

THE BURGHÖLZLI CENTENARY

by

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AS THE Burghölzli Hospital in Zurich approaches its centenary, it seems an opportune occasion to review briefly its historical development, and to compare it with its closest counterpart in England, the Maudsley Hospital. The outstanding contribution of this famous Swiss centre and its directors have created for it an almost unique place amongst the teaching centres of the Western psychiatric world.

HISTORICAL DEVELOPMENT

The foundation of the Burghölzli Hospital in Zurich marked the beginning of the modern era in Swiss psychiatry. Its establishment came in the wake of a world-wide change in attitudes towards mental disorder, ushered in by developing humanitarian ideas and altering medical concepts of psychiatric illness. The conditions prevalent in Switzerland during the mid-nineteenth century, and public reaction to them, were similar to those in England forty years before, which had led social reformers of the time to instigate a Parliamentary Committee of enquiry into the 'madhouses of England'. The appalling circumstances which were exposed at the Bethlem Hospital and elsewhere in 1815 were still to be found in Switzerland during the 1850s. The mentally ill were herded together with the chronically sick, or segregated in an isolated cell block where the more violent inmates were physically restrained in untreated, stone-floored cells. They were cared for by a hopelessly inadequate nursing staff under an untrained lay administrator, and so casual was the medical attention that a contemporary physician noted 'how frequently a doctor did not know a patient had been ill until he was presented with a death certificate'.

The discontent among enlightened lay people of the time was matched in both countries by psychiatrists with imagination and ability to provide effective remedies. In England, Prichard and Conolly were followed by Henry Maudsley, whilst in Switzerland, Griesinger had moved from the more advanced German school of psychiatry to become professor of medicine at Zurich University. Thus, although half a century separates the founding of the Burghölzli and Maudsley hospitals, the two moving spirits were contemporaries on the psychiatric scene, and both Griesinger and Maudsley were subjected to an intellectual climate which Lewis has described with its 'self-questioning, social and spiritual discontent'. Not only were similar environmental forces acting on the two men, but their careers and temperaments showed marked similarities, for although Maudsley came to psychiatry by accident from an intended career in surgery, and Griesinger from an established position as a physician, both men were self-willed, impatient of control, and neglectful of regular classes as students, yet both achieved considerable clinical responsibility before they were thirty. At twenty-eight, Griesinger published his famous textbook, *Die Pathologie und Therapie der psychischen Krankheiten für Aerzte und Studierende* (1871) (Pathology and Therapy of Mental Diseases) and when Maudsley, at the age of thirty-two, wrote

his own work on *The Physiology and Pathology of Mind* (1868), it was welcomed in Griesinger's journal as the most important psychiatric work of the year. The thinking of the two men was similar in many respects. Conolly's principles of 'no restraint' influenced his son-in-law, Henry Maudsley, and Griesinger less directly through his earlier training in Germany. Both men fought hard against the residual contemporary prejudices towards mental disorder and the tendency to regard mental illness as divine retribution or vicious passion. Perhaps in consequence, they over-emphasized its organic aetiology. Griesinger, in particular, felt that 'no mental institution is anything but a hospital for brain diseases', and the therapeutic sterility inherent in this attitude was reflected in the monotony of the Burghölzli's design.

By 1860, shortly after Maudsley was appointed superintendent of his first mental hospital at the age of twenty-three, Griesinger had founded a psychiatric clinic at the university in Zurich, and within two years land had been purchased outside the town from publicly donated funds for the erection of a mental hospital. The project was designed with help from Griesinger's friend, the German psychiatrist Heinrich Hoffman (also famous as author of the *Struwwelpeter*, a book he drew and wrote for his son). In 1863 Hoffman expressed his hope that 'the future Zurich Institution will be the best appointed and equipped amongst the lunatic asylums of Europe.'

During the next five years the hospital was built in parkland outside the town, with a view of the Alpine foothills, to a design which became a model for later institutions in Switzerland and elsewhere. A central administrative and communal block separated the two sexes in eastern and western wings where they were further segregated from north to south to provide accommodation for quiet, semi-quiet, and restless patients. Since its erection, this basic plan has proved satisfactory, although it suffered from conformity and monotony in design, which sprang inevitably from the contemporary view that all mental illnesses were aspects of a single organic brain disease requiring similar treatment. This basic design has since been modified by the addition of admission villas after 1903, special care units for patients in need of extra physical attention in 1930, a small observation ward in 1942, and recently, new workshops and a gymnasium.

During the early years of building, Griesinger continued his lectures in mental disease at the university, teaching that brain pathology was the key to psychiatry, regarding aetiological theories as unproven generalities, and prognosis as mere guesswork. When he left Zurich in 1865, psychiatric teaching fell into abeyance until shortly before the opening of the Burghölzli in 1870. Its first director, Bernhard von Gudden (see Table 1) also came from Germany, where he, too, had been influenced by Conolly's principle of no restraint which he proceeded to apply fearlessly, despite accusations of 'reckless irresponsibility'. Nevertheless, political and administrative animosity caused him to leave within three years. He was followed in 1873 by Gustav Huguenin, who came to psychiatry from an earlier training in paediatrics and who left after only two years to become professor of medicine at the University. For the next four years, Hitzig was Director, but, as with his two predecessors, political controversy marred and prematurely terminated his stay. The difficulties encountered by the hospital's first three directors were accentuated by their German origin and poor understanding of the local dialect, but sprang mainly from two more fundamental

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TABLE 1
Directors of the Burghölzli Hospital

Years	Director
1870–1873	Bernhard von Gudden (1824–1886)
1873–1875	Gustav Huguenin (1840–1920)
1875–1879	Edward Hitzig (1838–1907)
1879–1898	Auguste H. Forel (1848–1931)
1898–1927	Eugen Bleuler (1857–1939)
1927–1941	Hans-Wolfgang Maier (born 1882)
1942–present	Manfred Bleuler (born 1903)

sources. All, like Griesinger before them, were primarily interested in the basic sciences and organic origin of mental illness. Von Gudden's main contributions were in brain pathology and animal experimentation. He performed early studies on selective ablation of the central nervous system and was the first to suggest a connection between the pyramidal tracts and the cortex. Hitzig's interests lay in brain physiology and in 1870, together with Fritsch, he had been the first to describe the response of the brain to electrical stimulation, refuting earlier ideas that the entire cortex was functionally homogeneous. Despite such achievements, the experimental and organic approach of the three men was rendered largely sterile through lack of time, encouragement, and facilities in a busy institution which existed primarily to care for the sick. However, their humane approach to patients led paradoxically to further dispute with staff and lay administration, who were not yet ready to accept fully the principles of non-restraint. Inhuman remedies, like the rotatory chair and cold water hosing, were forbidden, and drastic physical treatments, such as purges and emetics, were reluctantly and cautiously applied. The few drugs used included chloral, the bromides, and opiates, but the emphasis in treatment was mainly on good hygiene and plenty of rest. The attitudes of these three men were so misrepresented to the Swiss public that open conflicts broke out and the hospital became known as 'The Bastille of Zurich.'

By the time the lay administrators had been finally subordinated and Hitzig had left to pursue his researches elsewhere, it was scarcely surprising that no one appeared willing to undertake the post of Director to the 'Hell of Burghölzli'. In 1879, Auguste Forel, already on the staff of the hospital, accepted the task at the age of thirty-one, only five years after qualification and with two years' experience in psychiatry. His appointment marked the real beginnings of the Burghölzli's world-wide reputation, and he proved ideally suited to bridge the gap between the older organic experimental approach and the dawning psychotherapeutic ideas on which that reputation has come to be mainly founded. His work on ants and his anatomical studies concerning the theory of neurosis occupied his earlier years, but from about 1882 onwards his interests turned to clinical research. His lectures changed from anatomical subjects

to the systematic teaching of forensic psychiatry and the beginnings of a psychotherapeutic approach. His organization of psychiatric teaching became a model in other centres over decades, and as early as 1888 he succeeded in making psychiatry a compulsory subject towards medical qualification. One of the most distinguished pupils to study under him was Adolf Meyer, whose commonsense ideas and practical approach were later to have such profound effects on western psychiatry and its rigid nosology. Kraepelin also considered training at the Burghölzli, but was unable to sever the ties with his own university.

In hospital life Forel mobilized the therapeutic potential of his approach and pioneered the change from enlightened custodial care to more active treatment, recognizing especially the value of regular occupation. Influenced by Charcot in Paris, he employed hypnosis, explained it as a phenomenon of suggestion, and in 1889 published his own classical work on the subject. His other major interests lay in the study and treatment of alcoholism; he recognized that the condition was curable and understood the value of total abstinence.

Forel was both a prodigious worker and a fanatical fighter for his medical and social beliefs. Within the hospital he re-established firm discipline, and outside it he campaigned against prostitution and alcoholism. He also played a large part in the rationalization of the criminal and lunacy laws. His demanding attitudes and dynamic approach exhausted his resources and alienated his colleagues, and he retired prematurely in 1898, at the age of fifty.

He was followed by Paul Eugen Bleuler, who had studied widely in Paris under Charcot and Magnan, and under his predecessor, Gudden, in Munich. As a native of the canton, he achieved a particularly close and sympathetic understanding of his patients, whose dialect he shared. Although the duties of Director finally forced him to divorce himself from patients more than he wished, it also enabled him to collect and express his ideas in writing and to teach the small groups of students in seminars, which he preferred to more formal lectures. Bleuler completely abandoned the old pathological speculations on aetiology. Instead, the Burghölzli became the first university clinic to apply Freud's psychoanalytical theories to the study of mental diseases, leading not only to a better psychological understanding of language, antisocial behaviour, motor disorders, and mental symptoms, but to powerful therapeutic possibilities. Freud himself noted that 'most of my present-day followers and collaborators come to me from Zurich', but from 1906 onwards, Bleuler's close association with his senior physician, Jung, led to the development of ideas which established the 'Zurich School' in its own right. Their work laid the foundation of modern dynamic psychiatry and coined much of its vocabulary, including such terms as affective abnormality, complex, ambivalence, autistic thinking, schizophrenia, and schizoid. In conjunction with Eugen Bleuler, Herman Rorschach evaluated his world famous projection tests at the Burghölzli.

One of Eugen Bleuler's most practical contributions to modern therapy lay in his management of schizophrenia, where he realised the deleterious effects of prolonged confinement in an institution and advocated early discharge as soon as the acute symptoms subsided. He created the beginnings of community care by organizing a service to follow up discharged schizophrenics and facilitate their rehabilitation.

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For those who remained in hospital, he advocated regular work, often on the land, and trained his ward staff to interrupt the stereotyped patterns of the schizophrenic's behaviour whilst still permitting the patient a maximum of individual responsibility. These practices were adopted and developed by Hermann Simon to become widely known as 'active' occupational therapy. Many of the fruitful ideas of this period were incorporated in Bleuler's popular *Textbook of Psychiatry* and in Jung's work on the psychology of dementia praecox. The pupils who studied at the Burghölzli during this period disseminated its teachings throughout the world: Karl Abraham in Germany; Brill and, later, Oskar Diethelm in the United States; Ruemke in Holland; and Minkowska in France. Binswanger, who later introduced phenomenology and existentialism to psychiatry, also studied at the Burghölzli, and now practises in Zurich.

From his mid-sixties onwards, Bleuler gradually relinquished clinical responsibilities for more philosophical preoccupations, but when he left in 1927, at the age of seventy, he was the first Director to have done so without being driven to premature retirement by feelings of bitterness. He was succeeded by Maier who had already spent his entire professional life at the hospital. Maier's own interests centred on forensic psychiatry; he pioneered the acceptance of diminished responsibility, advocated sterilisation of sexual deviants, and urged the need for psychiatric training of the judiciary. During this period child psychiatry developed in its own right, under the supervision of Jakob Lutz; in particular, the significance of behaviour disorders was appreciated and child guidance clinics were instituted.

Whilst Maier was Director, between 1927 and 1941, the modern physical methods of treatment became popular, though they had already been anticipated with the development of sleep therapy by one of the hospital's senior physicians, Jacob Klaesi, in 1920. The careful appraisal of this treatment tempered the uncritical enthusiasm with which the later 'shock' treatments were introduced in other centres. Insulin therapy was used first at the Burghölzli in 1936, cardiazol in 1937, and E.C.T. in 1940. The approach to psychosurgery was equally cautious, and although it was introduced by Moniz in 1936 and widely accepted in the Anglo-Saxon world during the second World War, it was not used at the Burghölzli until 1946, where its indications are still cautiously interpreted.

When Maier retired from this post as Director, he was followed by his predecessor's son. Manfred Bleuler had originally intended to practise surgery, but after an early and extensive training in neurology and psychiatry he was appointed professor of psychiatry in Zurich and Director of the Burghölzli in 1942, the post he still holds. The contributions to contemporary psychiatry during this period are too close for final evaluation, but much that is clearly of lasting value has been accomplished and is briefly reviewed below.

CURRENT TRENDS

The Burghölzli has always maintained a close association with Zurich University, but it was founded to serve primarily as a mental hospital to the Canton in which it was built. Although the early intention that patients should be drawn from recently ill and treatable cases was therapeutically and administratively desirable in a teaching

institution, this aim has been partially baulked by lack of alternative facilities for chronic patients requiring permanent care. Demands on the available facilities have been further aggravated by the rapid increase in population, its urbanization and rising average age. These have not been compensated for by improvements in the treatment or prevention of mental disease, and the steady increase in Burghölzli staff and the demands made upon it are clearly shown in Table 2. The nursing of acute cases and rapid turnover of patients has always required a high nurse-patient ratio. The increase from 1:6 in 1876 to 1:3 at present is accounted for by the additional demands of non-restraint, intensive occupational therapy, elaborate physical methods of treatment and the systematic training of nurses. The increase in the number of physicians from two to twenty-three is due to a five-fold increase in admissions, to the outpatient demands of psychiatry and family care as well as the elaboration of medical treatment and psychiatric training.

TABLE 2
Increases in Admissions and Staff

Year	No. of Admissions	No. of Physicians	No. of Nurses
1871	284	2	43
1900	203	4	76
1910	505	5	107
1920	782	8	126
1930	995	13	131
1949	1045	22	179
1964	1268	23	194

The Burghölzli's role as an area mental hospital and the lack of research resources accounted for the failure of earlier directors to combine academic and clinical pursuits, but later shaped its outstanding contributions to psychiatry along practical and clinical lines. Whatever advantages such a dichotomy between basic and applied science conferred in the past, recent years have demonstrated a need, as elsewhere, for a fresh synthesis between the clinical and academic workers forged around common interests in psychosomatic disorders and physical methods of treatment. Manfred Bleuler has criticized the modern tendency to undervalue psychopathological diagnosis, which developed from a natural reaction to the old unsound habit of creating speculative nosological systems. His own work on the mental changes associated with cerebral disease (the acute and chronic brain syndromes) and endocrine pathology (the 'endocrine psychosyndrome') are a reminder of earlier directors' interests in the organic origins of mental illness, but his emphasis on the profound modifications in the clinical picture which may be produced by an individual's personality and constitution is more reminiscent of Eugen Bleuler's discrimination between the primary and secondary features of schizophrenia.

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The clinical contributions of the past have propagated a continuing interest in the natural history of mental illness. Such work includes Ernst's important monograph on the outcome of the neuroses; Willi's study concerning the effects of schizophrenic children on their parents, and Benedetti and Müller's work on the application of psychoanalytical methods in the treatment of schizophrenia. The Burghölzli has also contributed to the developing field of physical treatment. Stoll pioneered the study of hallucinogenic drugs such as L.S.D., and, more recently, Angst has investigated the factors which may influence the patient's response to pharmaceutical agents, producing evidence to suggest genetic determinants.

Although this resurgence of interest in physical factors applied to clinical psychiatry has led to an eclectic approach to treatment, the attitude to physical methods remains cautious and less indiscriminate than in many centres.

As might be expected from the hospital's history and the attitudes of its Directors, great stress is laid on the importance and value of the personal relationship and trust between patient and doctor. Psychotherapy is practised in its widest sense, but because of practical considerations is usually limited in duration and is often directive in nature. No particular 'school' is followed, and emphasis is placed mainly on 'confession' and 'suggestion', although the existentialist viewpoint is represented in the teaching curriculum.

Physical treatment of any sort is reserved for the most serious or acute cases, and is always accompanied by continuous medical and nursing supervision. Insulin coma is occasionally used, and is sometimes combined with E.C.T. for the treatment of severe chronic schizophrenics. Sleep therapy is more extensively applied at the Burghölzli than in other centres, with the possible exception of those in Russia.

The use of drugs is cautious, and routine sedation is deprecated. Drugs are generally employed for short periods and given parenterally when their aim is to render the patient amenable to other methods of management. Reserpine, which was introduced into psychiatric therapy by Bleuler in 1954, is used for chronic severely psychotic patients in preference to phenothiazines, and morphine or scopolamine are occasionally given to disturbed patients.

The realisation that mental illness is not a unitary disease requiring stereotyped management has led, as elsewhere, to an increasing interest in patients who do not need admission but who benefit from expert help. Since Eugen Bleuler's time, particular interest has focussed on the problems of rehabilitation of patients in the family and community after discharge. This requires an early involvement of relatives, to utilise their assistance, and has also led to the concept of 'family care' in the community. Under this scheme, discharged patients are housed with selected families, willing and able to cope with the problems of rehabilitation, but supported by a hospital-based domiciliary team.

A more general idea of the work undertaken at the hospital may be obtained by a comparison of the annual figures with the Maudsley Hospital which shares its aim to treat acute short-stay patients wherever possible and also its teaching functions.

As shown in Table 3 the general work load for the two hospitals is very similar, but Table 4 throws light on some of the similarities and differences between the two institutions by comparing diagnostic categories.

TABLE 3
Number of Patients at Burghölzli and Maudsley (1960)

	Male		Female		Total	
	Maudsley	Burghölzli	Maudsley	Burghölzli	Maudsley	Burghölzli
Inpatients	612	629	680	639	1292	1268
Outpatients					2476	2045

TABLE 4
Comparison of diagnostic categories between Burghölzli (1960)
and Maudsley (Triennium 1958–1960)

Diagnosis	% Admissions	
	Burghölzli (1960)	Maudsley (1958–60)
Schizophrenia	35	17
Manic depressive	9	31
Neuroses	21	22
Character disorder	3	8
Paranoid state	.5	1.5
Alcoholism and drug addiction	9.5	3
Epilepsy	2	10.5
Senile and symptomatic	7.5	1.5
Others	12.5	3.5

The five main areas of difference are italicized. A higher incidence of schizophrenia at the Burghölzli and of manic-depressive illness at the Maudsley is partly accounted for by different diagnostic criteria. Manfred Bleuler's own study of schizophrenic illness, published in 1941, emphasized the frequency of a periodic course, with relatively good prognosis and little or no residual defect. Elsewhere, patients in this category might often be diagnosed as suffering from manic-depressive illness. Social factors may also play a part, and manic-depressive illness, relatively more common than schizophrenia in the higher social classes, may be treated privately in Switzerland, but under the National Health Service in this country.

Alcoholism, as these figures show, has always been a particular problem in Switzerland which has exercised the interests of successive directors and physicians. Diethelm has shown that not only is it common, but that the course of Swiss alcoholics tends to be more chronic and intractable than in the U.S.A., and Benedetti was amongst the first to describe alcoholic hallucinosis in detail.

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The tendency to admit more epileptics to the Maudsley but more senile patients to the Burghölzli results from administrative arrangements, and the fact that in Zurich special facilities are available elsewhere for epileptics but not for the elderly, who must be catered for under the Burghölzli's function as area mental hospital.

SUMMARY

A recent clinical attachment to the Burghölzli Hospital in Zurich provided information to review some of its historical and contemporary contributions to psychiatry and to study the pattern of development during the past century. Some appropriate comparisons with The Maudsley Hospital have been made.

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We are indebted to Professor Manfred Bleuler for his encouragement and advice in writing this account, and for providing much valuable historical information.

It is Professor Bleuler's modest wish that the comparisons we have made between the two hospitals should not obscure the differences in their scope and resources. Nevertheless, it is felt that these differences serve but to emphasize the considerable contributions to world psychiatry of an institution which claims only to perform the parochial function of an area mental hospital.