 1766 his ideas on the influence of the planets on man were exposed in a Doctoral Thesis in Medicine under the title *Dissertatio physico-medica de planetarum influxu*. In 1775 Mesmer was called by the Bavarian Academy of Sciences to take part in the commission established by Maximilian Joseph of Bavaria in Monaco to judge the reliability of the method adopted by the Austrian Catholic priest, exorcist and healer, Johann Joseph Gassner (1727-1779).

Mesmer stated that the efficacy of Gassner's practices was based on the 'Animal Magnetism', and his position opened the way, in a historical perspective, to a significant shift: from exorcism to psychotherapy[3].

It's worthy to analyze Mesmer's thought in its historical, political and cultural context.

At the end of the XVIII century in France, especially in Paris, it had spread "a general tendency towards mass hysteria"[4]. The government political weakness, a catastrophic economic situation, a widespread corruption and the consequent generalized anxiety feed strong radical and anticlerical tendencies. This was in accord with the basic assumptions of the philosophy of Enlightenment on the necessity to oppose scientific progress to the ideological legitimations of the social and political existing structure and its consolidated privileges.

Animal magnetism was an application of Newtonian philosophy to the organism in a sort of 'new philosophy' of man, in his health and illness conditions.

Mesmer's aim was to move from religion to science Gassner's approach (his analysis and practice); through this shift it was possible to open a new way for a healing method free from the religious constraints and in line with the Enlightenment theoretical assumptions. In the words of Ellenberger. "it does not suffice to heal the sick, it's necessary to heal him by socially accepted methods".

The *Mémoire sur la découverte du magnétisme animale*, the programmatic synthesis of Mesmerism published in Paris in 1779, stated five theoretical hinges at the basis of the new approach to man and his pathologies:

1. The universe is pervaded by a thin physical fluid that interconnect it;
2. Illness is provoked by a sort of imbalance, a not homogeneous distribution of the fluid within the body[5];

3. The magnetic fluid, through appropriate practices, can be channeled, stored and conveyed to other people;
4. So, it's possible to provoke cathartic crises and to cure many diseases;
5. Everybody has the animal magnetism, but someone, the sick, suffers from a shortage of it.

Hence Mesmerism, grounded in the theory of animal magnetism, linked life and wellness to a magnetic fluid flowing through the body. In a somnambulistic state induced by the magnetizer, with the subject with 'senses dormant' (today we should say with a lowered vigilance threshold), the fluid enhanced the organ on which it was fixed (so, it might cure mental/nervous diseases as well).
The fluid could be oriented and conveyed by the use of an instrument acting like a magnet, or through the influence exercised by the magnetizer who, touching the patient with his hands, could cure the imbalance at the base of the disease.

Looking for a rational explanation

Clearly Mesmer was looking for a 'rational' explanation – refusing any mystical theory – for the astonishing complexity of the human mind (in its power and its fragility). A rational explanation, coherent with the Enlightenment paradigm, to apply the theoretical assumptions and the methods of science in the study of the mind and its links with the body. And the 'par excellence' science was the physics of that time, with the study of universal gravity and electricity. In inventing his 'baquet'[6], a physical instrument that 'concentrated' the magnetic fluid and allowed its transmission through the body, Mesmer was inspired, indeed, by the newly invented Leyden Bottle[7].
Anyway, animal magnetism as a universal means of treating and preventing disease, was a disruptive proposal on many levels: in the

Fig.1 Tubular Leyden Bottle, second half of the XIX century, Museo Galileo, Florence.

Fig. 2. The sole remaining example of Mesmer's *baquet*, on display at the Musée d'Histoire de la médecine et de la Pharmacie, Lyon, France.

first place, in relation to the social and epistemological dimension of medicine. A process of social and professional structuration of the medical corporation was going on linking the social role of the

physician to the scientific method and on this assumption advocating the "separation" of the doctor from the patient and of medicine from the many different healing practices.

A disruptive proposal

The professional practice of medicine moved large sums of money and excluded large sections of the population. Mesmer, instead, proposed the 'contact', a physical contact between patient and doctor that was also effective on the psychic level. And this kind of contact, the 'touch', was an effective method for everyone and even practicable by everyone. Also the instrument could be adapted, almost shaped, according to the individual in his social dimension: for the poor Mesmer proposed in fact the collective magnetization through a 'magnetic tree'.

Fig. 3. Illustration from Puysegur (1820), *Suite des Mémoires pour servir à l'histoire et à l'établissement du magnétisme animal*, Paris: Cellot, III ed., table IV.

In this way, from within a sort of dialectic relationship, the eye of the magnetizer approached to that of the many who were interested in the extraordinary aspects of the human mind and its manifestation in the body and in the behavior, from writers to poets, from philosophers to physicians and psychologists, even to sculptors. Among Mesmer's friends, for example, we can remember the famous German sculptor Franz Xaver Messerschmidt (1736-1783) who in the seventies of the century sculpted the famous series of heads with exaggerated facial expressions after a stay in the house of Mesmer in 1766.

Fig. 4. Franz Xaver Messerschmidt. Biography of German Neoclassical Sculptor and His Character Heads, 1770, Belvedere Gallery, Vienna.

Obviously, the implications of the dissemination of these ideas, and of this new 'sensitivity' towards health and illness, fueled the contrast with medicine, also investing another 'cornerstone' of the nascent epistemological status of medical disciplines: the specialization of clinical contexts.

To hypothesize that a variety of disorders, syndromes and illnesses of various kinds, could be traced back to a single cause, bypassed the boundaries of specialism and the specificity of clinical methodologies and therapeutic approaches.

There was then the social and political question of the doctor-patient relationship and the nature of the cure: in 1784 the *Académie des sci-*

ences and *Académie de médecine* of the *Société Royale* recognized that "therapeutic effects [of animal magnetism] are not denied, but they are attributed to the imagination"[8].

As a whole, the theoretical system of Mesmerism stood in contrast with too many metaphysical and theoretical philosophical assumptions: on the body, the mind and the complex psychophysical dimension of the individual, on the mechanisms of life and illness, on the whole social organization.

Thus, at a great and rapid popular dissemination of animal magnetism (with numerous cases of gratuitous treatment that occurred in France and Alsace ...), discredit, criticism and polemics were added.

The 'stratification' of the psyche

On the theoretical and scientific level, the comparison focused on the nature and the ways of the effectiveness of the magnetizations. Some interpretative hypotheses linked it to a sort of 'stratification' of the individual's psyche and behavior; so, factors such as imagination, suggestion, altered states of consciousness (starting from sleepwalking) came into play.

One of Mesmer's most famous disciples, Amand-Marie-Jacques de Chastenet Marquis of Puysegur (1751-1825), developing and deepening the theory of universal fluid hypothesized that in the process of magnetization a decisive factor was the interpersonal relationship between doctor and patient, and the 'empathy' between the one who lends care and the one who receives it.

Developing the magnetization practices, Puysegur discovered the so-called "Magnetic Dream" or "Artificial Sleepwalking" (a state in which the subject is alert, attentive, able to speak and respond, and even shows a livelier intelligence than normal); and through steps like these, points of junction in the development of scientific thought, magnetism in the course of the Nineteenth century developed into the direction of hypnosis.

Looking in fact 'beyond' the magnetic fluid, looking for the factor capable of orienting and influencing it, Puysegur went back to the will of the magnetizer, to its ability to induce psychic and physical changes in a subject. Starting from the developments of the theory of animal magnetism a hypothesis of structure and mental functioning was outlined[9].

Hypnosis

In 1842 the Scottish surgeon James Braid (1795-1860) proposed the term hypnotism as a neologism deriving from the Greek 'hypnos', the god of sleep. In the words of Braid: "I therefore think it desirable to assume another name [than animal magnetism] for the phenomena, and have adopted neurohypnology – a word which will at once convey to everyone at all acquainted with Greek, that it is the rationale or doctrine of nervous sleep; sleep being the most constant attendant and natural analogy to the primary phenomena of mesmerism, the prefix 'nervous' distinguishing it from natural sleep. There are only two other words I propose by way of innovation, and those are hypnotism for magnetism and mesmerism, and hypnotised for magnetised and mesmerised"[10].

Based on many experimental observations, James Braid formulated the hypothesis that a subject could be induced into hypnosis by focusing it on a light stimulus or on a specific idea. This psychophysical 'healing' method began to spread in neurological and neuropsychological environments, since its best-known application: the use of hypnosis by Jean-Martin Charcot (1825-1893) for the treatment of hysteria at the hospital of the Salpetrière.

With his 1884 Report to the Paris Academy of Sciences, Charcot made a significant change in the opinion of physicians on hypnosis, proposing it as a method of investigation with a diagnostic and therapeutic potential rather than a form of charlatanism[11].

But the spread of hypnosis in the neurological and neuropsychological field necessarily brought with it the recognition of the fact that there was

Fig. 5. Pierre Aristide André Brouillet, A Clinical Lesson at the Salpetrière, 1887, Musée de l'Histoire de la Médecine, Paris.

no magnetic fluid, and it was necessary to look with new eyes to the complex structures of the psyche, to its unexplored territories (let's remember the definition of Mesmer as 'novel Columbus' by Ellenberger). Reflecting indeed on the relationship between hypnosis and hysteria Sigmund Freud, after his meetings with Charcot at the Salpetrière, came to hypothesize a multiple psychic, dynamic and conflictual apparatus, and the existence of stratified levels and mental processes generally hidden from consciousness, acting as unconscious motivations of our behavior. In the meanwhile, the work of Hippolyte Bernheim (1840-1919), with the School of Nancy, supported the presence in the human mind of many thoughts and psychic states of which there is no awareness and the possibility of investigating them with the method he called 'psychotherapy'. Many psychiatrists joined the Bernheim's method: from Krafft-Ebing in Austria, to Bechterev in Russia.

Dissemination of thoughts and practices

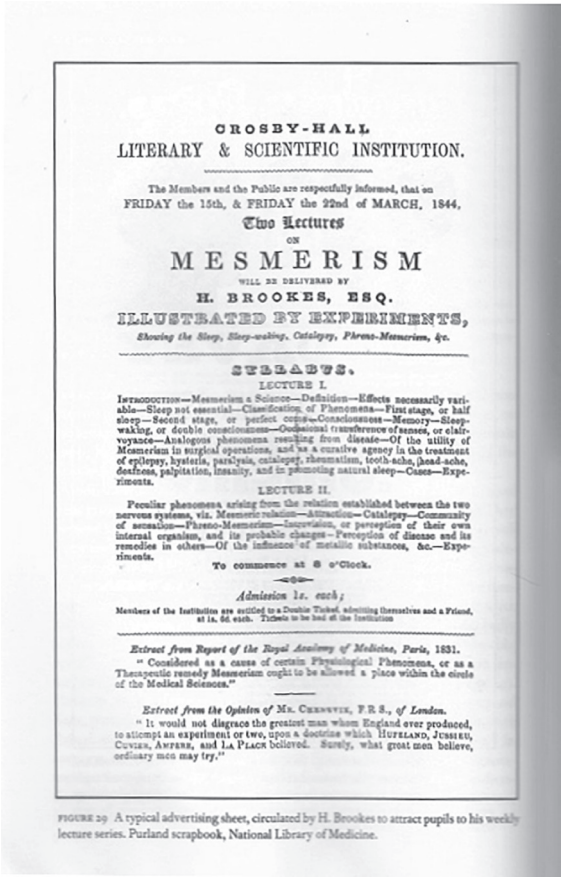
Naturally the Mesmerian model was differently interpreted in different European cultural and social contexts. In Germany it was linked to the theories of the Romantics and Philosophers of Nature, a nature understood as a living organism pervaded with a soul, within which, being a part of it, the human mind can communicate with the soul of the world, so perceiving 'hidden things'[12].

The German interpretation - as Ellenberger emphasizes – was more philosophical: while in France a therapy was sought, a medical practice, in Germany (with Schelling and Schleiermacher) one aimed at an 'experimental metaphysics'.

In England, however, mesmerism first encountered a great hostility, effectively spreading only from 1840 with the work of James Braid: the rejection of the theory of magnetic fluid and the proposal of a theory based on the physiology of the brain made the magnetism more acceptable to the medical corporation. But the violent opposition of the Royal Medical and Chirurgical Society persisted and then, after Liston's discovery of anesthesia in 1846, the technique of hypnosis was considered outdated.

In the overall, what occurred in the major European Countries in a century during which the disciplinary physionomy of medical and biological studies on the brain was being strengthened[13], it is a classic example of the dialectical interplay between science and marginal cultures, which feeds the development of science by constantly 'pushing' for the widening of the scope of scientific methods and for openness to the confrontation with unorthodox medical practices. In fact, the methodological foundations and the epistemological status of the sciences of the mind (psychiatry, psychology) were outlining themselves. "In Victoria Britain, almost any member of society – from factory worker to aristocrat to priest – might succumb to the powerful attractions of the mesmeric séance"[14]. Many Victorian intellectuals and scientists and also many public figures became interested in mes-

merism and often experienced hypnosis, in the context of a complicated game aimed to redefine, in the study of the mind, the conceptual categories of healthy and sick, what to look for in the study of mind and behaviour, and how to 'enter' in what Charles Darwin in the same years called "the citadel of the mind"[15].
Throughout the century, specialized companies and magazines, consultancy studies and popular shows on these issues began to spread.



CROSBY-HALL
LITERARY & SCIENTIFIC INSTITUTION.

The Members and the Public are respectfully informed, that on
FRIDAY the 15th, & FRIDAY the 22nd of MARCH, 1844,
Two Lectures
ON
MESMERISM
WILL BE DELIVERED BY
H. BROOKES, ESQ.
ILLUSTRATED BY EXPERIMENTS,
Showing the Sleep, Sleep-waking, Catalepsy, Phreno-Mesmerism, &c.

SYLLABUS.

LECTURE I.

Introduction—Mesmerism a Science—Definition—Effects necessarily variable—Sleep not essential—Classification of Phenomena—First stage, or half sleep—Second stage, or perfect coma—Consciousness—Memory—Sleep-waking, or double consciousness—Occasional transference of senses, or clairvoyance—Analogous phenomena resulting from disease—Of the utility of Mesmerism in surgical operations, and as a curative agency in the treatment of epilepsy, hysteria, paralysis, catalepsy, rheumatism, tooth-ache, head-ache, deafness, palpitation, insanity, and in promoting natural sleep—Cases—Experiments.

LECTURE II.

Peculiar phenomena arising from the relation established between the two nervous systems, viz. Mesmeric relation—Attraction—Catalepsy—Community of sensation—Phreno-Mesmerism—Inspiration, or perception of their own internal organism, and its probable changes—Perception of disease and its remedies in others—Of the influence of metallic substances, &c.—Experiments.

To commence at 8 o'Clock.

Admission 1s. each;

Members of the Institution are entitled to a Double Ticket, admitting themselves and a Friend, at 1s. 6d. each. Tickets to be had at the Institution

Extract from Report of the Royal Academy of Medicine, Paris, 1831.

"Considered as a cause of certain Physiological Phenomena, or as a Therapeutic remedy Mesmerism ought to be allowed a place within the circle of the Medical Sciences."

Extract from the Opinion of Mr. Chevreul, F.R.S., *of London.*

"It would not disgrace the greatest man whom England ever produced, to attempt an experiment or two, upon a doctrine which Hufeland, Jussieu, Cuvier, Ampere, and La Place believed. Surely, what great men believe, ordinary men may try."

FIGURE 29 A typical advertising sheet, circulated by H. Brookes to attract pupils to his weekly lecture series. Purland scrapbook, National Library of Medicine.

Fig. 6. A. Winter, 1998, p. 116.

And in 1889 in Paris and London it was all a flourishing of *Congrès de Spiritualisme International*; *Congrès d'Hypnotisme*, *Congrès de Magnétisme*, *Lectures* ed *Exhibitions on Mesmerism*.
In the eighties of the Nineteenth Century, even in Italy the first experiments began - and already in 1853, the Society of Encouragement of Sciences, Arts and Letters of Milan had launched a competition for the publication of a Memory on Animal Magnetism.
Many physicians, scientists, men of arts and culture, all interested - we could say - to penetrate the labyrinth of the mind, were interested in the phenomenon of magnetism by subjecting themselves to the magnetizing practice. Luigi Capuana, for example, experienced induced sleepwalking and in 1884 he published in Catania *Spiritism?* In 1886 Morselli published his *Essay on Animal Magnetism*.

The power of the mind

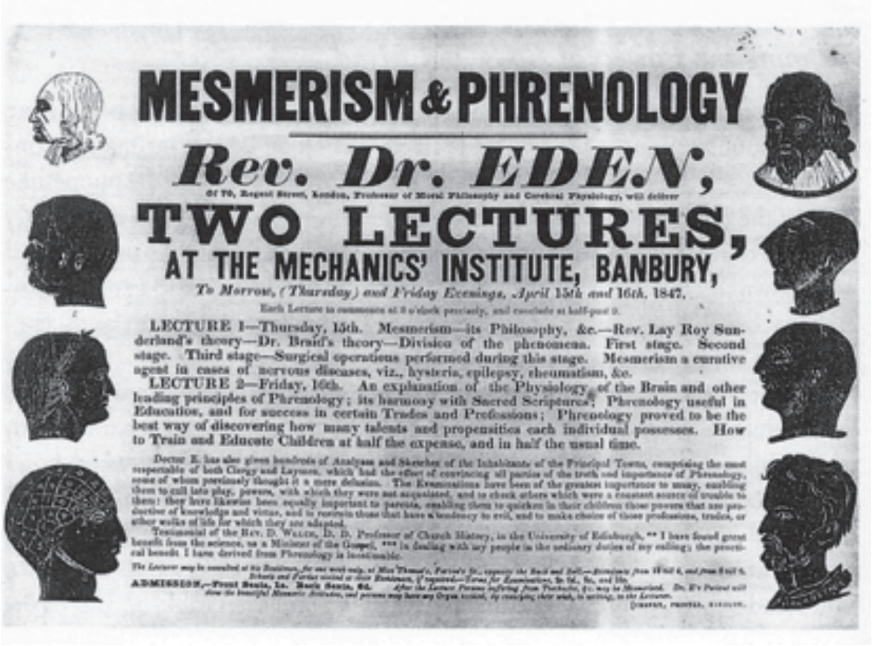
While a "legion of charlatans"[16], with theatrical demonstrations, performances, and sometimes real "waves of madness"[17], spread throughout Europe, the new theories on the human mind discovered the power of the mind on the body and the psychogenic origin ("*ideogenic*" in Freud's words) of the disease. This new conception of the pathogenesis of mental illness opened to the possibility of treating organic disorders through magnetism and hypnosis. And the powerful effects of the relationship stood out in the management of unconscious psychic energies for therapeutic purposes.
The 'magnetic sleep' (or 'trance'), in fact, revealed the power of an individual over another, on his body and his mind, exclusively on a psychic basis. And this opened up awesome scenarios on the great potential of the human mind, just letting emerge altered states of consciousness and unsuspected and astonishing cognitive abilities: perceptive, mnemonic and communicative interactions.
It was the revelation of what Winter called "the 'other side' of medicine and science" [18], the hidden face of the mind, better its different

'faces', its powerfully plastic and dynamic nature, even capable of what we would now define as 'cognitive enhancement' in the expansion and continuous reconfiguration of primarily perceptive but in a broader sense cognitive and behavioral capacities.

This, of course, involved the need to look with different eyes at the individual identity itself, at the nature of the human being in a complex reconfiguration of the boundaries between body and mind, between health and illness, between oneself and the others.

A 'new' science of mind appeared on the horizon; a science that - on the base of these theoretical assumptions - could not but arouse the most decisive opposition of official medicine.

This happened also because the 'subversive' potential of mesmerism grew exponentially due to its convergence with Phrenology, another


MESMERISM & PHRENOLOGY

Rev. Dr. EDEN,

TWO LECTURES,

AT THE MECHANICS' INSTITUTE, BANBURY,

To Morrow, (Thursday) and Friday Evenings, April 15th and 16th, 1847.

LECTURE 1—Thursday, 15th. Mesmerism—its Philosophy, &c.—Rev. Lay Roy Sunderland's theory—Dr. Braid's theory—Division of the phenomena. First stage. Second stage. Third stage—Surgical operations performed during this stage. Mesmerism a curative agent in cases of nervous diseases, viz., hysteria, epilepsy, rheumatism, &c.

LECTURE 2—Friday, 16th. An explanation of the Physiology of the Brain and other leading principles of Phrenology; its harmony with Sacred Scriptures; Phrenology useful in Education, and for success in certain Trades and Professions; Phrenology proved to be the best way of discovering how many talents and propensities each individual possesses. How to Train and Educate Children at half the expense, and in half the usual time.

Fig.7. Advertising for phreno-mesmerical lectures, in A. Winter, *mesmerized*, p. 118.

practice considered 'heretical' on the scientific as well as on the philosophical level, spread rapidly and capillary in the first half of the century in different European social and cultural tissues (and not only) based on the work of Franz Joseph Gall and Caspar Spurzheim[19].
"Phrenology had implications for law, education, the treatment of people with nervous disorders, and in the most general sense, social and political policy. When mesmerism became interlinked with Phrenology, this potential became even greater - and, to opponents, even more treatening"[20].
Both Phrenology and Mesmerism - in English there was the word "Phreno-Mesmerism" - questioned the very organization of society and had major implications for the political order undermining 'the heart' of the ideological structure based on a concept of mind, body, individual and collective behaviors that were now seriously challenged by a conception of human behavior and cognitive abilities as 'emergent properties' of a species-specific nature (therefore biological and innate) combined with the social and cultural environment.
On the basis of this new 'science of the mind' social reforms were invoked, ranging from education to ethics and to the treatment of mental disorders, obviously passing through the legal and political organization of the different Countries. A new 'physiology' justified and at the same time required to replace with the 'scientific' knowledge the basic ideological and social assumptions upon which the whole society was based, from schools to prisons and asylums.
But does it really was 'scientific' knowledge? And who had the last word on this problem, a problem that was in the first place epistemological but had also enormous social implications?

Scientific knowledge and socio-cultural contexts

Orthodox medicine was challenged by a new and 'global' approach, not intrusive and in principle generalizable and shareable, so as to go beyond the borders of traditional 'scientific' spaces (hospitals and

medical cabinets) in favor of a 'public' and uncanny spectacularization of the unsuspected, even therapeutic, powers of the human mind. In fact, the Mesmeric practices were practicable both in hospitals and in theaters, in squares and even in churches, thus aiming at an ever wider social 'target' and further feeding itself through arts and culture in a general sense. In England, for example, writers and biologists, physicists and physiologists were active protagonists of the public debate: from Charles Darwin and Herbert Spencer to Shelley and George Eliot, from Charles Dickens to William Benjamin Carpenter; and in France, Pierre Simon Laplace and Georges Cuvier, René Laennec, Jean-Marc Gaspard Itard and François Magendie.

As Winter points out: "Mesmerism questioned the nature and status of 'private' and 'public' […]. Thus, in revising the geography of private and public spaces, and offering new conventions of proper conduct, mesmerism was a means of asserting what should be the new rules, appropriate to the new times, for making claims about the nature of authority, and about authority with respect to nature"[21].

With the work of Mesmer, as we have said, at the end of the eighteenth century a great game was opened up for the redefinition of the boundaries between natural and supernatural, between religion and science, and - within science - between theoretical and methodological assumptions. And throughout the nineteenth century this dialectic epistemological process for the redefinition of man, his body and his mind, will be a powerful propulsive element for the development of scientific knowledge and clinical practices and for the definition of the new epistemological status of the main sciences of body and mind: medicine and psychology.

In the seventies of the nineteenth century, as is known, a series of important reforms redefined the disciplinary physiognomy of medical and biological sciences, starting from the introduction of laboratories and experimental practices in the educational curricula of physicians and physiologists (in England, for example, with the es-

tablishment of the Experimental Physiology Chair of Michael Foster in Cambridge). And as far as psychology was concerned, as we have already mentioned, starting from 1879 it had an autonomous epistemological status and new codified experimental methodologies.
All in all, looking at the scientific landscape of the late nineteenth century, a clear 'professionalization' and a disciplinary 'specialization' of bio-medical and psychological sciences state themselves as the point of arrival of a historical path and an epistemological development of which the unorthodox and 'alternative' practices in the approach to the human body and mind have been - as we have seen - an integral and constitutive part.

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2. Fusaro EC, La nevrosi tra medicina e letteratura. Firenze: Edizioni Polistampa; 2007.

3. In Ellenberger's opinion dynamic psychiatry began in 1775, with the contrast between the physician Mesmer and the exorcist and healer Gassner.
4. Ellenberger HF, The Discovery of the Unconscious. The History and Evolution of Dynamic Psychiatry. New York: Basic Books; 1970. (trad. it. La scoperta dell'inconscio. Storia della psichiatria dinamica. Torino: Boringhieri; 1976.)
5. This concept clearly echoes the ideas of Hippocrates on health as equilibrium ("crasis") and illness as a rupture of it ("dyscrasia"). For Hippocrates - as we know - the treatment was aimed at restoring harmony between the four humors through a "coction" procedure based on the heat inherent in man (Jouanna J, La nascita dell'arte medica occidentale. In: Grmek MD, Storia del pensiero medico occidentale. 3 voll. Roma-Bari: Laterza; 1993-98. 1993, I: 3-72.)
6. The baquet was initially conceived as a vat containing bottles of magnetized water from which steel bars escaped through which the 'magnetization' took place in the sicks, who were arranged around the tub holding their hands. Over the years, Mesmer changed the typology of the mesmerization instrument several times, depending on the economic and social condition of the sick, up to the exclusive use of the touch of his hand.
7. The Leyden bottle was the first electric condenser in history, invented in Leiden in the mid-1700s by the Dutch physicist Pieter van Musschenbroek. Metaphors inspired by technology - alongside organic and social metaphors - have always played a strongly propulsive role in the development of scientific knowledge: from the clock in the seventeenth century to the computer in the twentieth century. In the historical development of psychology as an autonomous discipline, among the metaphors of greater heuristic value we must remember that of the iceberg used by Freud to explain the stratification of the mind and the 'submerged' nature of the great part of it (Morabito C, La metafora nelle scienze cognitive. Milano: McGraw-Hill; 2002.).
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17. On this topic I refer, again, to the work of Wu Ming (2014).
18. Winter A, cit. note 14.
19. Morabito C, La cartografia del cervello. Milano: Franco Angeli Editore; 1996. Pogliano C, Storie di cervelli. Dall'Antichità al Novecento. Milano: Editrice Bibliografica; 2017.
20. Winter A, cit. note 14.
21. Winter A, cit. note 14.

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