

## Un approfondimento su...

# Actuality and originality in the scientific thought of Enrico Morselli (1852-1929)

## *Attualità e originalità nel pensiero scientifico di Enrico Morselli (1852-1929)*

ROSAGEMMA CILIBERTI<sup>1</sup>, SILVIA IORIO<sup>2</sup>, ADELAIDE TOSI<sup>3</sup>, OMAR LARENTIS<sup>3</sup>, MARTA LICATA\*<sup>3</sup>

\*E-mail: marta.licata@uninsubria.it

<sup>1</sup>Section of History of Medicine and Bioethics, Department of Health Sciences, University of Genoa, Italy

<sup>2</sup>Department of Molecular Medicine, Unit of History of Medicine, Sapienza University of Rome, Italy

<sup>3</sup>Centre of Research in Osteoarchaeology and Paleopathology, Department of Biotechnology and Life Sciences, University of Insubria, Varese, Italy

**SUMMARY.** Enrico Morselli, a student of Carlo Livi, offered an original contribution to psychiatry of his time through a plurality of interests and in-depth medical, biological, neurological, anthropological and sociological knowledge. From his writings, the relevance of his theoretical reflection under different aspects emerged: epistemological, methodological and psychopathological and of humanization of the treatment of the mentally ill.

**KEY WORDS:** Enrico Morselli, foundations of medical psychiatry, humanisation of psychiatry, treatment of madness, moral treatment, ergo therapy.

**RIASSUNTO.** Enrico Morselli, allievo di Carlo Livi, ha offerto un contributo originale alla psichiatria del suo tempo attraverso una pluralità di interessi e approfondite conoscenze mediche, biologiche, neurologiche, antropologiche e sociologiche. Dai suoi scritti emerge la rilevanza della sua riflessione teorica sotto diversi aspetti: epistemologico, metodologico e psicopatologico e di umanizzazione del trattamento dei malati di mente.

**PAROLE CHIAVE:** Enrico Morselli, fondazione della psichiatria, umanizzazione della psichiatria, trattamento della pazzia, trattamento morale, ergoterapia.

## INTRODUCTION

Enrico Morselli was an eclectic and significant exponent of Italian psychiatry in the second half of the nineteenth and early twentieth century<sup>1,2</sup>.

The versatility of his interests is reflected in the vast range of his scientific papers, extending from physical anthropology to sociology, hypnotism to sexology, magnetism to spiritism, neuropathology to legal medicine, criminology to experimental psychology, as well as general psychiatry to philosophy and even psychoanalysis<sup>3-6</sup>.

As a student of the naturalist John Canestrini and anatomist Paolo Gaddi, who introduced him to anthropology and craniology, he completed his studies at the Faculty of Medicine at the University of Modena, in Italy. In July 1874, he graduated with a thesis entitled "The blood transfusion" in which he denied the effectiveness of this practice in the psychiatric field<sup>7</sup>.

After graduation, under the guidance of the teacher Carlo Livi (pioneer of forensic psychiatry), he became an apprentice at the Manicomiale Institute of San Lazzaro in Reg-

gio Emilia, which was considered one of the most authoritative mental hospitals in Europe for the treatment of nervous and mental disorders<sup>8</sup>. Later, following Livi's advice, he attended an advanced course, held by Paolo Mantegazza, in anthropology at the Institute of Higher Studies in Florence. In 1877, at the age of twenty-five, he received free teaching in psychiatry and became the director of the psychiatric hospital in Macerata, where he introduced his research as an instrument of therapy and social reintegration<sup>9-10</sup>.

In 1880, he was appointed director of the Psychiatric Hospital of Turin and collaborated with Gabriele Buccola and Eugenio Tanzi. During this assignment, he abolished all means of coercion, provoking a great deal of opposition, in particular those of Cesare Lombroso<sup>11,12</sup> and Giulio Fano, eventually leading Morselli to resign from his post. In 1889, after the death of Dario Maragliano, Morselli became the professor of psychiatry in Genoa, where he would remain for more than three decades as an ordinary professor of psychiatry, experimental psychology and the director of the clinic for nervous and mental diseases.

He was particularly active in the field of journalism by participating in the foundation of numerous journals. In

1875, along with Augusto Tamburini, he founded the experimental forensic medicine magazine *Freniatria* (still active), in 1878 the *Journal of the asylum* in Macerata, in 1881 the *Journal of scientific philosophy*, in 1897 with Tanzila *Journal of Nervous and Mental Pathology*, in 1911 with Assagioli the periodical *Psyche*. In Genoa 1914, he assumed the position of director of the *Psychiatry Papers* which became, in times of war, a place to exchange opinions on the new problems caused by the conflict that the alienists found themselves having to face. During the same time period, he was president of the Italian Society of Neurology as well as that of Phreniatry.

In the dominant terrain of organic culture, Morselli's critical thinking constitutes an essential step for overcoming the belief in the insufficiency of the mere medical model, integrated and supported by the contribution of anthropological, psychological and sociological disciplines. In line with the tradition of positivism – critically more sophisticated than the limits of experimental research as an end in itself – Morselli showed a keen interest in an epistemological approach to science with particular attention to the contributions from the areas of study that were close to psychiatry and, in particular, those of philosophy, psychology and anthropology.

The intrinsic methodological nature of Morselli's approach is clearly reflected in his conception of psychiatry, which cannot be traced back to neuropathology, but rather placed in a field that is beyond the control of medicine and defined in an interdisciplinary manner. Moreover, faithful to his anthropological training and studies, Morselli promotes an approach to psychiatry oriented towards dialogue with the moral sciences. Moreover, it is on this aspect that Morselli offers perhaps the most original contribution and, together, the most modern approach, in order to overcome the logic of the custodial mental patient.

Therefore, a critical examination of his writings today offers significant interest due to the actuality of the numerous problems he faced, as well as his contribution in with regard to epistemological, methodological and psychopathological aspects, as well as that of humanizing the treatment of mentally ill.

#### **THE BIRTH OF THE EPISTEMOLOGICAL FOUNDATION OF THE PSYCHIATRIC CLINIC – MOVING TOWARDS A CONTINUITY BETWEEN PHILOSOPHY AND SCIENCE**

The cultural context of Morselli is defined by the far-reaching progress of the biological sciences, starting from Claude Bernard, which conferred an increasing level of scientific research in medicine. This research would become, according to an expression of Bernard himself, “experimental medicine”<sup>13</sup>.

On the contrary, while relying on the medical model, psychiatry was still conditioned by debates and uncertainties regarding its epistemological status, finding itself in an intermediate position between the biological, human and moral sciences<sup>14</sup>. The profusion of this *aporia* constitutes one of the most significant themes of philosophy of the science of Italian positivism. In line with the best positivism and in harmo-

ny with many other cultural stimuli, Morselli underlines the need to specifically make the psychiatric clinic “scientific”, in order to promote its rigour and reliability. “A clinic without theory” was attributable, according to Morselli, to mere professional practice, or to a confined approach to a “limited laboratory address”.

Faithful to his anthropological training, Morselli recognized an essential unity between philosophy and science that cannot limit himself to registering facts, but must necessarily reach back to the laws that govern them: «The material that each science can provide to philosophy is made up of laws discovered [by it] in natural phenomena: as science could not believe that [it] had achieved [its] goal, when [it] limited itself to studying and gathering facts, investigating their relationships (...). Facts are the raw material of science, [and] love not only science. [This is to say] that science should be content with facts and not looking further is the effect of an error or an illusion. An error, because it is contradicted by the whole history of human thought; illusion, because it would be easy to prove that the detached maternity derived from simple observation becomes scientific material only when in the observed facts one could see a uniform relationship, both in time and in space, and in short, a law»<sup>15</sup>.

Furthermore, this logically follows the theory of unity and continuity between the inorganic and the biological in the line of adherence to the evolutionary theory that constitutes the epistemological foundation of the proximity between experimental research and theoretical framework<sup>16</sup>.

In the same line of Spencer's thought, Morselli believed that the overall unification of knowledge was only partially realized within the individual sciences. In his view, philosophy had as its object – and as a sort of engine – the identification of the general reading of all scientific laws that has the principle and its corollary in evolutionary theory. Therefore, Morselli's point of view differed both from that of Comte (who believed philosophy is predominantly a methodology of science), and from that of Ardigò (which assigns to philosophical knowledge its role and its object, not identifiable with those of scientific knowledge). With respect to Ardigò, Morselli does not grasp the distinction between the problem of the origin of knowledge and that of its object of reference, following a qualitative isomorphism of the levels that are only quantitatively distinguished as a progressive moment of synthesis and unification (philosophy), with respect to the initial or intermediate phase of the identical process (science).

The necessary connection between philosophy and science was thus expressed in the strong defense of philosophy against the *odium antiphilosophicum* (widespread in the scientific circles of its time) which, according to Morselli, was legitimate only in the age of metaphysical philosophies that were prevaricating in regards the autonomy of science: «If not that, for a long time, the conditions of human thought have profoundly changed [...] from the metaphysics that contained them. [...] The individual sciences carried out the exams on a specific category of natural phenomena's but none of the them connected to [the links of] the other sciences. Little by little the parts were reversed: philosophy overcome science, but today it is science that gives materials and therefore existence to philosophy»<sup>15</sup>.

Philosophy is essentially an inductive knowledge, which does not rest on a priori concepts (unlike the thought of

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Kant) but is exclusively of empirical origin, even if not limited to the “single” or the “social man”, but referred to the evolution of living species: «So that philosophy [...] is born inductively and is therefore scientific: it is based on the observed facts, measured and classified by the individual sciences and induction by induction, rising gradually through logical development, to the latest generalizations»<sup>16</sup>.

As a result, philosophical knowledge is relative, however only in the sense that it refers to that world of experience phenomena that is the sole and total content of consciousness, beyond which an unknowable *Absolute* or *Noumen* is a mere abstract hypothesis. In Morselli's thought process, there is a monistic-dynamic conception of both knowledge and reality with a radical rejection of metaphysics<sup>17</sup>. In full coherence with this conception, Morselli insists on the strict continuity between biology and anthropology: a science of man deprived and divorced from the study of the phenomena of life would be unthinkable. At the same time, human life is, in turn, indissolubly connected to the scientific knowledge of cosmic reality. Therefore, the psychic sphere is placed within the organism as the result of a biological process that, as sensitivity and motility, is proper to all living beings. Consequently, any dualism of matter and spirit is unsustainable, due to the fact that mental activities are closely connected in the genetic field and in that of interactions with physiological functions: «The mental processes [...] are incomprehensible [...] if detached from the bodily or philosophical processes, with which the constant relationships, traceable to mathematical laws: so that the science of the spirit is in direct continuation with that of the organism, like this one its turn is with that of matter (or better, of cosmic energy)»<sup>16</sup>.

In line with this holistic vision, Morselli reiterates the same ratio of unity and continuity between psychological phenomenon and sociological phenomenon, since human society itself is nothing but the result of the same evolutionary process that governs all reality.

## METHODOLOGICAL PROFILES

### The relationship between psychiatry and neurology

Faithful to the teachings of Carlo Livi, while sharing the positivistic-organicistic model, Morselli was aware of the methodological and epistemological difficulties of the reduction of psychopathology and of the psychiatric clinic to a mere branch/sector of medicine. In the first chapter of *Semeiotics of mental illnesses*, Morselli defines psychiatry as: «The clinical study of disorders that the human mind can be subject to»<sup>18</sup>. Morselli denounced the overcoming of all those theories that identified, as a cause of madness, a functional principle completely disconnected from the anatomical-physiological dimensions.

While reiterating the decline of all those theories that saw in madness the presence of «anomalies of a functional abstract principle distinct from the organs», he also fought the exasperated support of somatism – like that of Nasse Jacobi – based on the a biological principle (Darwin) that contained a quite clear philosophical meaning, which was otherwise scientific in its foundation. Morselli continues: «[All] biology begins [...] with the concept of the inseparability of the organ and the function, without knowing life before or after the

body, and if the functional activity may be regarded as separated from the organic structure; following in this, physics and chemistry, which certainly concern natural phenomena as produced by the extraction of the energy regarding the matter, in other words of the unitary energy. It is possible to comprehend because medicine is in all its most varied parts only organicist, and why the doctor must exclusively be a clinician, that is nothing more than an observer of the phenomena of the organism living in a state of illness»<sup>18</sup>.

The reference to the link between organ and function in reference to cosmic energy not only attests the convinced adherence to Heakel's monism, but also clarifies the mere methodological character of this conception whose validity is circumscribed within the empirical phenomena, without any encroachment of metaphysical character<sup>19</sup>.

When referring to an organism, Morselli attributes the meaning of a systematic observation of the phenomena of the living organism, freed from apriorisms of any nature (including that of a materialistic conception that reduces psychic and psychopathological phenomena to somatic manifestations).

Therefore, Morselli's belief is based on an enlightened agnosticism devoid of ontological implications to the positive-experimental method, however, which organizes the data of scientific observation.

Consequently, psychiatry cannot be reduced in neuropathology, because while adhering to the medical model, it must integrate the physio-pathological data with the psychological aspects. In full support of the biological paradigm that sanctions the belonging of psychiatry to medicine, as a study of a chapter (mental pathology) of medical pathology, Morselli insists on the link between psychology and psychopathology by recalling Bernard's theories on the connection between physiology and pathology.

In consistency with this setting, Morselli defines it as the foundations of medical psychiatry, which has now definitively abandoned the idealism of Heinroth and Ideler, and considers its materialistic conception to be unacceptable. Specifically, he grasps the limit and the methodological meaning of an organism with finesse and equilibrium, refusing to mitigate the anatomic-physiological contribution which, although irreplaceable in a clinical investigation, nevertheless has a paramount indicative value for him.

In the framework of the organic paradigm, Morselli avoids the dogmatic excesses and anticipates on many points a critical review that will have its most mature outcome with Gaupp and, subsequently, with Jaspers.

In his *Semeiotics Manual* of mental illnesses, he immediately offers a warning on the easy enthusiasm towards the understanding of the psychic mechanisms on the sole basis of anatomic-physiological aspects, and of the connection between psychiatric nosology and anatomical lesion. In his opinion, progress in the knowledge of the anatomy and physiology of the brain has definitively denied the localization theory not only in the phrenological version of Gall, but also in the more recent versions of Flourens, Rolando and Longet.

Morselli, connoisseur and admirer of Ramon y Cajal, Golgi, Mosso, Flechsig, Gerlach etc. makes use of more accredited neuro-anatomy and physiology of his time, while also emphasizing the role of synthesis in psychic phenomena with respect to the totality of brain processes<sup>19</sup>.

The fact that the brain is the organ of mental functions does not make up a limit for Morselli. His merit consists in understanding the mental functions in a holistic field and of mental brain-nervous system continuity that privileges mental functions with respect to the morphological substrate.

Based on this foundation, the reduction of pathological anatomy in reference to psychiatric diagnostics is derived. Despite the fact that he belonged to that generation of psychiatrists and directors of mental hospitals who had emphasized the practice of autopsies for the research of the anatomical *noxa* of endogenous psychosis, Morselli fought these excesses and denounced these limits. In light of the disappointing results obtained by the numerous autopsy findings, he underlined the difficulty in identifying the correspondence between psychotic syndrome and anatomical lesion<sup>20</sup>. Moreover, with an absolutely modern approach, he underlined the essentially individualized nature of the psychopathological phenomenon that corresponds to an extreme variability of the anatomopathological finding. From this point of view, the conception of the clinical diagnosis that must consist of the synthesis of three exams: 1) anthropological; 2) pathophysiological; 3) psychological.

Morselli considered the psychological exam as the most important indication of the specific symptomatology of madness.

Furthermore, Morselli takes on an “organistic” tone in his belief that the existence of lesions corresponding to mental illness cannot be denied in the face of a lack of answers from the investigation technique. However, he overcame this belief by also relying on the criterion of the unobjectionable individuality of those who were ill and of the correlative variety of symptoms.

This approach resulted in the unacceptability of a reduction in psychiatry and neuropathology, even in the strict complementarity of approach, in relation to the specificity of the psychic phenomenon, which requires a broader investigation when compared to the medical aspect of an illness.

### The relationship with moral statistics

For Morselli, as well as Livi, anthropologic research from a psychiatric perspective has precise historical-doctrinal references: the phrenology of Gall and Spurzheim, the theories of Broca, the psychopathology of Broissais closely linked to Gall, the systematic observations of Canestrini, and above all the German “somatic” anthropological psychiatry of Jacobi, Bird and Flemming.

The most significant contributions that emerge from the complexity of scientific activity of Morselli in this area – a contribution first written in 1872 (on ancient skulls examined in Modena) to important essays of 1875 written in collaboration with A. Tamburini (on the anthropology of idiots) and in 1881 (craniometric research in their relations with psychiatry) – can be outlined in the following results: i) the discrediting of the poor methodological rigour of anthropological research and the appeal for the use of rigid and constant criteria in the measurements, in order to guarantee the homogeneity and reliability of the results; ii) the downsizing of the contribution of anthropological psychiatry to some cases and to some aspects, with the consequent refusal of a comprehensive explanation; iii) the need to reform anthropology

from the level of physical, anthropometric, descriptive knowledge to that of knowledge – always of a biological nature – but open to the “moral sciences”.

In his essay “Suicide. An Essay on comparative moral statistics”, Morselli applied and constructed a psychological-sociological anthropology model that integrates physical and anatomical observations into a general synthesis<sup>21,22</sup>. The use of quantitative methods in the study of behavior and its legitimation, in harmony with the positivistic conception (Comte and Spencer) of the continuity of phenomena in their scientific observation, constitute the fulcrum of his reflection<sup>23</sup>. Furthermore, equally significant is the thesis of the structural link between psychology and sociology, since psychology applies mathematical calculation to its research, and sociology with Quetelet uses statistics: «Therefore, psychology and sociology can be seen in a similar relationship, where we have one area of study within multiple areas, where we see specific aspects paired with general concepts. Moreover, these two fields consider each other as a component or part, or the other as the compound or as the whole. In any case, they face the same type of research when dealing with issues of society or illness. Naturally, we can move from the former to the latter through the use of deduction, much like what occurs in other areas base on objective truths»<sup>22</sup>.

Morselli rejected gross empiricism, the mitigation of experimental observation as a crude set of data in favour of the mathematical-statistical method in order to guarantee rigour. Equally original is the combination, with regard to method and content, of psychology and sociology. The elaboration of a serial approach, as an alternative to reductivism, together with the criticism of the statistical method of Quetelet, defines an innovative approach with respect to previous anthropological researches. The principle that inspires this approach is the need to save the specificity and individuality of human phenomena in the complex variability of their manifestations<sup>24</sup>.

Morselli's view on anthropology takes on a modern methodological interest due to its appeal to the need for a holistic approach to man integrating measurement and anatomical description with psychology and sociology, in the line of continuity that respects the uniqueness of the various areas of science. This approach allows Morselli to reach the critical recovery of physiognomy and sociology. Morselli's psychiatry, in the line of Pinel and Esquirol, is defined by sensitive attention to the social dimension, as well as psychological and biographical analysis. It represents one of the first attempts, both diagnostic and etiological, of a multifactorial approach to mental illness, closely connected to an approach to anthropology that implies unity and continuity of organic and psychic aspects, and therefore among biology, psychology and sociology<sup>25-27</sup>. In this context, Morselli confirms the fundamental role of psychology within psychiatry in a relationship of continuity, where the two areas of study work in parallel between normal and pathological aspects, as well as psychological and psychopathological issues. Importantly, this approach is in line with the thesis of the incomplete reducibility of the psychic to the organic, and therefore that of psychiatry to medicine. In Morselli's words: «The alienist must be both an anthropologist and a doctor, especially a neuropathologist and a psychologist»<sup>18</sup>.

## THE ETHICAL CONTRIBUTION TO THE HUMANIZATION OF PSYCHIATRY

One of Morselli's greatest merits can be found of his choices, as director of an asylum, aimed at the humanization of psychiatry. He continued an orientation that had been initiated, among others, by Tuke, Chiarugi, Pinel Esquirol etc., and Morselli determined a radical change in the treatment of mental illness<sup>28</sup>. Certainly, also for this reason, he owes a great deal to his teacher, Livi, who had presided over the mental hospitals of Siena and Reggio Emilia with a spirit of reform. However, Morselli, a great admirer of Chiarugi and Pinel and for reasons intrinsic to his training, is far from the prognostic and catamnestic approach towards mental illness, favourable towards overcoming custodialism. In fact, he was a convinced positivist. He had confidence in science, with regard to its gnoseological and practical implications. Moreover, his work identifies, in the great progress of nineteenth century biology, the possibility of a radical implementation of the rationalistic-enlightenment (even before positivistic) ideal of the progress of humanity. He is also a participant and heir of that revolutionary expansion of the medical clinic (promoted by Bernard and in Italy developed by Tommasi, Cantani, Buffalini, and later with Maragliano and Murri) which allows medicine to acquire a rigorous scientific methodology paired with new therapeutic efficacy. Therefore, Morselli's program is to cure the mentally ill, and not simply keep them institutionalised. This orientation is certainly shares common ground with Livi (influenced in turn by the philanthropic and social sensitivity of Puccinotti). However, Morselli not only develops it with commitment and courage in the context of his administrative responsibilities, but also justifies the theoretical assumptions.

His experience in Macerata and Turin are extremely significant. In Macerata, a disastrous hygienic-sanitary situation, defined by professional preparation of the personnel in charge of caring for the mentally ill, was discovered. Moreover, those hospitalised were often abandoned to themselves, subjected to humiliation and inhuman restraints<sup>29</sup>. Moreover, in Turin he energetically worked to free the patients from prison restraints in order to attempt a therapeutic approach for these patients.

In both locations, with more success in the Macerata area, he promoted reorganization based on criteria of order, efficiency, improvement of hygiene, staff training and medical assistance in the name of its deep-rooted conviction of the need for therapeutic actions to treat the mentally ill and insane.

Morselli highlights two fundamental tasks of the asylum: «On the one hand, the care of individuals affected by mental alienation, on the other hand the defence of safety of society against the dangers and damages that the state of these [patients] could cause»<sup>30</sup>.

He then severely criticizes the widespread orientation of his time, which privileged the "custodial" role in order to defend society from the mentally ill<sup>31</sup>.

However, this is not a matter of mere philanthropy. Morselli was persuaded by the curability of mental illness through somatic therapies: drugs, diets, showers, vibration (which originated in the Cox and Horn approach), but above all moral treatment: «Meanwhile the arise and disposition of new ones, as well as the transformation of old asylums, should

not be done regardless of therapeutic points of view. It is in the asylum and only by it that the alienated, in large part, expects their own recovery. [Therefore,] it is indispensable that it [the asylum] brings together both conditions, that is, security, outside, and the facilitation of all means of therapy, moral hygiene, within [the asylum]. The location and extent of the establishments, the exact distribution of the neighbourhoods, the number of attendants, organization of services, diet, work, exercise and distractions, administrative and medical staff, regulations, education, medical, moral and hydrophobic care and more; [here] these are the numerous questions of high importance for a disease, which, much like the mental alienation, touching the most noble and elevated functions of man, needs the continuous competition of all physical and moral forces that are able to fight it successfully»<sup>32</sup>.

Lastly, in the field of *moral treatment*, ergotherapy also played a fundamental role. Occupational therapy in the rehabilitation process of the ill had already been initiated by Pinel, Louret, Hoch and Rail as well as Livi. However, Morselli must be given the dual merit of having systematically applied this therapy in the restructuring of the asylum of Macerata and having closely connected it (especially agricultural work) to psychotherapy within a holistic approach (medical, psychological and social) to treating the mentally ill<sup>32</sup>.

*Conflict of interests:* the authors have no conflict of interests to declare.

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