

Accounting and Psychiatric Power in Italy: The Royal Insane Hospital of Turin in the 19th Century

1. Introduction

The importance of Foucault's ideas has been widely recognised by accounting scholars, most especially his concepts of governmentality (Stewart, 1992; Armstrong, 1994; 2015; Funnell et al., 2016; Grey, 1994; Neimark, 1994; Hoskin, 1994; McKinlay & Pezet, 2010; Miller, 1990; Miller & Rose, 1990) and disciplinary power (Hoskin & Macve, 1986, 1988; Miller & O'Leary, 1987; Sargiacomo, 2009). These concepts were developed from his studies of institutions which were refashioned by Western society from the early 19th century, including prisons, schools and clinics. Particularly influential in the early development of Foucault's ideas were his studies of lunatic asylums. In these works Foucault provides his own distinctive, innovative understanding of both the social meaning of the lunatic and the role played by lunatic asylums from the classical age to very recent times as a means of social control which embodies the values and priorities of social and political elites (Foucault, 1967, 1987, 2004, 2006a, 2006b).

Despite the overwhelming importance of lunatic asylums in evoking Foucault's ideas, these institutions have only recently been given a presence in the accounting literature with the study of the *Real Casa dei Matti*, the Royal House of Madness in Palermo, Sicily, in the early 19th century (Funnell et al., 2017). The present study of the *Ospedali Psichiatrici di Torino* (Royal Insane Hospital of Turin, hereafter the RIHT) provides the opportunity to further recognise the importance of the lunatic asylum in our understanding of the way in which disciplinary power, as understood by Foucault, is sustained and the dependence of this process on the information, discourses and values created by accounting practices. The RIHT was "a field polarized in terms of an essential dissymmetry of power ..." (Foucault, 2006a, p.4) where accounting practices were essential tools in creating and sustaining this dissymmetry of power by giving the doctor a considerable body of information about each of the inmates and the processes by which they were disciplined. Unlike the Royal House of Madness in Palermo, where doctors contributed little to the management of the institution, in the operations of the RIHT doctors were expected to have a major role in management, in creating a medical-managerial regime. This aspect of the history of lunatic asylums is given prominence in Foucault's historical analysis. The present study of the RIHT emphasises the importance of accounting tools, such as food and clothing budgets, statements of revenue and expenses and patient statistics, in not only the management of the lunatic asylum and related accountability to public authorities who were major contributors to the funding of the asylum but also in providing crucial support for new medical theories about the causes and treatment of the mentally ill.

The study also identifies the political contributions of accounting used by the RIHT in creating the social order expected by the liberal middle-class society of the mid-19th century. Accounting was heavily implicated in a hierarchical structure of power, which culminated with the head doctor, whereby the greater authority achieved by the medical profession provided the means for the psychiatrist to institute a regime of control within the RIHT which was consistent with the priorities and values of the dominant social and political classes in

whose interests the State ruled. The implications for the exercise of power of the dependent relationship between financial resources and a psychiatric diagnosis of madness was recognised by Foucault who stressed the economic consequences of psychiatric diagnosis and the generalisation of psychiatric power. In reference to France in the early 19th century he emphasised how

the cost of board and lodgings for someone confined in the asylum was paid by the department or the local community from which he came; that is to say, the local community became financially responsible for those who were confined. The reason why the local authorities hesitated for years to confine the mentally deficient ... was precisely the increased burden of their financial obligations (Foucault, 2006a, pp. 219-220).

There were two important periods in the life of the RIHT, the first between 1825 and 1860, which is the concern of this study, was when it officially changed from being a “welfare” facility to a “medical” facility (Falconio et al., 1928, p. 79), a period during which doctors increasingly assumed an overt, powerful role in the management of the asylum. The second period, which is not the subject of the present study, commenced with the unification of Italy in 1861, after which the hospital entered a period when the laws under which it operated and its administrative rules were substantially different from the pre-unification years. Under Carlo Alberto (1831-1848) the Kingdom of Sardinia¹ became a modern liberal State and with the 1848 Constitution (Soffiotti, 1999) began a capitalistic transformation that saw the values and role of middle-class businessmen and professionals become increasingly important (St. John, 1856; Pinto, 1990).

Evidence of the operations of the RIHT was obtained from the records of the RIHT and other documents preserved by the Local Health Unit of Turin, the *Ospedali Psichiatrici di Torino Archivio Storico* (hereafter OPTAS). Most importantly, in addition to official letters, financial accounts and instructions for the operation of the RIHT, the evidence available includes a rich collection of records maintained by RIHT doctors during the period examined that contain details of medical statistics and other information about the lunatic asylum². In addition, there is a comprehensive collection of parliamentary speeches, laws, ministerial inquiries and official statistics related to lunatic asylums of the Kingdom of Sardinia. Secondary sources, contemporary to the period of study, include reviews of papers written by RIHT doctors published in Italian journals and international scientific journals, essays and articles about the lunatic asylum and biographies of prominent RIHT doctors.

The first main section of the paper which follows provides a review of the theoretical framework and the research method used. This is followed by a history of the RIHT, its organisation, the treatment regimes used and the expected contributions of doctors. Subsequent sections examine the accounting significance of medical statistics in the management of the RIHT and for its accountability to the main providers of funds; the government and wealthy private individuals. Financial reports served overwhelmingly a stewardship function as a means to ensure the continued financial support which was necessary to allow the doctors to implement new treatments. There is no evidence that

¹ The Kingdom of Sardinia, or Piedmont-Sardinia, included Savoy, Piedmont and Sardinia. Turin is located in Piedmont. This is the reason why the RIHT was under the rule of the Kingdom of Sardinia.

² The OPTAS preserves records covering the period 1685-1987. The archive is divided into two sections: “Administration” and “Psychiatric Asylums”. In the former section, the surviving accounts, documents, regulations and minutes are partially available to the public.

accounting information was used in the modern sense as a form of cost accounting to assess the efficiency of providing services to the inmates. Lastly, the findings and conclusions of the paper are discussed.

2. The rise of psychiatric power

The emergence and ‘success’ of the mental asylum at the end of the 18th century (Gordon, 1990, p. 8) as an institution for exercising control over the population and the development of the ‘modern’ concept of mental illness provided the impetus for much of Foucault’s later work (Merquior, 1985; Visker, 1995; Barker, 1998; Smart, 2002; Foucault, 1967, 1978, 1987, 1994a, 1994b, 2004, 2006a, 2006b). Foucault’s history of the rise of modern psychiatric practices emphasises the way in which the confinement of the mad was a consequence of moral, economic and socio-political factors (Sapouna, 2012, p. 613). This was also the consequence of a movement, notes Hacking (1986, p. 162), which had arisen in the 19th century based on ‘making up people’. A category of people, the mad, was labelled by a community of experts who created a ‘scientific’ and ‘social’ reality (Hacking, 1986, p. 168). This interaction between reality, that is people with a mental problem, and a community observing it, namely the scientists which emerged in the first half of the 19th century, gave rise to a dynamic nominalism (Hacking, 1986, p. 170). The mad were a ‘class’ defined by definite properties. As more was known about these properties it became easier to control, help or change those whom these properties described. The sciences, in particular psychiatry, were able to create types of people that in a certain sense had not existed before (Hacking, 2006, p. 23).

The early mental asylum was to be a means to prevent crime, to care for the soul and to confine dangerous people. Psychiatry, the emerging ‘new’ science, provided the knowledge and the professionals in the service of these social aims. The asylum was a microcosm which symbolized the structure and values of bourgeois society (Merquior, 1985, p. 25). Prior to the 19th century, confinement in asylums was primarily an economic measure to address problems arising from a large class of idle, potentially disruptive people by taking them off the streets and putting them to work in the controlled environment of the mental asylum (Gutting, 1994, p. 57). Engaging the idle in productive labour constituted moral reform by transforming them into valued, compliant citizens (Smart, 2002, p. 11). Thus, confinement was sustained and justified mainly by a moral perception of madness, namely that poor discipline and immorality ‘alienated’ individuals from a society where bourgeois values ruled. Psychiatric power was “a regime of isolation, regularity, the use of time, a system of measured deprivations, and the obligation to work” (Foucault, 2006a, p. 173). Labour constituted an appropriate practice through which moral reform and constraint might be realized in order to have ‘new’ and efficient citizens returning to the working class (Smart, 2002, p. 11). Economic activity in closed institutions, such as mental asylums, but also prisons, based on inmates labour could be also a profitable practice to increase revenues of these institutions. Indeed, Foucault recognises a growing awareness throughout the 19th century that abnormality and its correction could be profitable (Foucault, 2006a, p. 124).

The influence of moral and religious ideas on institutions in the late 18th century and early 19th century has been emphasised by Ignatieff (1978) who has focused on the ‘ideas’ underpinning the ‘reforms’ of the penitentiary system in England. These ideas related the everyday life in prisons to the moral expectations of British society, especially those parts with Protestant religious beliefs. Prisons became a microcosm or allegory of the wickedness

of mankind, the universality of damnation, and the wait for judgment (Rock, 1981). Penitentiaries were designed according to a social system which included the meetinghouse or the chapel, an assembly of quiet, reflective, and well-regulated people seeking salvation. The aim was the imposition of an austere and monastic regime which would eliminate sloth, vice, disease and waste (Rock, 1981, p. 735). Like Foucault, Ignatieff (1978) argued that the aim of penitentiary institutions was the establishment of a system where power was based on complete discipline. The aims and the way in which this disciplinary power was achieved depended upon a far more precise and invasive set of controls than had previously been associated with sovereign power. Unlike sovereign power, which is enacted in a violent manner, disciplinary power intervenes “by means of an infra judicial interplay of supervision, rewards, punishments, and pressure” (Foucault, 2006a, p.51).

The success of disciplinary power derives from the use of simple instruments: hierarchical observation or surveillance, normalizing judgement and their combination in a procedure that is specific to disciplinary power, the examination (Foucault, 1977, p. 170). Disciplinary power became an ‘integrated’ system (Foucault, 1977, p. 176) that had a panoptic quality which is “brought to bear on the body, on its actions ... to make discipline become a habit” (Foucault, 2006a, p.47). Normalization played its role by introducing a range of degrees of normality that indicated membership of a homogeneous social body but also played a part in classification, hierarchization and the distribution of rank (Foucault, 1977, p.184). This required the ability to examine behaviour, to individualise surveillance. The examination was based on rituals and methods which performed specific roles, as in the case of the ritual of the doctor’s visit in a hospital or an asylum. The visit of the physician, later of the alienist/psychiatrist, was regular, rigorous and extended: it became an ever more important part of the functioning of a hospital and the exercise of psychiatric power (Foucault, 1977, p. 185). Consequently, the examination introduced individuality into the field of documentation (Foucault, 1977, p. 189) and, surrounded by all its documentary techniques, made each individual a ‘case’ (Foucault, 1977, p. 191). To gain a hold over the body and normalise behaviour requires “a procedure of continuous control ... to ensure that everything that happens, everything the individual does and says, is graded and recorded” (Foucault 2006a, pp.47,48).

According to Foucault, the first generation of influential ‘alienists’ who supported segregation of the mentally ill, notably Philippe Pinel and Jean Etienne Dominique Esquirol in France, were not liberators of the mad but the perpetrators of “a gigantic moral imprisonment” (Scull, 1991, p. 240; Smart, 2002, p. 13). Rather than the changes which occurred in the treatment of the mentally ill being a consequence of humanitarian reform and medico-scientific progress, it was instead, concluded Foucault, a time when the mad were reconstituted as subjects of power and objects of knowledge within the asylum itself (Smart, 2002, p. 14). In the asylum there was “dependence on and submission to the doctor as someone who ... holds an inescapable power” (Foucault, 2006a, p.177), where the use of medication was merely “the extension of asylum discipline to the surface of the body, or into the body”, rather than primarily a means to cure (Foucault, 2006a, p.181).

In the liberal states at the beginning of the 19th century the transfer of authority in mental asylums to medical doctors emerged as a solution to the problem of reconciling the constitutional guarantee of the freedom of citizens with the social requirement for the confinement of those who threatened the moral order, and may also have been deemed to pose

a potent physical threat to ‘normal’ citizens (Rose, 1990, p. 377). There was a direct link between psychiatric practice and the legal system whereby psychiatric recommendations were based on a mixture of medical and juridical discourse (Gordon, 1990, p. 12). This allowed the creation of the “delinquent,” the person who already resembles the crime committed, and the psychiatrist takes the role of judge with reference to the ‘dangerous mad’, the ‘abnormal’ (Foucault, 2004; Stone, 2004, pp. 81, 83). The codes and vocabularies of psychotherapeutics become technologies of government elaborated within political rationales (Rose, 1989, p. 254).

Another crucial step in strengthening the authority of psychiatry and those who were its practitioners was ‘scientification’ of psychiatry; the building of a scientific discourse and an academic status (Foucault, 2006a, p. 133). This provided the means to legitimate and disseminate psychiatric knowledge and, as a consequence, to affirm power (Barnham, 1992, p. 45). At the beginning of the 19th century “psychiatry became an autonomous discipline and assumed such prestige precisely because it had been able to develop within the framework of a medical discipline conceived of as a reaction to the dangers inherent in the social body.” (Foucault, 1978, p. 7). The scientific credentials of psychiatrists depended on the ability to collect, record, classify and store information about patients to provide psychiatrists with the evidence of causes to diagnose mental illness (Foucault, 2006a, pp. 197, 248). Thus, the psychiatrist becomes the key ‘administrative’ figure, admitting patients, certifying and writing reports which would determine the type of treatment, the period of incarceration and when the patient could be released (Smart, 2002, p. 15; Gordon, 2013, p. 94). The result was that the old form of inspection, irregular and rapid, was transformed into a regular observation that placed the patient in a situation of almost perpetual examination. This had two consequences: in the internal hierarchy, the physician, hitherto an external element, begins to gain over the religious staff and to relegate them to a clearly specified, but subordinate, role in the technique of the examination; the category of the ‘nurse’ then appears; while the hospital itself, which was once little more than a poorhouse, was to become a place of training and of the correlation of knowledge; *it represented a reversal therefore of the power relations* and the constitution of a corpus of knowledge (Foucault, 1977, p. 186, emphasis added).

In Foucault’s discourse, power and the knowledge upon which it depended are crucial in legitimating psychiatrists and in giving them a significant, influential multi-disciplinary role in society. This emphasises the extent to which virtually all of the psychological falls within the ambit of power (Hook, 2007, p. 60). In a broader sense, the codes and vocabularies of psychotherapeutics are used as techniques for the regulation of subjectivity and the technologies of government elaborated within political rationales (Rose, 1989, p. 254). Foucault’s emphasis is upon power and the symptomatic role of high-cultural artefacts in reinforcing the system of power-knowledge (La Capra, 1990, p. 31). The social exclusion of the mad, the asylum, psychiatric practice, and the world of psychotherapy are all linked, involving authority, goals, and discipline (Bracken & Thomas, 2010, p. 226). Sometimes madness is reduced to a reality imposed by psychiatric power; a sick person without symptoms, without crises, without violence (Colucci, 2006, p. 65). More broadly, in 19th century bourgeois society, the asylum is a place where the “microphysics of power” is exercised by the doctor acting primarily as a director of conduct rather than a practitioner of medical treatments (Foucault, 2006a, p.180) as a part of the complex system of powers

controlling the members of society itself (Philo, 2007, p. 152). To achieve the authority and presence that they needed, medical practitioners were able to “put together an epistemological model of medical truth ...”,³ a medical discourse of mental redemption, so that the doctor could constitute himself⁴ as “a master of truth” in a “game of truth” which was essential in creating the imbalance of power between the patient and the doctor upon which the success of the institution would depend (Foucault, 2006a, pp.11,13). This would require access to information about the inmates and management of the institutions which would allow power to be exercised in a ‘meticulous’ and ‘calculated’ manner by medical personnel (Foucault, 2006a, p.14).

Psychological knowledge needed to be “converted into something else real in practice ...” which would allow the doctor to be omnipresent, to achieve the “assimilation ... of asylum space to the psychiatrist’s body... stretched and distended to the dimensions of an establishment, extended to the point that his power is exerted as if in every part of the asylum” (Foucault, 2006a, p.181). Administrative power and medical power were to be coincident. All aspects of the operation of the asylum were to emphasise the exclusive, unchallengeable authority of the doctors and the complete subservience of the patients to their control. The psychiatrist “must see everything and everything must be reported to him: what he does not see himself, he must be informed about by supervisors completely subservient to him, so that he is always present, at every moment, in the asylum” (Foucault, 2006a, p.182). The patients, especially, had to believe that they might always be being watched. Gradually “(p)eople’s bodies, behaviour, and discourse are ... besieged by a tissue of writing ... which codifies them and passes them up through the hierarchy to a centralized point (Foucault 2006a, p. 49). The patient becomes encircled “by the doctor’s will or by the general regulation of the asylum ...” (Foucault, 2006a, p 5). Everyone, patients and staff, must know that everything that happens within the asylum is potentially known to the doctor, that he exercises an influence that has no limits.

Collecting information about the operations of mental asylums in a systematic way was for scientific purposes but also, crucially, to legitimate for bourgeois society the very existence of asylums by providing evidence that they were effectively managed according to the values of bourgeois society, resulting in the return of the patients to society as productive citizens. The asylums therefore introduced the problem of “how to establish the system of exchange within madness which will enable the mad person’s existence to be financed” (Foucault, 2006a, p. 177; Foucault, 2006b, p. 441). Accordingly, accounting practices became a key component of the microphysics of power, which enabled public and the private bodies and individuals who were engaged in establishing, managing and funding the ‘new’ institutions to control the performance of the institutions. In exercising this control, Foucault notes that until the late 18th century there was “a constant conflict between the medical director of the hospital, who had therapeutic responsibility, and the person with responsibility for supplies, administration of personnel, and management ...” (Foucault, 2006a, p.183). Unlike other disciplinary spaces, such as prisons, schools and orphanages which were not managed by officials with a related specialist knowledge, by the early 19th century control of mental institutions had been

³ Foucault refers to two new kinds of medical truth based upon scientific discourses. Firstly the nosological discourse which sees madness as an illness and then, after Bayle’s discoveries related to paralysis, a discourse based on anatomical, pathological knowledge which emphasises organic causes of madness.

⁴ All psychiatrists at the time were men.

assumed by the doctor. This paradox, suggests Foucault, was made possible by the ‘medical stamp’ given to asylums which emphasised that control needed to be in the hands of medical personnel (Foucault, 2006a, p.179). The hospital, thereby became a “machine for exercising power” (Foucault, 2006a, p.102).

The doctors became the directors of the institutions with someone in charge of the specifics of operating the institution but under the doctor’s obvious control. Whereas, before, institutions for the mad were never medical places, although with some doctors, in the latter part of the 18th century they gradually became places where a cure was now expected which would require organisation and management of asylums at the direction of medical practitioners (Foucault 2006a, p.179). However, at this time the ‘medical truth statements’ of doctors were insufficient to ensure them the power to control the asylums. This would only be achieved with the legitimacy provided by ‘economic truth statements’, mainly financial performance measures. In a similar manner to the way in which medical truths gave doctors authority as directors of treatment, the information provided by accounting constituted economic truth statements that provided doctors with the means to achieve control as managers. Thus, the ability to rely upon the truth statements provided in the financial reports and related statistics of an institution would further augment the doctors’ power as both medical and institutional directors.

Fundamental to ensuring the efficiency and effectiveness of the asylums, the local authorities and their communities which became financially responsible for the poor who were confined wanted to ensure that only individuals who were a clear and confirmed threat to society were confined. This placed the doctor in a position of considerable authority by giving them the responsibility to decide “that the idiot was not only an idiot, that he was not only unable to provide for his own needs ... but, and this was the only condition on which the local authorities agreed to support him, he had to say that he was dangerous” (Foucault, 2006a, pp. 219-220). Therefore, it is not surprising that doctors often wrote false reports to ensure that an ‘idiot’ would be categorised as dangerous to ensure that they would be admitted to an asylum. The need to meld the ‘economic’ with the ‘psychiatric discourse’ in the social project of the mental asylum which was built on psychiatric power involved the psychiatrist in a more complex social game in matching resources with needs for which the information provided by accounting practices would play a critical role. This was clearly evident throughout the early history of the RIHT.

3. Royal Insane Hospital of Turin

Prior to the 19th century, in the Kingdom of Sardinia the poor, homeless, sick and other social outcasts such as the insane were placed in homes for the poor known as *ospizi di mendicITÀ* (Hospice for the poor) (Levra, 1988; Pavanelli, 1991). In France Philippe Pinel and Jean Etienne Dominique Esquirol justified the isolation of the insane as the means to ensure their safety and that of their families, to separate them from negative outside influences, and to subject them to “a medical regimen (which would) impose new intellectual and moral habits on them” (Foucault, 1994b, p. 48). No longer would the mentally ill be physically restrained with chains and segregated with other social outcasts. It was not until 1728 that the first Italian mental hospital, the *Spedale dei Pazzi*, later renamed the *Ospedali Psichiatrici di Torino* (the RIHT), was founded in Turin by a religious organisation, the *Confraternita del Santissimo Sudario* (Anonymous, 1846; Berti, 1862, p. 23). All patients had to be from the Kingdom of Sardinia and the families of those admitted to the hospital had to pay a fee to

support the patients, which depended upon their wealth. The *Confraternita* contributed to the financial needs of the hospital from the income it received from alms, rents and mortgages (Dellapiana, 2007; Falconio et al., 1928, p. 18).

The years from 1728 to 1825 have been labelled the “welfare years” of the RIHT (Falconio et al., 1928, p. 79), during which it provided no medical care, only “hospitality” to patients who lived in very poor hygienic and sanitary conditions, wrapped in iron chains (Anonymous, 1839, p. 343). In 1820, after visiting the institution, the French doctor Valentin spoke of the filthy conditions in which the insane were made to live and of their nakedness, terror, rage and desperation (Valentin, 1826, p. 171). The therapeutic methods used in the hospital changed dramatically when the *Regia Segreteria di Stato per gli Affari Interni* (the Ministry of Interior) issued a ruling on 22nd March 1825 (OPTAS, 1825a) which established an official healthcare service. This turned the RIHT into what Foucault (2003) calls a “clinic”, with its rules and rites in which the medical profession assumed greater prominence.

The first head of the newly created medical department at the RIHT appointed in May 1828 to implement reform was Dr Benedetto Trompeo⁵. During his appointment (1828-9) Dr Trompeo turned the RIHT into a well-organised hospital modelled on French asylums which used new therapeutic methods (OPTAS, 1829c) and was able to accommodate more patients (OPTAS, 1829b). Trompeo collated his experience at the RIHT in two volumes (Trompeo, 1829, 1830) in which he described the theoretical basis of his ideas, his investigative and working methods and his accomplishments (OPTAS, 1829a), all of which were well received in Italy and abroad (G.B., 1829; Dupasquier, 1830; Fenoglio, 1830). He believed that mental disorders depended on both physical and moral causes; that the body and the mind had to be treated together (Trompeo, 1830, pp. 4-5). In 1829, Giovanni Stefano Bonacossa⁶ was appointed medical assistant (OPTAS, 1829e, 1829f) and in 1830 Dr Cipriano Bertolini was appointed as the new head of the medical department, a position which he occupied until 1842 (OPTAS, 1829d). Bertolini, a supporter of innovative healthcare protocols, proposed therapeutic baths (OPTAS, 1830a), reorganised the nursing service (OPTAS, 1830b), changed the confinement methods, and took special precautions for the admission of patients (OPTAS, 1831). In 1842 Bonacossa, an adherent of the organicist principles of “Gall’s System”⁷, was

⁵ Benedetto Trompeo (1797-1872), who had a medical degree from the University of Turin, received many royal honours after his time at the RIHT (Cantù, 1844, p. 150). He was president of the Medical Academy of Turin in 1863-64 (Anonymous, 1872).

⁶ Giovanni Stefano Bonacossa (1804-1878) graduated in medicine at the University of Turin in 1824. In 1830 he was lecturer at the medical college of the University. In 1838 he visited many European countries and in 1841 some Italian States to find out more about their lunatic asylums (Desmaisons Dupallans, 2006, p. 123). Bonacossa published a number of books, which led to him becoming a member of the Society of Phrenology and the Historical Institute of Paris, as well as the medical academies of Lyon, Gant and Bologna (Cantù, 1844, p. 65). His main work, which was published in 1837, is a book on mental disorders supported by an extensive statistical addendum that he worked on for six years while at the RIHT (Maffoni, 1837; P., 1837; Z., 1837; D.F.C., 1839). He was president of the Medical Academy of Turin in 1869-71. In 1874, he resigned from all his medical and academic posts and retired (Teccari, 1969).

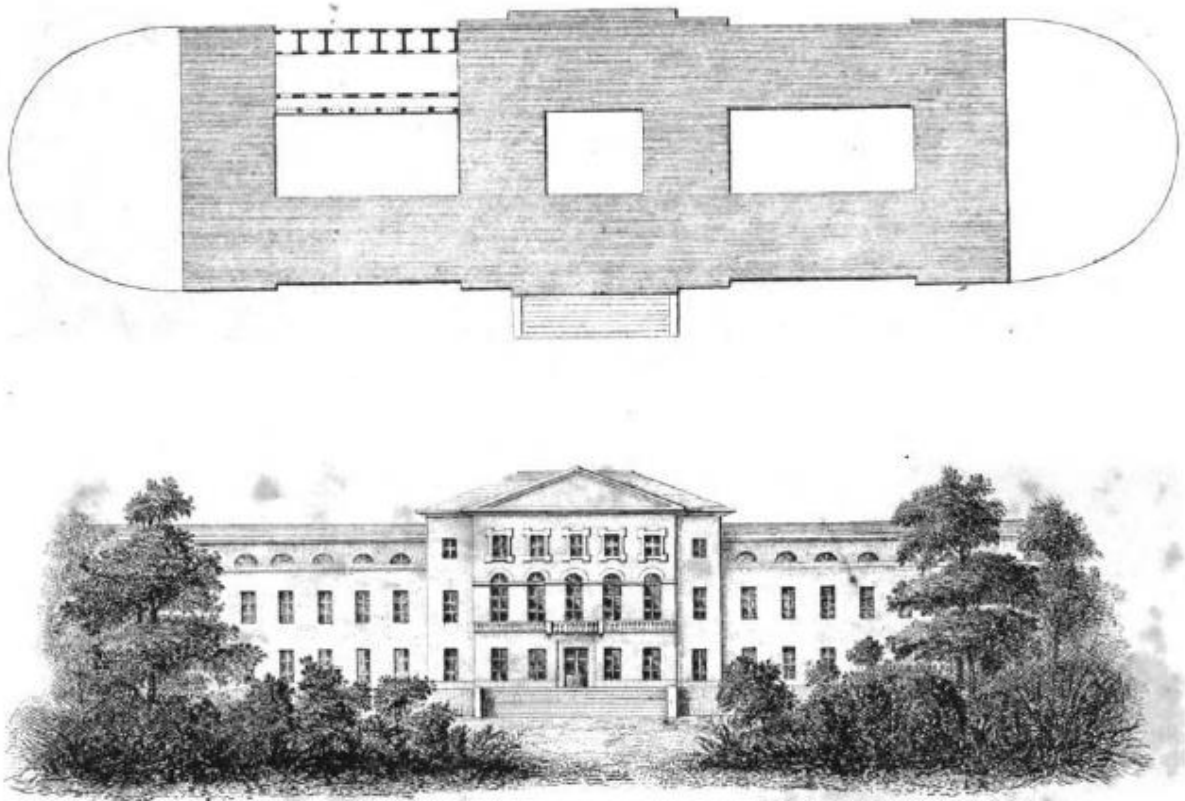
⁷ Franz Joseph Gall (1758-1828) wrote a treatise on the brain (posthumously published in English: Gall, 1835a), the one to which Bonacossa referred. Other books by Gall included *On the Organ of the Moral Qualities and Intellectual Faculties: And the Plurality of the Cerebral Organs* published in 1835 and *The Physiognomical System* written with Spurzheim in 1815. Gall founded his theory on an empirical basis, arguing that mental disorders necessarily had a biological cause. Gall was strongly convinced of the unity of man with nature, and applied the methods of the naturalist to man. Consequently, Gall investigated the functions of the brain as a biological science. He used anatomical, pathological, clinical and comparative findings supporting his psychology theory (Young, 1990, pp. 16, 26, 27). See also: Temkin, 1947; Ackerknecht & Vallois, 1956.

promoted as head of the medical department (OPTAS, 1842b), with Michelangelo Porporati as his assistant (Falconio et al., 1928, p. 100; Padovani, 1949). Building upon the reforms introduced by Bertolini, Bonacossa refashioned the RIHT into a more medical-led facility. The greater presence which was now given to medical priorities and practices was noticeable from admission to discharge of the patients. Rather than admission decisions being determined by the need to incarcerate violent individuals or those living in poverty, the admission of patients now required the involvement of doctors and the cross-examination of the patients' families to ensure that the patient needed to be placed in the asylum (Trompeo, 1830, p. 10). When admitted, patients were not divided according to a category of mental illness, instead they were distributed in the asylum according to non-psychological or medical criteria such as whether they were calm or agitated, those who could work and those unable to work. Thus, Foucault (2006a, p.180) concludes that there was "a discrepancy between medical theory and asylum practice".

The transformation of the RIHT into a 'clinic' progressively occurred under Bertolini and Bonacossa. This included doctors regularly visiting the patients with their assistants or with medical students who, from 1837, recorded the patients' details in special registers (OPTAS, 1837b). Also, the daily routines were strictly organised (OPTAS, 1842a). Foucault (1967; 2006b; 2008) has emphasised that these routines were a fundamental component of this new era of 'bio-power'. In 1848, the RIHT's management applied to the Ministry of Education to create the first chair of psychiatry. This was established two years later when it was awarded to Bonacossa, who thus became the first Italian professor of psychiatry (Padovani, 1949). Subsequently, all 5th-year students of the Faculty of Medicine at University of Turin have been required to spend time as interns at the RIHT, a ritual that has been extensively described by Foucault (2003).

In 1824 a new building was designed by Talucchi, a Turin-born architect and a well-known academician, and built in the suburbs north west of Turin (OPTAS, 1825b). By the time it was opened in 1830 approximately 700,000 Italian lire had been invested in the new facility, with nearly 135,000 lire provided by the House of Savoy (Desmaisons Dupallans, 2006, p. 122). Substantial funds were given also by lay and religious associations, the army and by bequests, with the land for the new buildings donated by the municipality (Berti, 1862, p. 23). The layout and façade of the building are shown in Figure 1.

Figure 1. The building plan and the facade of the RIHT (1834)



Source: Guislain, 1840, pp. 116-117.

The new RIHT, as shown in Figure 1, had a long box shape, with two parallel buildings nine metres apart; one for men and one for women, covering a total surface area of over 23,000 square metres (RCSST, 1849-52, p. 856). At the time throughout Europe and Britain considerable importance was given to the use of space in asylums for therapeutic purposes using, as in the case of the new RIHT building, large rectangular buildings with gardens, or for monitoring purposes relying upon a radial layout like the Panopticon, a form which was entirely disregarded in Turin's design⁸ (Edginton, 1994, 1997; Franklin, 2002; Scull, 2004; Hockman, 2005; Sine, 2008; Funnell et al., 2017). The new RIHT immediately attracted a large number of patients, as shown in Table 1, mainly from the area of Turin but also from throughout the Kingdom of Sardinia. In 1852, after patient numbers had increased to nearly 500, thereby exceeding the 400 beds capacity of the new facility, a branch of the asylum was opened in the Charterhouse of Collegno, located on picturesque Alpine slopes, which was owned by the Catholic Church, to where some of the male patients were relocated (Berti, 1862, p. 23). When religious congregations were suppressed in the Kingdom of Sardinia in 1855, soon after in 1856 the RIHT purchased the building from the Church to where it then

⁸ Foucault was impressed with the way in which "Asylum architecture—as defined in the 1830s and 1840s by Esquirol, Parchappe, Girard de Cailleux, and others—was always calculated so that the psychiatrist could be present virtually everywhere" (Foucault, 2006a, p. 182).

relocated all the patients. The lunatic asylum would stay in Collegno until 1997 (Montaldo, 2007).

Table 1.

Patients present at the beginning of the year, 1831-1860

Year	Men	Women	Total	Year	Men	Women	Total
1831	205	126	331	1846	242	195	437
1832	181	135	316	1847	280	204	484
1833	212	143	355	1848	245	197	442
1834	204	145	349	1849	252	198	450
1835	189	133	322	1850	263	213	476
1836	199	147	346	1851	264	217	481
1837	223	138	361	1852	286	211	497
1838	207	135	342	1853	283	245	528
1839	218	152	370	1854	297	211	508
1840	245	173	418	1855	312	201	513
1841	229	178	407	1856	349	229	578
1842	268	200	468	1857	365	262	627
1843	281	197	478	1858	394	254	648
1844	256	201	457	1859	391	289	680
1845	264	211	475	1860	409	334	743

Sources: Bonacossa, 1837, pp. 52-53; Falconio et al., 1928, p. 161.

In 1836 King Carlo Alberto launched a systematic reform of charitable institutions in an attempt to raise more private funds, especially from the upper and middle classes, businesses and church parishes (Petitti di Roreto, 1837, p. 152). As part of these reforms, new administrative and regulatory measures were imposed on the lunatic asylums of the Kingdom, all of which at the time were run by religious organisations (RSAI, 1841, p. 141). The philosophy underlying the House of Savoy's regulatory reform, and generally its healthcare policy, was noted by a Councillor, Count Petitti di Roreto, a preeminent man from the Savoy ruling class. He listed the three goals that society expected of lunatic asylums:

- (a) try to treat and heal those sad people troubled by that terrible disease; (b) to protect other people's lives by protecting them from the danger lunatics are exposed to, unable as they are to take the necessary measures in human life; (c) to protect public order and private safety, which could be infringed by lunatics, especially raving lunatics, undeterred by the fear of legal prosecution because of their unreasonableness (Petitti di Roreto, 1837, p. 11).

Between 1837 and 1860 the RIHT was operated by a chairman and a royal administrative committee known as the Board of Governance, the equivalent of the modern Board of Directors, which was composed of 15 members appointed by the King for three and five years respectively (RIHT, 1837a, Sec. 1). All posts were unpaid. The new Board of Governance was assisted by a managing director and by a salaried health director. The members of the Board of Governance were responsible for the management of the asylum, healthcare and financial and legal matters (RIHT, 1837a, Sec. 2-5). The Deputy Chairman, the general superintendent of Turin's city police, was the officer in charge of the lunatic asylum. It was mainly his responsibility to decide on the admission of the insane, as well as supervising the work of the RIHT (RIHT, 1837a, Sec. 6). At this time, the organisation of the RIHT included: a royal inspector, a treasurer, the head of the hospital department, the assistant to the head of

the hospital department, a medical consultant, an assistant surgeon, a consultant surgeon and a rector or spiritual director.⁹

Patients were to be treated according to a moral treatment regime adopted from France that was based on three principles: a gentle approach to the patient, which required a good diet and accommodation that promoted a healthy lifestyle; religious education, and the eventual rehabilitation of the patient through work. Chains were no longer used, although straitjackets were used to control raving lunatics (Anonymous, 1839, p. 346). Physical-pharmacological treatments included bleedings, administration of salts and opioids, warm and temperate baths with sleeping and calming plant extracts, purgatives and other psychotropic substances (Bonacossa, 1840, p. 147). Visiting times, meal times and the times for the other daily activities were strictly regulated (OPTAS, 1937b, articles 456-459). Patients were treated to frequent entertainment and encouraged to engage in leisure activities, which included growing plants, listening to music and reading books (Trompeo, 1830, p. 6; Berti, 1862, p. 24; OPTAS, 1844). Religious services for the patients included morning Mass and weekly classes of moral education (Bonacossa, 1840, p. 147). The importance of middle class values of self-discipline and industriousness as measures of the aspirations and success of the asylum meant that patients were also to be engaged in productive activities (Walk, 1954; Peloquin, 1994; Charland, 2004, 2015; Edginton, 2007).

To work productively was the key feature of the culture of normality of the middle classes of the time. Consequently, the patients performed a wide range of jobs, with two thirds of the women taking on traditional female duties, mainly responsibility for the care of bedding, clothing and keeping the rooms clean. In return for these services they received a small amount of money. In contrast, male patients were mostly idle while in the asylum, something that was criticised by the staunchest advocates of moral treatment (Desmaisons Dupallans, 2006, p. 124). The few jobs that were offered to male patients were mainly outdoor work such as cutting wood and gardening. There were also some successful experiments in working outside of the lunatic asylum (Bonacossa, 1840, p. 146). After the lunatic asylum was relocated to Collegno in 1852 it was able to offer a more extensive use of ‘occupational therapy’, though limited to underpaid farming work which was thought to be effective as a treatment and for moral improvement (OPTAS, 1842c; Falconio et al., 1928). There was the belief that regular outdoor work could recreate “consistency” and “discipline” in the body-mind system of the patient who had to be brought back to a state of balance and reason according to the values of order and stability, the embodiment of the new 19th century middle-class, that required careful and constant social control (Gillio, 2007).

In Foucault’s studies of the transformation of the treatment and understanding of mental illness with the introduction of moral treatment and the relationship between the medical-psychiatric science and its growing influence on society he gives particular emphasis to the academic recognition it achieved as a new science and, consequently, the influence that doctors came to have on political decisions, on public opinion and on legal measures affecting the insane (Foucault, 2006a; 2006b). According to Foucault, one of the distinctive features in the medicalization of healthcare, most especially treatments for the mentally ill, has been the systematic and painstaking application of statistical methods (Foucault, 1967, 2006b).

⁹ At the level of operations there was a supply officer (RIHT, 1837a, Sec. 13), a housekeeper, a janitor, a senior nursing officer and 21 nurses (13 male and 8 female), a cellar-man, two cooks, a kitchen boy, a barber and a doorman (Anonymous, 1839, p. 347; RCSST, 1849-52, p. 858).

4. Statistics and medicalization of mental health

The history of the RIHT aligns strongly with what Hacking argued to be the statistical approach in scientific discourse which quickly spread at the beginning of the 19th century in a number of domains. This ‘avalanche of numbers’ was obsessed with analysing morals, namely, the statistics of deviance (Hacking, 1986, p. 161). This, concludes Hacking (2006, p.24), was achieved by combining five elements to create a new ‘scientific’ and operating context: (a) a classification, which focussed on a kind of person; (b) the people, those to whom the classification would be applied; (c) institutions, which include clinics, annual ‘scientific’ meetings and other rituals; (d) the knowledge, constituted by the presumptions that are taught, disseminated and refined within the context of the institutions; (e) the experts or professionals who generate the knowledge, judge its validity, and use it in their practice (Hacking, 2006, p. 24).

At the RIHT at the beginning of what have been called the clinical years between 1825 and 1860, in contrast to the preceding welfare years, extensive, detailed patient statistics began to be collected, processed and published to meet the needs of the doctors. This represented a dramatic change in the priorities of the RIHT which reflected the status that had now been achieved by doctors, medical remedies and insights into the treatment of the mentally ill. At the same time, this information was fundamental to the higher standards of operational and financial management and accountability now expected by the main financial supporters of Piedmont’s insane asylums. Indeed, patient statistics were to assume a crucial role in decisions made by the government about the level of funding it was prepared to provide to the asylums for the poor, non-paying patients in the Kingdom of Piedmont. An early rendition of the statistical information, both financial and non-financial, collected at the RIHT and its importance was provided by Trompeo (1830, p. 11) in his essay “*Prospetto statistico del RIHT*” (“Statistics at RIHT”) where he gave details about 320 men and 335 women who were patients, according to their marital status, age and employment. These details showed that mental disorders were more widespread among unmarried men, widowers, people aged between 20 and 40 years and amongst farmers, servicemen and clergymen (Trompeo, 1830, p. 14). Trompeo complained, however, that he could not class the causes of mental disorders because he “lacked the feedback that any doctor needs if he wants to start treating the insane” (Trompeo 1830, p. 14). In Bonacossa’s 1837 book, which was based upon information collected at the RIHT from 1831 to 1836, details were provided about the diseases encountered at the RIHT, their proposed causes, treatments and the results (Bonacossa, 1837, p. 4). His statistics were extensive and extremely detailed, as shown in Table 2 by the headings under which they were collected. The purpose of this research was to record all the facts and observations and list all the diseases, their causes, their treatments and their results (Bonacossa, 1837, p. 4).

Table 2.
Bonacossa's statistics

No.	Heading
1	Men and women, admitted, discharged and deceased
2	Patients admitted by place of residence
3	Patients admitted by age
4	Patients admitted by marital status
5	Patients admitted by profession
6	Types of madness by province
7	Patients discharged and deceased by age
8	Cause of madness
9	Cause of each type of madness
10	Causes of prevalent madness in each province
11	Weather observations
12	Patients admitted, recovered, improved and deceased
13	Relapsing and remaining patients by year
14	Proportion of patients cured and deceased by type of madness
15	Proportion of patients admitted, discharged and deceased by month
16	Time taken to recover or die by kind of madness
17	Diseases men and women died from
18	Comparison of patients discharged and deceased in some European hospitals

Source: Bonacossa, 1837.

Bonacossa worked hard to build a discourse in which knowledge and power are closely connected, where psychiatric power “is above all a certain way of managing, of administering before being a cure or therapeutic intervention: it is a regime of total control of patients” (Foucault, 2006a, p.173). Bonacossa took inspiration from a long tradition of statistical research in medicine, which since the early 19th century had been spreading in Europe. This clearly emerges from his citations of scholars in Great Britain (Burro, Julius, Halliday, Bissed Hawkings), the Netherlands (Guislain), France (Vastel, Debouteville, Pastoret, Desportes, Dupin, Esquirol, Ferrus), Switzerland (De La Rive), Norway (Holst and Wendt) and Italy (Gualandi, Lostritto, Marini, Trompeo). The most frequent types of madness identified by Bonacossa were mania and lypemania. The former was usually erratic, while the latter caused extreme religious fervour and fear of damnation, more frequently in women. Dementia was the third most frequent form of madness, while erotic monomania in women was fourth on the list and finally monomania of pride (Bonacossa, 1840, pp. 144-5). Out of a total of 650 men who were patients between 1831 and 1836, the greatest number of patients were farmers, who constituted a disproportionate total of 253, followed by servicemen (69), priests and monks (26), cobblers (20), landowners (19), carpenters (16), masons and clerks (both 14), shopkeepers (13), tailors and students (11 each), surgeons (10), coachmen (9), and porters (8). Among 412 woman patients the highest number was, again, that of peasant women (195), followed by servants (58), housewives (44), seamstresses (21), shopkeepers (7), nuns (5) and cobblers (4) (Bonacossa, 1837, pp. 56-57; 1840, p. 145). Identifying the patients by occupation shows that the doctors considered the patients' working conditions to be one of the concomitant causes of mental disease.

The main causes of the mental disorders were ascribed to a predisposition, which Bonacossa believed accounted for 20-25% of the cases. Otherwise, the main physical causes in men were, in order of occurrence: drinking, brain diseases such as epilepsy and encephalitis, sunstroke, pellagra, syphilis and cuts or traumatic injuries. In a sample of 119 male patients, the main moral causes were said to be worries about poverty (54), worries at home (17),

financial setbacks (15), frustrated and unreciprocated love (9), jealousy (9) and religious qualms (8). In women, the main physical causes in 182 cases were identified as uterine conditions (26), pellagra (22) and brain conditions (20). Moral causes for women were identified as worries about poverty (70), disappointing relationships (14) and jealousy (10) (Bonacossa, 1837, pp. 72-75; Bonacossa, 1840, p. 146).¹⁰

Information about the number of patients who recovered and were returned to society, length of treatment and patient deaths became the main performance indicators of the RIHT and upon which it would be held accountable. As the main provider of funding, the government of the Kingdom of Sardinia began to take a keen interest in collecting information and processing statistics about conditions for patients in the lunatic asylums. Accordingly, in 1828 they appointed the *Regia Commissione Superiore di Statistica* (Royal Commission for Statistics), a body reporting to the central government of Piedmont, chaired by the Ministry of the Interior and composed of 14 members, all of whom were aristocrats and business executives, including Camillo Benso, Count of Cavour. Only one member had ‘specialist’ knowledge, Professor Giulio, a Turin-born mathematician. The medical statistics books produced by the Commission contain a section which lists information collected from the four lunatic asylums of Piedmont, Alessandria, Chambery, Genoa and Turin (RCSST, 1849-52). The statistical reports were to be used to provide a standard method for all asylums in the Kingdom for recording and interpreting patient details; an approach which conformed closely to Bonacossa’s criteria (1837). The statistics collected by the Commission provided the government with the means to control the population, that is for “bio-political” reasons as consistently emphasised by Foucault (1967, 1991, 2008). The Commission produced eight tables in which data was disaggregated for each lunatic asylum for the period between 1828 and 1837 to provide details of the number of lunatics admitted, the types of madness according to age, gender, marital status and occupation, and causes of madness. This level of detail and the variety of information now provided in the statistical reports produced by modern asylums reinforced for Foucault (1977, p. 189) how a “‘power of writing’ was constituted as an essential part in the mechanisms of discipline.”

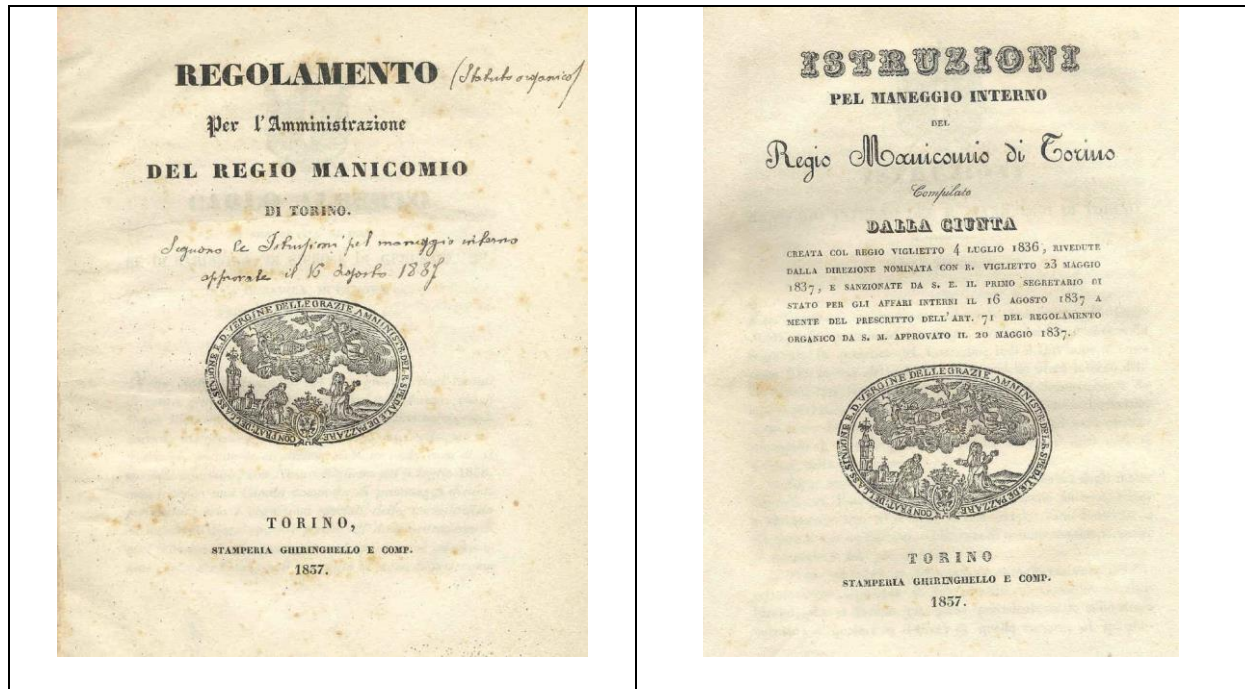
The statistical reports periodically drawn up and published, with their highly detailed tables, were, as discussed below, an essential tool for the management of the RIHT to legitimise its function in Piedmont-Sardinia society. Most especially, the mental asylum was accountable for the well-being and ultimately the social redemption of all of its inmates, neglecting nothing in the pursuit of these goals. Furthermore, the government, its officials and aristocratic and bourgeois financial supporters of the RIHT who had access to the financial and other reports from the RIHT could appreciate the medical performance of the RIHT in terms of admitted and recovered patients.

The transformation of the RIHT into a modern hospital as part of King Carlo Alberto’s reforms began in 1837 with the issuing of the *Istruzioni per il maneggio interno del Regio Manicomio di Torino* (Instructions for RIHT Management) and the *Regolamento per*

¹⁰ The poor physical state of patients, who often were suffering from gastro-intestinal conditions and infections, as well as their mental condition, and the ineffectiveness of treatments, resulted in most patients staying for extended periods in the RIHT; between 199 to 303 days for men and 173 to 311 days for women (Bonacossa, 1837, 110; 1840, 148). Bonacossa stated that approximately 60% of the patients were incurable and could be diagnosed as such as soon as they were admitted to the hospital. Therefore, few patients were cured, with most being readmitted (Bonacossa, 1840, p. 148).

l'amministrazione del Regio Manicomio di Torino (Regulations for RIHT Management, see Figure 2).

Figure 2. Royal Regulations for RIHT



Sources: OPTAS 1837b; 1837c

The Regulations (see Table 3), signed into law by King Carlo Alberto on May 20th 1837, applied to the main areas in the management of the lunatic asylum and remained in force until 29th July 1909. They consisted of seven chapters containing 68 Articles. Most importantly, Chapter Four (Articles 32-41) and Chapter Six (Articles 50-65) were devoted to the admittance and medical treatment of the insane.

Table 3.
Regulations of 1837

<i>Article no.</i>	<i>Applies to</i>	<i>Article no.</i>	<i>Applies to</i>
1-7	Management	42-49	Religious and financial services
8-19	Management's expenses. Employees	50-65	Healthcare
20-31	Administrative rules	66-68	Interim measures
32-41	Admission, treatment and discharge of patients		

Sources: RIHT, 1837a, 1837b.

The Instructions was a very long body of rules, as seen in Table 4, containing 495 Articles which provided very detailed instructions about the services that were briefly described in the Regulations. It contained job descriptions showing the duty of each manager, employee, doctor, nurse, accountant and guardian, including the priest and the nuns. Procedures were related to purchasing, cash payments and receipts and itemising medical material and

medicines. Many sections were devoted to the segregation of duties, authorizations of transactions and supervision of operations.

Table 4.
Instructions of 1837

<i>Article no.</i>	<i>Applies to</i>	<i>Article no.</i>	<i>Applies to</i>
1-17	Management	167-169	Head pharmacist
18-29	Admission and fees	170-214	Healthcare, medical, surgical and pharmaceutical service
30-46	Inspector	215-226	Rector
47-68	Treasurers	227-264	Treasurer
69-96	Rights and duties of the secretary	265-327	Sisters of Charity
97-101	Head secretary	328-360	Senior nurse
102-121	Rights and duties of the treasurer	361-395	Nurses
122-133	Head treasurer	396-416	Head cook and kitchen staff
134-135	Legal advisor	417-425	Barber
136-141	Manager of the home	426-444	Doorman
142-166	Pharmacy	445-495	Space allocation within the building and in-house rules

Sources: RIHT, 1837a, 1837b.

The new Instructions and Regulations allowed psychiatric power over inmates at the RIHT to take place in many ways and made possible the practice of internment as medicine. The Regulations, in particular Chapter 6 which focussed on the main features of moral treatment, emphasised how psychiatric power was involved in “the management or organization of needs” (Foucault, 2006a, p. 152) to subjugate or to “direct” the inmates and the staff of the asylum (Foucault, 2006a, p. 174; RIHT, 1837a, Articles 20-31, 52-54). This clearly emerged from the ‘physical’ role of the psychiatrist in meeting with the inmates, the requirement that the psychiatrist was ‘living’ in the asylums and was to be present everywhere necessary to manage patients (RIHT, 1837a, Articles 32-40, 54; Foucault, 2006a, p. 182). Psychiatric power enabled the management of needs, and even the emergence of new needs (Foucault, 2006a, p. 152), together with the management of the deprivations it created (Foucault, 2006a, p. 155). The diet, the clothing, the leisure time activities, the religious practices, and the punishments were all elements combined in the RIHT in this “management of needs and deprivations” (OPTAS, 1831a; 1842; RIHT, 1837a, Articles 52-53; Bertolini, 1836; Bonacossa, 1840). Trompeo, Bertolini and, notably, Bonacossa, exercised a special power through medical rituals, procedures, interviews, and diagnoses by which “the real was imposed on the mad in the name of a truth possessed in the name of psychiatry” (Foucault 2006a, p. 133). Medical publications (Trompeo, 1830; Bertolini, 1836; Bonacossa, 1840) show how the nosological discourse concerning the kinds of illnesses, and the anatomical-pathological discourse about organic correlatives were developed (Foucault, 2006, p. 134).

The Instructions also specified in considerable detail a comprehensive set of accounting rules and the associated accounting records which were to be provided by the RIHT (RIHT, 1837b, Article 72). The large number of accounting records which had to be maintained was indicative of, and essential to, the complexity of the organisation of the RIHT and the level of detailed accountability required of those appointed to manage the Institution. As an intimate

dependency developed between the financial resources available and the application of new medical therapies, doctors increasingly took a strong interest in financial matters and how they were presented in the accounts for it was on the basis of this information that the doctors would receive the resources and, therefore, the opportunity to apply new therapies. More especially, it was the means by which economic truth statements were developed to substantiate the doctor's role as director of the operations of the asylum and to confirm the achievements of the asylum for its supporters.

5. Accounting for the RIHT

The main accounting records required according to the Instructions were the daybook (Article 62), the cashbook (Article 102), the bank book (Article 104), and the inventory book (Article 73) (see Table 5). Significantly, the accounting system was focussed on monitoring direct costs, in particular transactions related to the purchase and use of goods (RIHT, 1837b, Article 58) and drugs (Article 151). Donations to poor people and to their families were also recorded in a special book (Article 271). Every year the RIHT appointed a committee of five members to check the accounts (Article 119) and draw up key reports, including a statement of revenue and expenses for the previous year. The committee also produced a six-monthly report on the patients (RIHT, 1837a, Instructions Article 9) and the fees collected from patients (RIHT, 1837a, Instructions Article 10). The treasurer was responsible for collecting the fees and any other income and for paying all the expenses approved by the management (RIHT, 1837a, Instructions Article 44). The supply officer recorded the money spent each day on food purchased (Article 228) and consumed (Article 230). Every day he filled in the register of admitted and discharged patients, monitored the deliveries of consumables, and once a week recorded all consumed items in a register (RIHT, 1837a, Instructions Article 49).

Table 5.

The account books of the RIHT from the “*Istruzioni per il maneggio interno*”

Books	Keeper	References
Registry of inspections	Inspector	Art. 34
Registry of patients' belongings	Managers	Art. 51
Registry of patients' transfers	Service managers	Art. 72
Board Resolution Book	Secretary	Art. 76
Book of nominees for the Board	Secretary	Art. 76
Registry for approval of unplanned costs by the Board	Secretary	Art. 76
Registry of appointments	Secretary	Art. 76
Registry of admissions	Secretary	Art. 76
Yearly inventory	Managers	Art. 48
Accounts books	Managers	Art. 62
Monthly statements	Head supply officer	Art. 63
Cash book	Treasurer	Art. 102
Bank book	Treasurer	Art. 104
Ledger	Treasurer	Art. 112
Pharmacy cashbook	Pharmacist	Art. 151
Patients' ledger	Supply officer	Art. 227
Daily expenditure record book	Supply officer	Art. 228
Food consumption record book	Supply officer	Art. 230
Inventory management book	Supply officer	Art. 260
Registry of donations	Supply officer	Art. 271

Source: RIHT, 1837b.

The main final report each year was the statement of revenue and expenses, an example of which is provided for 1831 in Table 6.

Table 6.
Statement of the Revenue and Expenses for the year ending December 31st, 1831

Cash and revenues	Amount (lire)	%	Expenses	Amount (lire)	%
Cash on hand	9672.56	6.24%	<i>Expenses decided in 1830</i>		
Deposits	3000.00	1.94%	Contributions to the institution	1918.05	1.24%
Total cash and deposits	12,672.56	8.18%	Rental of rooms for the Hospital	130.00	0.08%
Revenues			Wages, pays and bonuses	2805.90	1.82%
<i>Revenues of the asylum</i>			Religious services in chapel	108.50	0.07%
Rentals	13,780.13	8.89%	Purchase of straw	1270.98	0.82%
Interest on properties and annuities	22,924.21	14.80%	<i>Consumables</i>		
<i>Alms</i>			Bread, meat, etc.	8434.29	5.46%
Dioceses, parishes, poor boxes and benefactors	351.47	0.23%	<i>Returns</i>		
<i>Random</i>			To deposits	4000.00	2.59%
Premiums on deposits	205.20	0.13%	Prepaid board and lodging	695.33	0.45%
Lottery of St Luigi	115.00	0.07%	<i>Liabilities</i>		
<i>Board and lodging</i>			Wages for the rector	150.00	0.10%
Boarders	30,992.03	20.00%	Wages for the deputy rector	350.00	0.23%
Poor people	65,815.86	42.48%	Wages for the clergyman	60.00	0.04%
<i>Items sold</i>			Wages for the secretary	60.00	0.04%
Straw and sweepings	1141.76	0.74%	Wages for the farm	225.00	0.15%
Cloths	53.68	0.03%	Gilder for the Confraternity	246.00	0.16%
<i>Consumables</i>			Burden of Masses	1190.40	0.77%
Excise duty	6500.00	4.20%	Interest on properties	945.04	0.61%
Treasurer's board and lodging	340.00	0.22%	Pensions for life	1673.32	1.08%
Prepaid surplus			Taxes and repairs of assets	2218.75	1.44%
Sales of wine	43.73	0.03%	Lawyers, attorneys and notaries	265.22	0.17%
Total cash and revenues	154935.63	100%	Annuities	180.00	0.12%
			<i>Repairs at the hospital</i>		
			Mason	1560.00	1.01%
			Painter	692.80	0.45%
			Locksmith	1571.00	1.02%
			Hardware	974.00	0.63%
			Tinsmith	160.00	0.10%
			Pump repairer	130.00	0.08%
			Stove repairer	135.00	0.09%
			Glazier	304.00	0.20%
			Oil-cloth	285.00	0.18%
			Upholsterer	51.40	0.03%
			Rooms for rent	260.00	0.17%
			Cesspit cleaner	404.00	0.26%
			Architect and other items	400.00	0.26%
			<i>Wages, pays and bonuses</i>		
			Wages for the head of the hospital department	1400.00	0.91%
			Wages for the assistant doctor	500.00	0.32%
			Wages for the surgeon	266.67	0.17%
			Wages for the phlebotomist	288.00	0.19%
			Wages for the Secretary – Treasurer	1200.00	0.78%
			Wages for the steward	420.00	0.27%
			Wages for the farmer, for the secretariat and treasury	360.00	0.23%
			Wages for the Sisters of Charity	600.00	0.39%
			Wages for the linen maid	120.00	0.08%
			Wages for the families	4291.25	2.78%
			Bonuses for the secretariat	10.00	0.01%
			Bonuses for the families	115.00	0.07%
			Bonuses for the surgeons, the hernia specialist, and the dentist	185.25	0.12%
			<i>Secretariat and Treasury</i>		
			Printer	491.50	0.32%
			Paper and binding	365.35	0.24%
			Mail and tips for the janitors	288.67	0.19%
			Auctioneer	6.00	0.00%
			<i>Religious services in chapel</i>		
			Masses	76.50	0.05%
			Funerals	497.45	0.32%
			<i>Belongings, furniture and linen</i>		
			Hempen cloths	1440.00	0.93%
			Hemp spinning, and other jobs	1129.95	0.73%
			Cloth making	888.00	0.57%
			Cloth and thread	6373.05	4.13%
			Cloth dyeing and bleaching	882.49	0.57%
			Launderer	451.79	0.29%
			Straw	1921.88	1.24%
			Mattress maker	615.80	0.40%
			Saddler	68.00	0.04%
			Furniture	107.50	0.07%

General items	458.85	0.30%
<i>Tools</i>		
Locksmith	997.00	0.65%
Tinsmith	545.00	0.35%
Cooper	40.00	0.03%
Basket maker	188.00	0.12%
Knife maker	38.00	0.02%
<i>Clothing</i>		
For the patients and families	2026.24	1.31%
Tailor	360.80	0.23%
Cobbler and leather	822.89	0.53%
Hatter	57.50	0.04%
<i>Consumables</i>		
To the poor to get back home	82.75	0.05%
Bread	19,478.92	12.61%
Wine for meals and for Mass	13644.44	8.83%
Vinegar for cooking	260.98	0.17%
Wine-keg man	109.80	0.07%
Beef and veal	17,989.25	11.64%
Vermicelli, i.e. pasta	3405.90	2.20%
Rice, corn and beans	3597.50	2.33%
Vegetables	408.78	0.26%
Standard refectory expenses	8125.00	5.26%
Cheese	1644.50	1.06%
Oil for cooking and lighting	3010.60	1.95%
Candles	292.00	0.19%
Wood for cooking and heating	8840.09	5.72%
Coal	848.60	0.55%
Salt and tobacco	1470.60	0.95%
Drugs, leeches, chloride of lime	6214.09	4.02%
Milk	247.72	0.16%
Warehouseman	65.00	0.04%
Total expenses	154484.88	100.00%

Source: Bonacossa, 1837, 119-124.

It is clear from the considerable detail provided in Table 6 that revenue and expenses were thoroughly examined to ensure that a detailed account was given of the use of all funds and resources. The most important expenses were food and drink, which accounted for 52% of total expenditure, followed by the cost of board, lodging, and clothing at 11%, while the cost of medical treatments and medical staff accounted for only 6% of total expenditure. The patients were put into two groups; the 'self-pay patients' and the poor for whom 80% of the costs were covered by the State and 20% by the municipality in which they lived (Berti, 1862, p. 24). There were two classes of poor patients and five classes of paying patients who paid five different levels of fees according to their ability to pay. These varied from 350 lire per month to 800 lire per month. Occasionally, more wealthy patients were admitted for a fee of 1000 lire (Bonacossa, 1840, p. 149). The revenue from State subsidies for poor patients was 42% of total revenues while self-paying patients contributed 20%. The proportion of poor patients was consistently about 80% of the total number of patients (RCSST, 1849-52, p. 859). For servicemen the Ministry of War paid 310 lire a month, which was less than the fee for the poor (Desmaisons Dupallans, 2006, p. 127). The lunatic asylum received several donations and offerings, in cash and in kind, a total of 338,200 lire between 1831 and 1836 (Bonacossa, 1837, p. 126), and regularly held charity lotteries (OPTAS, 1833). The RIHT also had its own income from the rent of properties it owned, interest earned on mortgages and dividends on State bonds (RCSST, 1849-52, p. 859).

The continued growth in the number of patients and increases in the cost per patient placed a heavy burden on the budget of the small Savoy state. This angered the ruling upper and upper-middle classes who as major sources of finance became ever more determined that structures would be created and information provided that would ensure that the RIHT would be well managed (Petitti di Roreto, 1837, p. 305). This fundamental stewardship function of

accounting practices was to provide the means by which the doctors and those managing the RIHT could reassure those who contributed the resources upon which the very existence of the RIHT depended that these were being used to bring about the recovery and restitution of inmates. This, thereby, provided the means to reinforce the role of the doctor as director of operations. The meaning of “managing well the organization” was clearly exposed in an essay by Petitti di Roreto who believed that it included six features: the Board of Directors should be “not cautious” but “enterprising”; each medical unit should be governed by a good doctor; the female departments should be managed by the nuns; the male department needed to have several guardians; revenues should exceed expenses and, finally, rich patients should contribute to cover expenses with a fee for clothing and food (Petitti Di Roreto, 1837, pp. 24-25).

As shown by Table 7, in the years covered in this study, apart from 1825-1830 and 1836-7 for which there is no information available, deficits were incurred in eleven out of 28 years, some of which, as in 1852 and 1854, were substantial. When there was a surplus, which occurred in 17 out of 28 years, these were always very small and never more than 10% of expenses. The total expenditure of the *Hospice des aliénés* in each of the first five years changed very little from approximately 150,000 lire after which it grew to a peak of nearly 470,000 lire in 1860. Thus, the nominal value of expenditure had tripled in 30 years¹¹. The evidence reveals that financial reports were seen by the State as a tool to promote the smooth and efficient functioning of the RIHT by monitoring its annual performance, even if calculated on a cash basis. The financial reports, especially those listing all cost items, allowed the Piedmont-Sardinia government to control the amount of their annual contribution for the RIHT.

Table 7.

Total revenues and expenses of the RIHT, 1831-1860 (lire)

Year	Revenue	Expense	Surplus (Deficit)	Year	Revenue	Expense	Surplus (Deficit)
1831	154,935.65	154,484.88	450.77	1846	262,606.27	245,637.49	16,968.78
1832	140,960.69	144,898.43	-3937.74	1847	231,082.39	239,741.64	-8659.25
1833	147,320.39	134,968.01	12,352.38	1848	230,619.65	252,094.26	-21,474.61
1834	148,961.82	140,229.37	8732.45	1849	240,989.39	225,084.74	15,904.65
1835	140,558.86	128,696.59	11,862.27	1850	307,730.12	243,840.64	63,889.48
1836	NA	NA	NA	1851	270,425.42	272,641.00	-2215.58
1837	NA	NA	NA	1852	244,617.67	332,283.25	-87,665.58
1838	212,705.06	197,686.32	15,018.74	1853	312,639.73	295,463.56	17,176.17
1839	216,874.00	219,253.67	-2379.67	1854	269,673.33	373,356.85	-103,683.52
1840	199,129.32	193,894.75	5234.57	1855	372,945.45	352,036.44	20,909.01
1841	189,958.26	208,965.91	-19,007.65	1856	387,712.59	34,9502.50	38,210.09
1842	232,177.11	201,952.66	30,224.45	1857	448,553.10	422,133.91	26,419.19
1843	269,412.52	240,442.57	28,969.95	1858	459,048.87	471,491.85	-12,442.98
1844	253,051.14	260,365.75	-7314.61	1859	452,136.64	449,036.55	3100.09
1845	231,446.65	236,102.38	-4655.73	1860	469,230.69	445,307.75	23,922.94

Sources: Bonacossa, 1837; Falconio et al., 1928.

In the management of the lunatic asylums of the Kingdom of Sardinia particular care was expected in controlling the main expense items monitored by the *Regia Segreteria*, that is, food, lodging and clothing. This was also a fundamental principle of the ceaseless, omnipresent discipline and control by doctors as directors of operations required by moral therapy. At the RIHT, food was served three times a day. The diet of poor people, who took

¹¹ Between 1830-1840 most of Europe experienced inflation.

their meals together, included: for breakfast, 50 grams of bread; for lunch, 150 grams of bread, a main course (meat and/or pulses), a rice or pasta soup, a quarter of a pint of wine mixed with water; for dinner, 180 grams of bread, a soup or a salad. For each of the self-pay patients, who took their meals in their rooms, the amount of bread was the same; the courses and the number of glasses of wine, however, were different (RCSST, 1849-52, p. 858). In addition to the food, the tableware and the clothes worn at the lunatic asylum were different for the poor and the more affluent who paid for their care (Bonacossa, 1840, p. 144). To control the cost of meals the RIHT drew up a detailed food budget, such as that prepared in 1837 as shown in Table 8.

Table 8.

Food and other costs budget, 1837

Monthly Fees of Five Classes of Self-Pay Patients

Cost (lire)	Poor 1st class	Poor 2nd class	Military at 85 a day	Fee 350	Fee 450	Fee 600	Fee 800	Fee 1000
Bread	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Wine	0.05	0.10	0.10	0.10	0.10	0.15	0.20	0.20
Soup	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Second dish	0.04	0.21	0.21	0.21	0.41	0.74	0.89	1.19
Total of food costs	0.33	0.55	0.55	0.55	0.75	1.13	1.33	1.63
Tobacco, clothing, linen	0.10	0.10	0.10					
Overhead cost	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Total of daily cost	0.83	1.05	1.05	0.95	1.15	1.53	1.73	2.03
Daily fee	0.56	0.56	0.85	0.96	1.23	1.64	2.19	2.77
Difference	-0.27	-0.49	-0.20	0.01	0.08	0.11	0.46	0.74
Total for all patients	244,340	237,133	7,207	61,085	24,435	24,434	6,108	6,108

Source: Bonacossa, 1837, p. 125.

The food served at the RIHT was based on a diet that had to meet both medical and economic criteria. All doctors, as widely reported by Trompeo (1829) and Bonacossa (1840) and by the Medical Commission sent to inspect the lunatic asylum in 1847 (RS, 1863), stated that especially the poorer patients needed a varied, nutritious diet that could prevent some of the typical illnesses linked to poverty and malnutrition which were recognised as causes of mental illness. Very importantly, achieving this depended on the “principles of order and good governance (which) should not be missing in such an institute” (RCSST, 1849-52, p. 858). The food budget and the general monitoring of the cost for providing for the daily needs of the patients also reveal a contradictory dimension of the accounting practiced by the RIHT. The control by the State, through the *Regia Segreteria*, of the average cost of food per patient in each lunatic asylum encouraged the management of every lunatic asylum in the Kingdom to keep the average cost within a specific range. This amounted to the government putting a limit on any potential excess by indirectly setting a specific diet compatible with the specified average cost. This average cost was the mean value of the cost of the poor people’s diet and the cost of the wealthier patients’ diet. Thus, any reduction in the state-defined average would have adversely affected the poor people’s diet, with the impact this would mean for the treatment and recovery of patients according to the precepts of moral treatment.

The significant financial commitment of the government in providing mental health services meant that it took considerable interest in the type of information produced by those

managing the mental asylums and the way this was used to ensure the efficient management necessary to control costs. This priority also reinforced the authority of the doctor as the director of operations. Thus, the government asked each asylum to provide information so that it could make general estimates of the supply and demand for places for patients at lunatic asylums and to make comparisons between the performance of the four lunatic asylums. The importance of comparative information for effective State control over asylums was emphasised by Foucault (1977, p. 189) who saw it as necessary “to recognize the patients, expel shamblers, follow the evolution of diseases, study the effectiveness of treatments, map similar cases and the beginnings of epidemics”. Thus, using this information the *Regia Segreteria degli Affari Interni* produced statistics about demand for services in lunatic asylums which, as shown in Table 9, included the average and total costs of services. The differences between the asylums were very small. The overall cost of all 815 patients in Piedmont asylums in 1839 was 320,604 lire (RSAI, 1841, p. 143).

Table 9.
Cost of mental asylums in 1839

N.	City	Organization	Revenues (lire)	Number of Insane	Total hospitalization days	Average cost for each day/patient (lire)	Total yearly cost (lire)
1	Chambéry	Hospice des Aliénés du Béton	41,726.25	90	32,850	0.905	29,674
2	Torino	Regio Manicomio	163,717.76	370	135,050	1.10	148,555
3	Genova	Ospedale degli incurabili, detto anche Ospedaletto		320	116,435	1.10	128,078
4	Alessandria	Ospedale dei Pazzereelli	<u>15,000</u>	<u>35</u>	<u>12,325</u>	<u>1.16</u>	<u>14,297</u>
Totals			220,444.04		296,660		320,604

Source: RSAI, 1841, p. 145.

The government of the Kingdom of Sardinia was especially interested in information which would allow it to assess the performance of each lunatic asylum by comparing the cost of supporting each patient. The cost per person calculated by the lunatic asylums could then be an indicator which all the lunatic asylums were expected to meet. A ministerial document specified that the cost per person, which would determine the level of the central government’s contributions, did not include “administrative and secretarial costs, wages and livelihood for the people who have been necessarily and specially appointed to take care of and run such hospitals” (RSAI, 1841, p. 143). Accordingly, the cost per person estimated by the Ministry only included the cost to provide for the basic, essential needs of the patients, that is, the direct costs of board and lodging, clothes and drugs.

The firm position taken by the government on allowable costs contradicted organicist theories advocated at the time by doctors who associated the causes of mental disorders with the patients’ physical health. A healthy diet, as noted earlier, was viewed as a prerequisite to regaining the physical health of patients and subsequently improving the patient’s mental well-being. Therefore, putting a limit on a diet prevented the full application of the medical therapies and the need to meet the expectations of the bourgeoisie. This explains why a doctor like Bonacossa was so interested in the asylum’s accounting, especially in listing the details of the food budget which acted as a form of mediation between the government’s influence and the medical position of Bonacossa and his colleagues who were firm supporters of Gall’s organicist theory of treatment for the mentally ill.

By excluding overhead costs in the calculation of the cost per patient, the central and local governments were often placed in a position where they were forced to justify funding an asylum whose income appeared to exceed expenses. This often led to demands by the King and taxpayers for more financial and operating details. Thus, the RIHT had to ascertain the origins of the poor lunatics to reassure both the central and local governments that everyone admitted to the asylum was made to pay as much as they were able to afford. To meet potential resistance from local authorities, the *Regia Segreteria* assured them that great care was taken to assess the patients' mental health, their ability to pay and that their citizenship, and thus eligibility for receiving treatment, was always verified to ensure that no foreign patients were admitted (RSAI, 1841, p. 144). Patients who fully met the costs of their treatment from their own funds did not have to come from the Kingdom (RCSST, 1849-52, p. 859).

Public opinion amongst the most educated in Piedmont was also overcoming the prejudice that saw mentally-ill people as incurable (Petitti di Roreto, 1837, p. 302; Anonymous, 1839, p. 344). Instead, the cost of lunatic asylums was considered to be a welfare service which would rehabilitate people who would have otherwise been completely left to their own devices, until they could get back into the world and satisfy middle-class expectations of decency and productive efficiency. Processing statistics about the patients' marital status, gender, profession, age and residence was not just for information or for describing the mental disorders, but to help the government take the best decisions as to how to prevent such diseases and, depending on the features and numbers of the population, to plan measures, admissions and, therefore, budgets. Producing statistics about the entire State is also evidence of an interest in keeping the population under control in all respects, for "bio-political" reasons, as consistently emphasised by Foucault (1967, 1991, 2008).

6. Conclusion

Foucault's extensive historical research into lunatic asylums, the role they played in the early 19th century and the relationships between the asylum and the patients, is focussed above all on the 'great confinement' which had characterised treatment of the mad from the 17th century; the process whereby 'deviants' were reduced to silence out of concern or fear that people then had for the unknown and the irrational (Fitzsch & Jutte, 2003; Porter & Wright, 2003; Knowles & Trowbridge, 2015). The process of replacing the 'great confinement' ran through two stages. Stage one marked the birth of the modern lunatic asylum, the stage that saw the spread of moral treatment advocated by Pinel (1797, 1804, 1806) and Esquirol (1819, 1835, 1845) when a central role was played by the doctor's 'magnetic' and demiurgic personality for 're-educating' a 'deviant' person. The purpose of this re-education, as noted by Foucault (1967, p. 247), was to give back to the middle class someone who had learnt (again) its values and life principles, who was ready to be an efficient and productive member of society (Scull, 1977, 1990). In stage two, Europe's mid-19th century lunatic asylums dramatically changed, and so did the people confined in them. The change saw mental illnesses being increasingly recognised as medical disorders (Boyne, 2013), with knowledge being standardised into scientific categories (Gutting, 1989; Dowbiggin, 1992; Pietikainen, 2015; Scull, 2015). According to Foucault (2006, p. 179) this resulted in the mad being regarded more as ill people that needed to be treated rather than as individuals to be put back into the world as efficient and 'normal' people, even if the patients had to be locked up in a lunatic asylum if they were not cured. The doctors realized that the successful implementation of these changes in the diagnosis and treatment of the mentally ill would require a new regime

of managing the operations of the asylum. To be able to treat mental illness as a medical disorder that required a rigorous regime of control meant that control had to be by the doctors. Thus, the doctor would have a dual role as medical director and director of operations. The medical truths that the doctor sought to promote would be insufficient to ensure the authority that they needed to implement the new treatments.

This study of the RIHT has focussed on the transition from stage one to stage two, during which it was transformed from a religious to a private organisation under public control. It was so successful that a rise in demand drove it to move on two occasions to larger premises in less than 40 years. The distinctive features of the RIHT which set it apart from other lunatic asylums at the time, such as the *Real Casa dei Matti*, were its extensive use of drugs and the particular procedures and ‘rites’ of the hospital, but especially the central role played by the doctors in the management of the asylum, most famously Trompeo, Bertolini and Bonacossa whose influence was confirmed by the importance given to their publications and the respect they enjoyed on both national and international levels. While the management system adopted in the RIHT was not noticeably innovative in the use of financial information, medical treatments were emerging as completely new, especially with reference to the Italian context. The leading management role given to the doctors, the medicalization of the treatment, the ritual of the doctors’ visit and the close relationship developed with the Faculty of Medicine and Surgery of the University of Turin reveal the innovative practices of the RIHT with respect to the main mental asylums working in that period in Italy, such as Ancona (Rocca, 1998), Aversa (Saporito, 1907) and Roma (Bonella, 1994). These features clearly distinguish the RIHT from the *Real Casa dei Matti* of Palermo, where a key role was played instead by a philanthropist, Baron Pisani, who had no medical expertise or academic reputation (Funnell et al., 2017). However, in both cases, moral treatment was largely practised. Even the doctors of the RIHT, despite writing that they disagreed with Esquirol’s and Pinel’s theory and favoured instead the ideas of Gall, accepted and practised moral treatment but, unlike Pisani at Palermo, as an adjunct to pharmacological treatments.

The accounting tools used by the RIHT were very similar to those of the *Real Casa dei Matti* of Palermo where medical statistics were also used to classify people, to provide evidence of various aspects of the activities of the lunatic asylum, legitimising it and fulfilling its accountability to the local community and the regional state funding it (Funnell et al., 2017). Accounting was used to justify costs that society was asked to bear to contain an illness in an acceptable way according to the moral standards of the time. Most importantly, accounting practices allowed the programmes of moral therapy to become thinkable and thus enforceable by doctors in their dual role as medical practitioners and managers. However, there are at least three significant differences in accounting as practiced in Turin and Palermo. Firstly, compared to Sicily the public authorities of the House of Savoy played a more proactive role in estimating, comparing and monitoring the costs of the patients’ board, lodging and clothing through a form of ‘central planning’ that was completely missing in the regional authorities of Sicily. Secondly, unlike the *Real Casa dei Matti* the administrative rules laid down by the royal legislation for the RIHT gave particular emphasis to procedures, the separation of duties and auditing plans, to ensure new levels of accuracy and accountability, something that was not a feature of the Palermo asylum. Thirdly, accounting, especially statistics reports made by the doctors, was strongly involved in a ‘scientific discourse’ on madness. The accounting information overseen by the doctors as the directors of the RIHT reinforced their authority based upon medical forms of truth by providing evidence of their good management which constituted statements of ‘economic truth’.

The mid-19th century Italian middle classes expected organisations such as the RIHT to be operated in an efficient and effective manner, where resources would be used to produce the best treatment for the patients to restore them to society as productive citizens (Digby, 1983; Foucault, 1987; Wright, 1997; Shepherd, 2014). The efficiency and effectiveness expected of lunatic asylums reveals the role accounting played within the asylum and in society (Piddock, 2007; Parry-Jones, 2013; Pietikainen, 2015). The doctors who managed the lunatic asylums were urged to reduce costs and accept ever increasing numbers of inmates (Micale & Porter, 1994, p. 425). Therefore, with the mid-19th century middle classes wanting to monitor, and preferably minimise, the cost they paid for the poor, the sick and the insane, accounting had to be able to provide the information necessary to manage large organisations and report the costs as evidence of the way the resources had been productively used and thus confirm the role of the doctor as director of operations (Smith, 1999; Macintosh, 2002; Walker, 2004, 2008; Holden et al., 2009). However, the RIHT did not adopt emerging modern management tools such as cost accounting, labour accounting, quality control or reporting, that were beginning to be used by some other social institutions of the period but in very limited ways (Carmona et al., 1997; Holden et al., 2009; Bracci et al., 2010; Sargiacomo & Gomes, 2011; Antonelli et al., 2017).

Medical and social effectiveness were measured in statistical and financial terms, evidence according to Foucault (2003, p. 36) of the scientific rationale that increasingly underpinned the treatment of the insane. Hence, the extensive use of medical and psychiatric statistics in the asylums at that time (Goffman, 1968; Berrios, 1996; Goldstein, 2002; Walker, 2008) was used to explain the cause and social impact of the lunatic's deviancy or immorality but also to monitor the effectiveness and relevance of the services provided (Porter, 1990; Miller, 1992; Crammer, 1994; Rimke & Hunt, 2002). After the reform implemented by State authorities in 1836, the accounting system implemented in all four asylums in Piedmont involved keeping records for medical and financial purposes between which there was a reciprocal and dependent relationship. The information produced by the accounting systems was not just for the public authorities who paid all the funding for the poor but also for the management of the lunatic asylum and for the medical community, both local and non-local. To identify the cause and social impact of a mental disorder required considerable information related to admissions, discharges, recoveries, deaths, the taxonomy of mental disorders and their causes as well as the lunatics' origins, by region, gender, age and occupation. Foucault (1977, p. 189) identified the way in which detailed examinations that place "individuals in a field of surveillance also situates them in a network of writing; it engages them in a whole mass of documents that capture and fix them. The procedures of examination were accompanied at the same time by a system of intense registration and of documentary accumulation".

In addition to patient statistics, the public authorities were also interested in the efficiency of the residential and healthcare services provided at the RIHT and generally in any lunatic asylum in the Kingdom of Sardinia. They wanted to be able to review carefully the direct costs of such services, especially the cost of board, lodging and clothing. The costs were recorded regularly in great detail and the *Regia Segreteria degli Affari Interni* compared them across the entire institution and with other insane asylums. This allowed the *Regia Segreteria* to monitor the efficiency of an institution, thereby promoting the best use of the funds that the State had to pay for the hospitalisation of poorer patients. Also, the food budget, and therefore the patients' diet, became a way to control the body, one of the distinctive features of Foucault's (2008) theory of bio-politics. Any increase or decrease in the cost per patient per

day allowed by the public authorities meant improving or worsening the patients' health and quality of life and the exercise of a different level of control over their bodies which would have implications for their chances of recovery. Therefore, the daily cost of food per patient, as established by the public authorities or estimated by the RIHT, was not neutral but incorporated a number of opinions and assessments on the quality of life that the insane should have according to the values that society attached to these people.

In order for the RIHT to survive, the management had to legitimise the institution with the public authorities and with the many contributors that it relied upon for offerings, donations, gifts and bequests. This required the management of the lunatic asylum to have highly developed accounting systems to confirm its good management and to measure its performance. Keeping accounts in good order was a necessary requisite of the culture of the Savoy middle classes at the time which was deeply rooted in values such as *laissez-faire*, frugality and a cautious use of public resources (Cesarani & De Federicis, 1995; Quine, 2002). Yet, there is no surviving evidence to confirm that donors made their funding decisions primarily or exclusively on the basis of financial reports or other accounting-based information coming from RIHT. Public opinion and government rewarded those public and private institutions that proved they adhered to such values, something the accounting practices of the RIHT allowed it to achieve.

This study of a prominent Italian lunatic asylum in the early 19th century has provided the means to investigate a period during which 'psychiatric' doctors were establishing a new discipline which had quickly achieved great credibility but which relied upon both medical truth statements and economic truth statements (Foucault, 1967, 2003, 2006b). It has exposed the critical role of accounting practices in supporting the political and social justification of the asylum, its claim for public and private support and the essential contributions of accounting and broader statistical information in confirming the success of doctors as directors of the work of the RIHT. At the same time, accounting was also a way through which the State could control and monitor the cost of providing the necessary facilities and care for patients, thereby having repercussions for the patients' diets and their physical and mental health. The study emphasises the importance for this process of the statistics processed by the doctors of the lunatic asylum as highlighted, once again, by Foucault (1967, 2003).

Further research could extend the study of the RIHT beyond period covered by this study, 1825-1861, to the late 19th and early 20th centuries when it gained international attention for the famous Bruneri-Canella case, known as the 'Collegno amnesiac'¹². Research could also be extended to other lunatic asylums in Italy in the years covered by this study and to later periods. Finally, lunatic asylums established outside of Italy, especially France, Great Britain and the USA could be studied to compare the impact of medicalization for the treatment of the mentally ill on the management, efficiency and the accountability of lunatic asylums.

¹² At the end of the First World War, a soldier who had apparently lost his memory was admitted to the RIHT in Collegno. He was unable to recall his name or any other details about himself. Later, in 1926, when further attempts were made to identify him two possibilities emerged after Giulia Canella alleged that he was her husband, Professor Giulio Canella, a philosophy teacher. The police, however, believed that he was Mario Bruneri, an anarchist and a criminal. After several trials involving famous attorneys, including Roberto Farinacci, one of the most powerful and influential man in the Fascist Regime, no agreement was reached. Many newspapers, novels, theatrical performances and, in recent years, TV shows and movies have been devoted to the puzzle (see Zago, Sartori & Scarlato, 2004).

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