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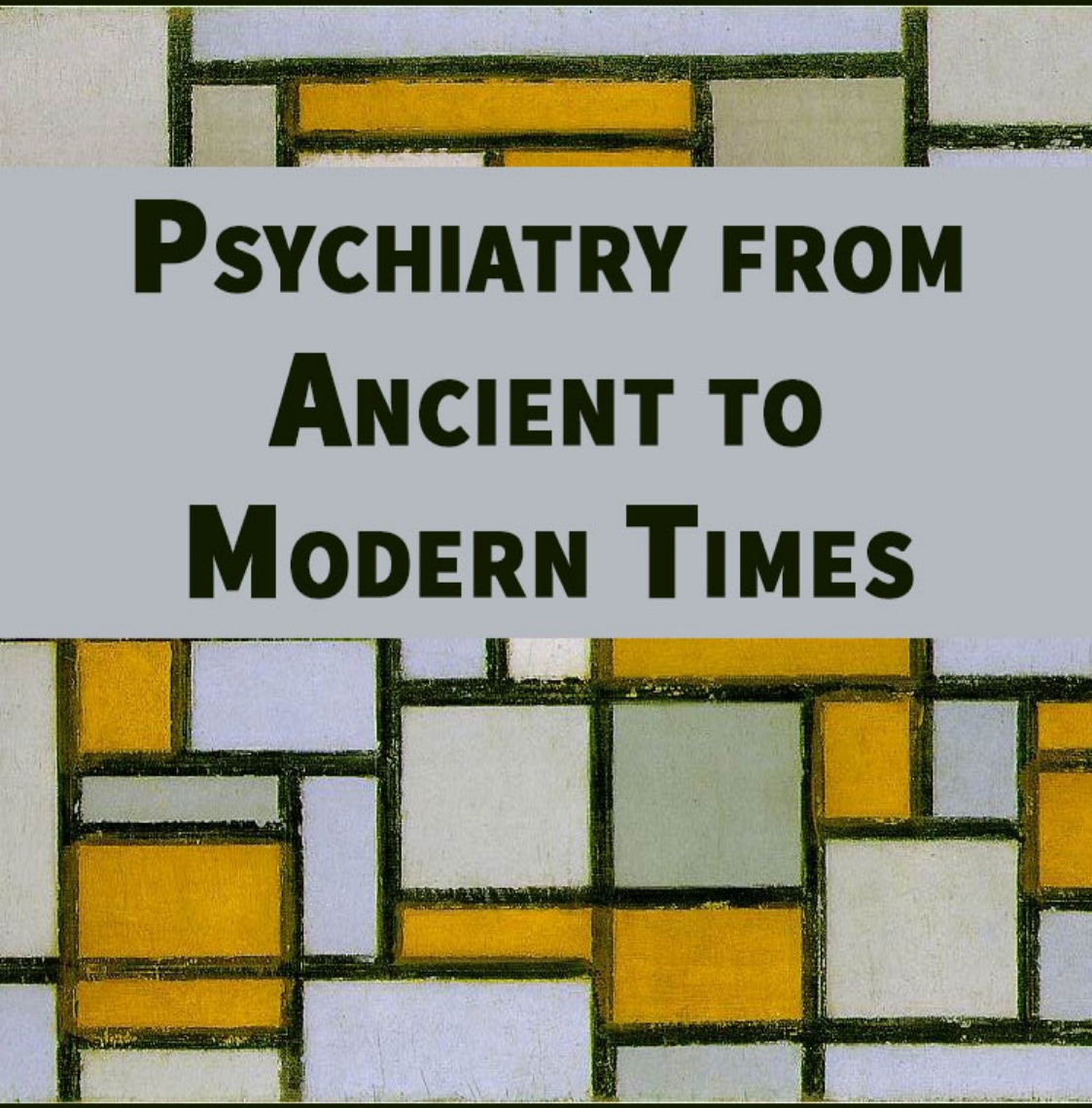

Psychiatry from Ancient to Modern Times

American Handbook of Psychiatry

PSYCHIATRY FROM ANCIENT TO MODERN TIMES

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Introduction

Modern psychiatry, like the other branches of science, is continually changing. Today's discovery will soon be made obsolete by tomorrow's discovery. At present certain medical papers mention only the literature of the past five years; the rest is almost as antiquated as Hippocrates. This being the case, one may wonder about the interest of the history of psychiatry and inquire into its meaning.

No science can progress if it lacks a solid theoretical fundament. There is no theory of science without a knowledge of the history of science, and no theory of psychiatry without a knowledge of the history of psychiatry. This becomes evident as soon as one ponders the basic principles of modern psychiatry. Why should we treat mental patients humanely? Is any kind of healing possible without a rational body of knowledge? Is there a difference between an empirical body of knowledge and a scientific, experimental one? Does psychiatry belong to medicine, or is it a science in its own right, or perhaps no science at all? In order to solve such problems philosophical cogitation is not enough: one needs a great deal of data, and these data can be secured only through historical inquiry. However, this implies in turn that historical inquiry be conducted not in an amateurish fashion, but by means of a scientific methodology.

Unfortunately medical history is a very young branch of science. It is not enough to say that there are wide gaps in our knowledge of Greco-Roman, Arabian, and medieval medicine (not to speak of Indian or Chinese medicine). The truth is that we possess only extremely fragmentary data, so that any reconstruction attempted on the basis of these data is doomed to be artificial. In regard to the last two or three centuries, the difficulty often stems from the immense accumulation of data, so that the trees hide the forest.

Today scientists are keenly aware that no progress can be called definitive, that any discovery can at any moment be displaced by a new one. But we should not overlook another, complementary viewpoint: the progress of today might also get lost through the regression of tomorrow. Science implies not only a striving toward progress but also a constant effort to maintain the permanent acquisitions of yesterday. These are two among the fruitful lessons that a psychiatrist may learn from the history of science.

The Roots of Psychiatry

Although scientific psychiatry is hardly more than one or two centuries old, it is in a large measure the outcome of notions and procedures that are perhaps as ancient as mankind itself. It would seem that from the beginning among all populations of the earth a special attention was bestowed upon certain conspicuous types of behavior or other abnormalities. Individuals whose behavior was deemed to be abnormal were dealt with in three possible ways. Many of them were treated in a downright inhuman, cruel way. Some others were treated in a human but nonmedical way (for instance, those psychotics whose utterances were taken for prophetic inspiration). A third group were submitted to a variety of healing procedures that we today understand to be anticipations of modern psychiatry.

The birth of scientific psychiatry was a long-range process. It started with the discarding of nonmedical ways of dealing with mental patients and the perfecting of primitive healing procedures. The next step was the constitution of systematic bodies of knowledge by medicine men (and later temple healers) and also by lay healers. The third step was the foundation of a rational medical art, severed from religion and superstition; this great revolution is symbolized by the legendary figure of Hippocrates. But whatever its merits, the rational medicine of the Greeks and Romans still remained on a prescientific level (to use Bachelard's terminology). The

foundation of a properly scientific medicine did not occur before the seventeenth century, and that of psychiatry as a branch of medicine in its own right came still later.

In this text I shall attempt to retrace these steps as briefly as so complex a matter will allow. It has been, indeed, a long way from nonmedical attitudes to primitive healing, from primitive healing to rational pre-scientific medicine, and from there to scientific medicine and modern psychiatry.

Nonmedical Ways of Coping with Deviant Behavior and Abnormalities

For countless centuries a great number of those persons who would indisputably be recognized today as mental patients were the victims of social attitudes in direct opposition to the principles of a humane and scientific psychiatry. Feeble-minded infants, with or without bodily defects, were often killed shortly after their birth without further ado. Even among the culturally enlightened Greeks such children were exposed in the wilderness. Among certain Western and Central European rural populations there was a lasting belief in the existence of "changelings." Goblins or demons were supposed to steal newborn children and replace them with their own ugly progeny. Children believed to be changelings were often left without nourishment so that they would die of hunger; this was no crime since these beings allegedly did not belong to humankind. Those feeble-minded children who survived often were mercilessly exploited by their families, or led a miserable life, being the butt of their community's jokes.

Those senilely demented were often ruthlessly treated. Koty has shown that among the populations of the earth certain peoples are kind and considerate with old people and cripples; others harsh and cruel. But even in the best case these individuals were likely to be sacrificed in the eventuality of famine or other calamities.

Psychotics frequently fled from, or were rejected by, their communities.

Some of them, the stronger, would escape to the woods or desert places, living as "wild men," feeding themselves on roots and berries. An example is the demoniac of Gadara described in the Gospel: he had been tied up several times but had managed to break his chains and escape; he lived in tomb vaults and frightened the surrounding population. When these psychotics attacked passers-by or isolated homesteads, they were outlawed so that they could be killed by anyone without compunction. Less severe psychotics would survive as vagrants and live off the charity of individuals and communities. Accounts from the Renaissance period tell of "fools" roving from place to place; in certain communities they were provided with some food or money and gently led to the border; in other places they were driven away with a whip; no doubt they paid a heavy toll in fatal illnesses or accidents. There are also stories of "fools" being set in a little boat on the river, so that the stream would drift them along to another place.

A frequent plight of chronic psychotics was a prolonged confinement in dungeons, cellars, or other dark places, either in a prison, a monastery, or a private home. Even after mental hospitals had been established, certain families preferred to have their patients secretly confined in their home, rather than institutionalized. A famous case was that of the *séquestrée de Poitiers* in 1901. Following an anonymous letter, the police discovered that a catatonic woman had been confined by her respected and well-to-do family in a dark room for 24 years in an indescribably filthy condition; neither

neighbors nor friends knew of the existence of the woman.

Mild psychotics, especially those with delusions of grandeur, were often the plaything of children and adults, sometimes made the victims of practical jokes or utilized for nefarious purposes. Philo tells the story of a lunatic who lived in Alexandria in the first century A.D. and was the laughingstock of the children. It happened that Herod Agrippa, king of the Jews and protected by Emperor Caligula, visited Alexandria. A group of people of that city, out of hatred for the Jews, staged an insulting mockery by bringing this "fool" into the gymnasium, dressing him like a king, and greeting him with royal honors; this was the onset of an anti-Jewish riot and pogrom. It would be easy to collect numerous instances of disturbed individuals who were victimized in the worst fashions. Sir John Lauder, a young Scotsman who sojourned in France in 1665-1666, related that in the town of Montpellier a "fool" proclaimed that he had discovered a universal antidote that could nullify the effect of any poison. He proposed to try it on himself. Although it should have been clear that the man suffered from delusions, the pharmacists of the town prepared a poisonous beverage that the man drank together with his own draught, whereupon he died miserably within a few hours.

The worst fate was probably that incurred by the "furious," the agitated and aggressive psychotics. They usually were chained, sometimes with iron fetters, or mercilessly beaten until they quieted down—that is, fell into

complete exhaustion. Sometimes they were sandwiched between two mattresses tightly bound with ropes, where they often died from choking. Herodotus relates that Cleomenes, King of Sparta, "was smitten with downright madness" and went striking every Spartan he met with his scepter. He was imprisoned by his kindred and his feet put in the stocks. He asked for a knife, and the servant who kept him did not dare to refuse his order. Cleomenes then cut gashes in his flesh along his legs, thighs, hips, loins, and his belly until he died. If this could happen to a king, one may imagine what would be the condition of a commoner befallen with a similar condition.

As to psychotic criminals, many of them were tried and sentenced as if they had been ordinary, nonpsychotic criminals. But the crime itself that brought the man to trial was all too often the product of the patient's delusions, or of mass suggestion exerted upon him, if not of false accusations and torture, as happened to thousands of unfortunate women during the witch psychosis of the sixteenth and seventeenth century.

On the other hand, it could happen that the social response was favorable to the patient. Various types of disturbed behavior were tolerated in many cultural settings. Certain mental patients were well cared for by the community. Such was the kind attitude of the poor mountaineers in the high valleys of the Alps toward the feebleminded afflicted with cretinism, a condition that was endemic on these mountains until the middle of the

nineteenth century. In certain cultural settings psychotics with delusions of grandeur were honored as prophets; sometimes they gathered followers and launched a psychic epidemic.

One should not be too shocked by such “primitive” attitudes toward mental patients. In our own century did we not see the inmates of mental hospitals being systematically exterminated in certain civilized nations, and left to perish miserably of hunger in other countries? The humane and scientific care of mental patients has been a hard-won, delayed achievement in the history of mankind, a conquest that will always need to be defended against the powers of obscurantism and oppression.

Primitive Healing

As far as we can go back into the past we find evidence that a more privileged group of mental patients benefited from certain healing procedures. About healing in prehistoric times we know almost nothing. Numerous skulls from the neolithic era show the marks of trepanning that had been performed on living individuals and followed with cicatrization. Since even in recent times the same operation was performed by medicine men of various primitive populations as a cure for certain nervous conditions, it is likely that the rationale was the same among our prehistoric ancestors. A few pictures of prehistoric art point to the existence of magic and wizards. Such is the well-known picture of a sorcerer, his head adorned with deer's antlers, in the "Cave of the Three Brothers" in southern France, a picture believed to have been painted about 15,000 B.C. and to be the oldest known representation of a healer.

We assume that a continuity exists between prehistoric and primitive healing, such as it is known from ethnological inquiry. Unfortunately many primitive populations disappeared before any serious study could be conducted, and of those that survived many retained only distorted remnants of their former medical lore. However, the systematic study of primitive medicine, undertaken by Buschan, Bartels, and their followers, provides us with a fairly accurate knowledge of the main features of primitive medicine.

According to Sudhoff, primitive medicine always and everywhere distinguished several kinds of disease, of treatment, and of healer. Certain conditions, obviously the effect of accidents, parasites, or poisons, suggested the use of rational, empirical treatments (this was *natural medicine).* Instances of death rapidly following hemorrhage or asphyxia led to the belief that the source of life was in the blood or the breath; this was the starting point of *speculative medicine.* Acute sickness or death occurring in an unexpected, inexplicable way was attributed to the action of evil spirits or wizards; this was the foundation of *magical medicine.* Hysterical or epidemic possession incited efforts to expel the mysterious intruder from the soul, and this was *demonological medicine.* Natural medicine was the realm of the "lay healer"; magical and demonological medicine the preserve of the medicine man, later of the priest; speculative medicine was to become the field of election of the rational prescientific physician.

The medicine man plays an essential role in his community. He is not only healer but often a dreaded wizard and one of the leaders of his tribe, along with the priest and the chief. He is a "man of high degree" (as Elkin termed the Australian medicine man), and he has undergone a long and difficult training that often includes the experience of an initiatory illness. His personality is the principal agent of the cure, provided that the patient, the healer himself, and the community are all convinced of his healing power. Thus, his healing methods are essentially psychological in nature. Primitive

healing is almost always a public procedure, a ceremony conducted within a well-structured group.

Ethnologists distinguish several basic disease theories, each one linked to a specific healing procedure: these include the loss of the soul and its recovery by the shaman, the intrusion of a supposed disease object and its extraction, the intrusion of an evil spirit and its expulsion (mainly in the form of exorcism), the breach of a taboo and its propitiation, the pathogenic effect of magic and its cure through countermagic. These procedures are of great interest for transcultural psychiatry, comparative psychotherapy, and medical history. A direct continuity can be shown from exorcism to magnetism, magnetism to hypnotism, and from hypnotism to the newer dynamic therapies.

On the other hand, historians of medicine have convincingly shown that the true ancestor of the modern physician is the lay healer, whereas the medicine man is the ancestor of the priest, who was the physician's antagonist for centuries. Thus, the discontinuous line of evolution led from primitive healing to priestly healing, from there to rational pre-scientific therapy, and eventually to scientific psychiatry.

Priestly and Religious Healing

Around 4,000 B.C. the first kingdoms and empires were founded in Asia and in Egypt. This implied the advent of a new type of social organization with a large administrative system and of religions with colleges of priests and elaborate rituals. The medicine man gave way to the priest, whereas the lay healer became the physician, although the separation was not always very sharp. For many centuries the healing priest and the physician lived side by side, the physician more concerned with natural therapy (massage, dietetics, hot baths, nonmagical drugs), and the priest with psychological healing.

The healing powers of the priest were enhanced by the fact that, in addition to the attributes of the medicine man, he acquired the awesome prestige of being the representative of a healing god. A few healers came to be considered supernatural beings and gods. Such is the story of Imhotep in Egypt. He was born around 3,000 B.C. and became vizier of Pharaoh Zoser and chief of ritual. Special honors were conferred upon him after his death; later he was worshiped as a demigod; around 600 B.C. he had reached the status of a god of medicine. Numerous wonderful cures were reported to occur at his shrines, and it seems that a medical teaching was provided in his great temple at Memphis. Until about 500 A.D. he remained one of the most popular gods in Egypt.

It would seem that a similar evolution took place in Greece with

Asclepius (Aesculapius) though we lack reliable information about his life. In the *Iliad* he is referred to as a physician and father of two physicians. A few centuries later he was a god and numerous patients flocked to his shrines, the *Asclepeia.* Most famous were his temples in Epidaurus, Pergamon, and Cos. The beautiful site, the prestige of the place, the stories of wonderful cures, the journey, the period of waiting, all affected the patient. An *Asclepeion* combined the holiness of a place of pilgrimage like Lourdes with the enjoyments of a fashionable health resort. After careful screening the patient had to undergo a period of purification and to perform preliminary rites. The highlight was the *incubation,* that is, the night of sleep in the sanctuary, either on the ground or on a couch called the *kline.* Then the patient might experience an *epiphania* (apparition of the god), or receive an oracle, or have a therapeutic dream, that is, a specific kind of dream that would in itself bring the cure. The cult of Aesculapius did not recede before the advent of rational medicine. As time went on, the number of his shrines increased throughout the Hellenistic and the Roman world, and for some time Aesculapius was a great rival of Christ. After the triumph of the Church, patients sought healing at the new Christian shrines. It is significant that in 1893 the skeptical Charcot wrote a paper *On Faith Healing,* declaring that he had seen patients cured at Lourdes after medical treatment had failed, so that the existence of powerful, unknown healing agents must be assumed.

The influence of religious healing extended over the patients'

perception of their own illness. Depressive conditions became linked with the idea of sin; this was particularly marked in the Egyptian and Assyro-Babylonian worlds. Healing could be obtained through confession, propitiation, that is, reconciliation with the gods, and acceptance of the cosmic order. Concepts of the nature of man, as taught by the priests, also influenced the clinical pictures. One instance is the *Dialogue of a Life-Weary Man with His Soul,* an Egyptian writing of about 2,000 B.C. that might be considered the oldest known document on the psychology of suicide.

Rational Prescientific Medicine

A decisive step in the history of medicine was taken with the rise of autonomous schools of medical practice and teaching, dominated by astute clinicians and creative thinkers. In Egypt the Ebers Papyrus (of about 1,500 B.C.) is one of the oldest documents of this type of medicine. Similar developments took place in Assyro-Babylonia, Persia, India, China, Japan, and even in Mexico among the Aztecs; however, our knowledge of the history of medicine in these countries is extremely imperfect. Modern scientific medicine is predominantly the tributary of Greek prescientific medicine, even in its terminology.

Ancient Greek medicine was based on dogmatic concepts that survived for about 25 centuries. In the same way as Greek priestly medicine was dominated by the mythical figure of Aesculapius, Greek rational prescientific medicine is dominated by the hardly less mythical figure of Hippocrates.

All we know of Hippocrates (about 460 to 377 B.C.) is that he was one among several reputed physicians of his time; the rest is legend. The treatises collected under his name about three centuries later were divergent in style, dialect, and content. As Werner Jaeger says, “The result of one century of research is that there is not one page in the Hippocratic collection which we can, with certitude, ascribe to Hippocrates himself.” Nor do we have his portrait; but his name is traditionally attached to a noble bust that is, in

Singer's words, "an idealized representation of what the Greek would wish his physician to be." Whereas the god Aesculapius stood high above mankind, Hippocrates remained the more accessible figure of the "physician-philosopher." To quote Singer again:

> His figure, gaining in dignity what it loses in clearness, stands for all time as the ideal physician. . . . Calm and effective, human and observant, prompt and cautious, at once learned and willing to learn, eager alike to get and give knowledge, unmoved save by the fear lest his knowledge may fail to benefit others . . . incorruptible and pure in mind and body. ... In all ages he has been held by medical men in a reverence comparable only to that which has been felt towards the founders of the great religions by their followers.

Hippocrates is customarily called the Father of Medicine. Before him, however, Greek medicine had at least two centuries of intensive development in the form of autonomous schools of philosophical medicine, and many medical treatises, now lost, had been written. To quote Neuburger: "We stand as in a devastated town, where only *one* building is extant, and we see only the rough outline of the streets." Among these schools the Cnidian strove to diagnose diseases and localize their seats, whereas the school of Cos was more concerned with the prognosis, with the organism as a whole within the environmental setting, and with the concept of the "healing power of Nature."

It would be irrelevant to speak of a "Hippocratic psychiatry." Throughout the whole Greek and Roman literature, mental disorders are described in one among several other chapters of medicine; nothing is known

about that could resemble a textbook of psychiatry. The Hippocratic writings describe or mention three main mental conditions: phrenitis (acute mental disorders with fever), mania (mental disorders with agitation without fever), and melancholia (chronic mental disorders without fever and agitation). A variety of organic paroxysmal conditions in women are related to the uterus (in Greek, *hystera*, hence the adjective "hysterical" which meant "uterine" and did not have the connotation of a neurosis). A description of the "Scythian disease" refers to an instance of transsexuality in the setting of a particular culture.

The Hippocratic writings are often considered the beginning of scientific medicine. To be sure, they discard religion and superstition and strive to rely upon clinical observation, experience, and sound judgment. In this sense it is a rational medicine. However, we are still very far from the principles of scientific medicine. Hippocratic thinking belongs to the pre-scientific level of medicine. Robert Joly has shown conclusively how even the best treatises of the Hippocratic collection are pervaded with "substantialism," "numerology," and other irrational elements that often interfere with and blur the otherwise acute clinical vision of the writer.

Greek medicine worked with the principles of physical qualities, the four humors, the pneuma, the faculties of the soul, and organic localization. These principles had to be correlated to each other and with the clinical

pictures offered by medical practice.

Greek philosophers had widely discussed polarities of opposite qualities. The two main polarities finally chosen were those of dry-moist and warm-cold. Philosophers had also argued endlessly about the physical elements until Empedocles settled the question by compromise, proclaiming as the fundamental elements water, air, fire, and earth. Similarly physicians decided there were four humors of the human body: phlegm, blood, bile, and "black bile." Like the four elements, the four humors were correlated to the physical qualities (phlegm moist-cold, blood moist-warm, bile dry-warm, black bile dry-cold). Morbid conditions were explained by the resulting imbalance from the excess of one of the humors. Thus, *melancholy* was thought to result from an excess of black bile. However, it soon became necessary to involve also changes in the qualities of the humors, disturbances in their circulation, and to distinguish varieties among each one of the humors.

Meanwhile, primitive medicine's concept of breath (or pneuma) as a principle of life had found its way into philosophical medicine. Stoic philosophers and the Pneumaticist school of medicine distinguished three kinds of pneuma, physical, vital, and psychic, and interpreted certain diseases as resulting from a lack or alteration of the pneuma.

Greek concepts of the soul, originating in primitive and priestly medicine, were developed by the philosophers. Aristotle distinguished three main "souls" of the human psyche: vegetative soul (common to plants, animal, and man), animal soul (common to animals and man), and rational soul (property of man only). To each one he attributed several "powers" (or faculties). The use of this framework led to associating mental states with lack, excess, or disturbance of the various "souls" or "powers." Passions were considered excessive activities of the animal soul, or the absence of control over the animal soul by the rational soul. Certain mental conditions were supposed to result from a deficiency of the rational soul (anoia).

Greek philosophers and physicians argued about the seat of the soul and of its faculties. The ancients had thought that the diaphragm (*phrenes)* was the seat of the soul, hence the word "phrenitis" for acute fever delirium (this condition later was correlated to an inflammation of the brain or its coverings). As to the seat of the intellect, Empedocles, Aristotle, and Diodes said it was the heart, whereas Alemaeon, certain Hippocratic writers, and the Alexandrian, Galen, held for the brain. The next step was the localization of the various "souls" and "powers."

We can see how heterogeneous were the theoretical assumptions underlying Greek psychopathology. The word "melancholia" was derived from humoral pathology, "anoia" from psychological concepts, "phrenitis"

from supposed anatomic views, whereas the word “mania” (probably a colloquial word) simply meant “madness” or “fury.” Epilepsy, a purely clinical designation, expressed the main symptom of the convulsive attack. The Hippocratic writers had inherited this terminology from their unknown forebears, and the whole development of Greek medicine was a ceaseless effort to integrate these various conflicting concepts and clinical pictures into a coherent system.

The legacy of ancient Greek rational medicine is thus a twofold one. Greek medicine gave to the world the ideal figure of the Father of Medicine, Hippocrates. On the other hand, it gave also an abstruse, increasingly artificial system of dogmatic medicine, which predominated throughout Hellenistic, Roman, Arabian, and Western medicine and eventually became an intolerable burden that impeded the progress of human thinking.

Psychiatry in the Greco-Roman World

In the Greek and Roman worlds there was no such thing as "psychiatry" as we know it today, but only a few scattered elements of that which was to become this science much later.

We have discussed the prescientific concepts utilized by Greek rational medicine. The Greek physician's way of thinking was not less different from ours. The modern scientist starts with observation and quantification, draws inductions and hypotheses that are tested by experimentation and according to the findings accepted or rejected. Not so with the Greeks, who used axiomatic thinking, started with statements considered self-evident, then drew deductions that they extended with the help of analogies. Conflicting statements were rarely submitted to experimental testing, but mostly settled by theoretical discussions and compromises without much regard to facts.

In Greek science there was no unified framework universally accepted and adopted by all scientists. Instead, there were a number of schools based on particular philosophical systems, each one professing its own dogmatic teaching incompatible with those of the other schools. Greek medicine remained inseparable from philosophical speculation. Each philosophical revolution had its counterpart in medicine: the Pneumatists based their system on Stoicism, the Methodists on Epicureanism, the Empiricists on Skepticism. The movement toward philosophical syncretism was paralleled

by the medical eclecticism of Galen.

It would be fascinating if we could closely follow the evolution and vicissitudes of these medical schools. Unfortunately our knowledge is extremely fragmentary. Out of a thousand books written by the Greeks, hardly more than one or two have survived.

Among the oldest medical schools known to us were those of Sicily, of Cnidos, and of Cos, the latter two well-represented in the so-called Hippocratic writings. Then in the fifth century B.C. Athens became the center of Greek culture. Aristotle exerted a great influence on medicine. He edited an encyclopedic collection of monographs covering the whole field of contemporary learning; there was, for instance, a *History of Medicine* by his pupil Menon, of which fragments have survived. Diodes of Carystos, who was associated with that school, was considered one of the greatest Greek physicians; unfortunately his works are lost. However, his description of hypochondriac disturbances was to be taken over by Galen.

After the Macedonian conquest, the Eastern Mediterranean world was Hellenized and a new cultural center flourished in Alexandria, with its famous museum and library. Among the great Alexandrian physicians were Herophilus and Erasistratus. Both of them made discoveries in the field of anatomy, especially in regard to the nervous system. It is generally assumed

that with these two physicians Greek medicine reached its highest scientific level, even though their theories were not free from speculation. Undoubtedly their works, had they survived, would hold great interest for the history of neurology and psychiatry.

The Empiricists school, whose philosophy was inspired by the Skeptics, was represented mostly by Heraclid of Tarent. They were good clinicians who strove to define diseases according to their seats and described them *a capite ad ealeem,* that is, going from scalp and hair down to the heels and adding a chapter for general diseases. Mental diseases were classified among the diseases of the head, following those of the scalp and the skull. This type of classification was traditional up to the seventeenth century.

Inspirer of the Methodist school was Asclepiades (first century B.C.), a fashionable Greek physician and prolific writer who practiced in Rome. His works have been lost. He seems to have been much interested in mental diseases and to have applied a variety of treatments: hydrotherapy, gymnastics, massage, suspended bed, music therapy—obviously a therapy accessible only to a few wealthy patients. Another great Methodist physician, Soranus of Ephesus (first half of the second century A.D.), discussed the treatment of mental diseases along the same lines as Asclepiades. Most of his writings have perished, but something of his work is known thanks to a Latin adaptation by Caelius Aurelianus.

Another school, the Pneumaticists, basically followed the philosophy of Stoicism and emphasized the doctrine of the pneuma. Their great proponent was Archigenes; his works are lost but were utilized by Aretaeus who flourished around 100 A.D. Aretaeus gave clear descriptions of the traditional disease entities, phrenitis, mania, and melancholia, and mentioned that mania and melancholia could turn into each other. This simply meant that a chronic psychosis could begin or be interspersed with acute episodes.

The Romans did not found a school of medicine, but compiled encyclopedias embracing the whole field of knowledge. Those by Cato and Varro have perished, but we have the medical part of A. Cornelius Celsus' encyclopedia (first century A.D.) with a chapter on mental diseases. Among the treatments were fettering, flogging, starving, or terrifying the patient, and suddenly pouring cold water over his head; however, rocking the patient in a suspended bed was used in other eases.

The eclectic trend was personified by Claudius Galen (ca. 138-201 A.D.), an outstanding clinician, good investigator in the field of physiology, and passionate systematizer. He borrowed his philosophical principles from Aristotle, the Stoicists, and the Hippocratic writers. A prolific author, he is credited with writing about 400 treatises, of which about 80 are extant. Because the works of the most prominent physicians before and after him have been lost, Galen towers as a mighty isolated genius. He endeavored to

reconcile his clinical and experimental findings with the traditional doctrines of the qualities, the humors, the pneuma, the "powers" of the soul, and the localizations. Galen laid great emphasis on the doctrine of the four basic humors, which had been much developed since the Hippocratic writers. Disease resulted from the excess of one humor and the resulting dyscrasia (imbalance), or from mixtures and alterations of the various humors, or from their accumulation in pertain organs, or from the ascension of "vapors" from the stomach or other organs to the brain. Galen's humoral doctrine covers also the field of the innate constitutions or temperaments. Galen distinguished two kinds of black bile. The word "melancholia" could mean either a specific variety of innate character or one among a wide range of diseases caused by the action of the two kinds of black bile. The Galenic doctrine extended to the theory of drugs and their therapeutic indications.

On Melancholia, a treatise under Galen's name described three main forms of this condition: (1) general melancholia (from an excess of black bile in the whole body), (2) brain melancholia (from an excess of black bile in the brain), and (3) hypochondriac melancholia (from the ascension to the brain of vicious vapors from the stomach). The author refers also to constitutional melancholia, melancholia from a one-sided diet, from the "adustion" of yellow bile, from the suppression of hemorrhoidal or menstrual flux, from precipitating emotional factors. Finally he describes particular clinical types of melancholia, one of them being *lycanthropia,* that is, the delusion of being

transformed into a wolf. This treatise standardized for the following fifteen or sixteen centuries the concept of melancholia. It was the model and prototype of a tradition that was to culminate with Robert Burton's *Anatomy of Melancholy* in 1621.

It is usually assumed that Greco-Roman medicine underwent a swift decline after Galen. This might partly be an illusion resulting from the fact that the works of the most original minds of the following few centuries have been lost. Posidonius (second half of the fourth century A.D.) seems to have been eminent in the fields of neurological and mental diseases. But the Roman Empire was crumbling under its inner weakness and the repeated assaults of the barbarians, and medical progress was hampered. Thus, Galen was resorted to as the infallible oracle who had said the final word about medicine.

One may wonder to what extent the patients actually benefited from the kind of medical care expounded by all these authors. Greco-Roman physicians were mostly interested in acute diseases; they gave up the care of chronic patients as soon as these appeared to be incurable. Medical care was mostly given to patients of the upper classes in the cities and to the military. According to George Rosen, the family and friends of the Greek and Roman patients were expected to provide for them according to the accepted customs, and the condition of the insane poor was extremely miserable.

There were apparently a few privileged forms of mental disorders. Plato distinguished "divine madness" from natural madness. Divine madness included the four varieties of prophetic madness (given by Apollo), religious madness (given by Dionysus), poetic madness (inspired by the Muses), and erotic madness (inspired by Aphrodite and Eros). An unclear problem is the feigned madness of men such as Meton, Solon, and Brutus: it would seem that it was a kind of ceremonialized eccentric behavior conspicuously displayed in certain extraordinary circumstances in order to focus attention upon an impending public danger.

Throughout the ancient world there were a few practices that could deserve the name of psychotherapy. Specific techniques of mental training were associated with the philosophical schools. The Pythagorians practiced exercises in self-control, memory recall, and memorization for recitation. The Stoics learned the control of the emotions and practiced written and verbal exercises in meditation. The Epicureans resorted to an intensive memorization of a compendium of maxims that they recited ceaselessly, aloud or mentally. Psychological training could be individualized as evidenced by Galen's treatise *On the Passions of the Soul.* This method consisted of unceasing effort to control one's passions with the help of a wise mentor who would point out one's defects and dispense advice, then the gradual reduction of one's standard of living, attaining serenity and freedom from affects, until one was able and ready to help others in a similar way.

Lain Entralgo has pointed out the importance of the "therapy by the word" among the ancient Greeks. There was a cathartic, a dialectic, and a rhetorical use of the spoken word. One particular practice was the consolation, a letter, sometimes a poem, written to a person suffering grief and intended to help him recover peace of mind. Several of these consolations have become literary classics, such as Plutarch's *Consolation* to his wife for the death of their child, or his *Consolation* to his friend Apollonius for the death of his son. This kind of supportive psychotherapeutic intervention was to revive in Western Europe in the sixteenth and seventeenth century.

The Romans are credited with founding public hygiene. They devised elaborate systems of water adduction and sewage. A slow development of public medicine took place: there were town physicians paid by city authorities and a rudiment of medical teaching. But their only hospitals were the *valetudinaria* for the recuperation of wounded soldiers, gladiators, or slaves. Their moral callousness, their predatory economy, the use of vast masses of miserable slaves, the cruel games of the circus, all these were the antipode of any kind of mental hygiene.

Christianity no doubt introduced a new spirit. Its founder imposed the care of the sick as a religious duty. Charity institutions and hospitals gradually developed, parallel to the flourishing of monasteries. Christianity influenced much of the philosophical and legal thinking, and the practice of religious

confession stimulated the development of introspection: this is well illustrated by Saint Augustine's *Confession.*

Psychiatry in the Middle Ages

After the ruin of the ancient world, Greco-Roman culture split into three parts: the Byzantine Empire, the Arabia, and Western Europe, each with its vernacular language: Greek, Arabic, and Latin. Each developed its own civilization and medical tradition, but they were bound by certain mutual influences.

Although the barbarians had destroyed the Western Roman Empire, the Eastern Roman (or Byzantine) Empire survived for ten centuries, and its capital, Constantinople, became the cultural center of the world. In the sixth century A.D., under Emperor Justinian, many charitable institutions were founded, such as orphanages, homes for the aged, and hospitals, among which were a few *morotrophia* for the mentally sick. Unfortunately we do not know how these institutions functioned and what vicissitudes they underwent between the sixth and the fifteenth century. What could be the way of life of an insane person in Constantinople is shown by the descriptions we have of the *saloi* or "sacred fools": these men led an utterly marginal life, living off the charity of good people, being an object of ridicule, but enjoying the privilege of telling the truth to anybody. The Greek medical tradition was prolonged by men such as Aetius of Ami da and Alexander of Tralles (sixth century), Paul of Egina (seventh century), and Johannes Actuarius (fourteenth century). Contributions of psychiatric interest could probably also be found among the

writings of Byzantine theologians and writers: to give only one instance, Eustathius of Thessalonica (twelfth century) wrote a treatise, *On Simulation,* analyzing role playing in the theater and in life and giving a psychology of histrionism. But numerous precious works perished in the catastrophe that engulfed Byzantine civilization in 1453.

In the seventh century the Islamic invasion destroyed Hellenistic civilization in Asia Minor, Syria, and Egypt. Then, after the Arabs had conquered an empire stretching from Persia to Spain, they underwent the influence of the conquered countries, and by the late eighth century and during the ninth century a brilliant Islamic civilization flourished in Baghdad, Cairo, and Spain. It was an era of widespread development for a medicine based on the teachings of Hippocrates, Galen, Aretaeus, and the earlier Byzantines. But here, too, it is difficult to appraise the real originality of that period. Out of a thousand books written by Arabian physicians, very few have survived; among these few most either remained in manuscript or were not translated into modern Western languages.

Among the most outstanding names one should mention Rhazes (864-925), a Persian distinguished in all fields of medicine. Among his many treatises is one translated into English under the title, *The Spiritual Physick of Rhazes:* a classification of psychopathological disorders is given, according to the failure or excess in each one of the three "souls" (vegetative, animal, and

rational). Rhazes also discusses drunkenness (a topic somewhat neglected in extant Greek medical books) and its motivations: to dispel anxiety, to meet situations requiring particular courage and cheerfulness. Arabian medicine culminated in the work of Avicenna (989-1037), a Persian poet, philosopher, and physician, whose *Canon of Medicine* was used as a medical textbook for centuries in the Islamic as well as in the Western European world. The *Canon* systematized the highly artificial concepts enounced by Galen. The diseases are described in the traditional order "from head to heels," mental diseases being included in the chapter on head diseases. Arabian literature, like the Byzantine, contains nonmedical works that are of interest for the psychiatrist, for instance, books by the mystics, the moralists, the philosophers, books on physiognomy, on the interpretation of dreams. But of all this wealth, the greatest part has perished, and very little of value is available from the rest.

Throughout the Islamic world, many mental hospitals were founded by pious benefactors, especially in the thirteenth century. Among these were *moristans,* most probably inspired by Byzantine *morotrophia.* We have wondrous descriptions of the great hospital in Cairo in the thirteenth century, and especially of the *moristan* of Adrianople (Edirne) founded in the fifteenth century. In the midst of paradise gardens was a luxurious marble building with fountains in the courts, summer and winter rooms; the patients lay on silk cushions, were nourished with the finest food, were treated with a combination of drug, music, and perfume therapy, received friendly visits

from the beauties of the town; their chains were gilded with gold and silver. In sharp contrast with such a description, we read in a poem of Djelal-Eddin (thirteenth century): “In the corner of a dungeon sat a raving insane; his neck tied with a rope.” The French traveler Chardin, who visited Persia in the seventeenth century, describes the *moristan* of Ispahan as a kind of cloister around a garden; there were about 80 cubicles, but only seven or eight lunatics, all of them in the most miserable condition, lying on straw, fettered by arms, body, and neck. The staff consisted of one doctor, one pharmacist, one *molla* (priest), one cook, one doorman, and one cleaner. Not much better is the account given by Edward Lane of the *moristan* in Cairo in the middle of the nineteenth century: there were two courts, one for male and one for female patients. Around the first court were 17 very small cells with grated windows. The patients were chained by the neck to a wall, had only straw to sleep upon, and wore scarcely any clothing. It was customary for each visitor to give them pieces of bread, so that as soon as they saw a stranger enter, they made a great clamor. Obviously the Cairo *moristan* had declined since the thirteenth century. Actually we know very little about the history and the functioning of the Islamic mental institutions.

After the ruin of the ancient world, medicine in Western Europe was in a precarious state. There was a long period of destruction and decline. The privileged class of city aristocracy for whom Greco-Roman medicine was meant had disappeared, the writings of ancient authors were lost, medical

tradition was interrupted. However, as we have seen, Christianity forwarded the care of the sick. Saint Benedict's rule proclaims that "the care of the sick is to be placed above and before every other duty." There were infirmaries in the monasteries, where monks made use of medical compilations written by obscure authors.

Meanwhile, the Church slowly gathered a certain amount of psychiatric knowledge of its own. In monasteries and in the practical experience of the confessors, certain specific conditions had been observed: the *acedia* (boredom) of the monks, the *scrupulositas* (excessive scruples) of certain penitents. Later the distinction between genuine and false mysticism and other observations made by moral theologians were the objects of valuable inquiries. Not until our time, however, were they incorporated, as a section of "pastoral psychology," in the general body of psychiatry. On the other hand, demonological concepts were taken for granted by the Church and accepted by medicine. In view of the general belief in demonology, many cases of neurotic or psychotic disturbances took the form of devilish possession, and conversely many patients could be cured by exorcism. Suggestive healings also took place at the shrines of certain saints; patients could sometimes remain there for a prolonged time; this was the origin of the psychiatric colony in Gheel, Belgium, which still exists and can be traced back to the thirteenth century.

Gradually there was a revival of lay medicine and a rise of medical schools. The thread with ancient Greco-Roman medicine was found again. After the recovery of Galen's works, his system became in its whole complexity and artificiality the official doctrine of Western European medicine.

Another great event took place in the thirteenth century. As in the first centuries of Christianity, the cure of the sick was placed in the foreground of Christian duties, and many hospitals were created. There are reports on hospitals for the mentally sick scattered in several European countries; however, the main development took place in Spain. In Granada an asylum for the insane had been founded by the Moorish King Mohammed V in 1365-1367, and the plan of the older Spanish asylums copied the plan of the Arabian *moristans*. The first one was opened in Valencia in 1407 under the name of *los Desamparados* (the abandoned) by Father Jofre, and operated by an association of 100 clerks, 300 laymen, and 300 lay women. Then came the foundation of the asylums of Saragossa in 1425, Seville in 1436, Barcelona in 1481, and Toledo in 1483. Spanish historians, notably Juan Delgado Roig, have published the acts of foundation and official documents of these hospitals, but many details about their functioning are still unclear.

Psychiatry in the Renaissance Period

Appraisals of the Renaissance have varied. According to Jacob Burckhardt, it was the period of "coming into awareness of the human personality, of its nature and place in the universe." Man's image of the world was immeasurably widened following the geographic explorations and the rediscovery of ancient Greco-Roman culture. Man became able to perceive reality instead of what he had been taught to see. G. de Morsier, a historian of brain anatomy, has shown that fourteenth- and fifteenth-century surgeons who dissected human bodies were unable to see anything except what Galen and the Arabs had taught; the ability to perceive the anatomy of the brain as it is, and not as one believes that it should be, appeared in the early 1500s almost simultaneously and independently from each other in men born in Italy, France, Belgium, and Holland. The death blow to Galenic anatomy was given by Vesalius in 1543. The same transformation occurred in botany, astronomy, physics, and other sciences. These innovations, however, met much resistance from the adherents of the traditional doctrines. In addition to these great advances, the Renaissance was also the period when slavery (which had been abolished since the fall of the Roman Empire) was reestablished, at least in the newly conquered colonies, when widespread genocide took place in the Caribbeans and Central America, when judicial torture was reinforced under the impact of resurgent Roman law, and when the witch psychosis underwent an unprecedented development. Another

negative feature of the Renaissance was its contempt for the vulgar, the illiterate, and the "fool." But there was much interest in mental illness and in the multiform manifestations of *imaginatio*, a notion that included all that we call today suggestion and autosuggestion as well as many creations of the unconscious mind.

Medical authors of the Renaissance are much better known than those of previous periods because the invention of printing gave their works a better chance to survive. In Italy Arturo Castiglioni praises the psychiatric writings of G. R. da Monte, Gerolamo Mercuriale, Prospero Alpino (all three mainly interested in melancholia), and Jerome Cardan (a precursor of the concept of moral insanity). One should also mention Jean Fernel in France, Johannes Schenck in Germany, and Timothy Bright in England. The latter's *Treatise of Melancholie* (1586) is considered the first psychiatric book written by an Englishman. His theory of melancholia was also highly successful in the literate world, and this may explain the great popularity of Robert Burton's *Anatomy of Melancholy* (1621). Although Burton admits that the distinction of the various subforms of melancholia is "a labyrinth of doubts and errors," he describes them in detail. Melancholy became the fashionable disease in England. The type of character that was moody, cold, bitterly ironic, eccentric, misanthropic, disgusted with life, and predisposed to suicide became identified with the term "melancholy," later called spleen or hypochondriasis, and on the continent it was sometimes considered to be the typical English

character.

The break with the tyrannical domination of the Galenic system in medicine was effected mainly by two great pioneers, Paracelsus and Platter. Theophrastus Bombastus von Hohenheim, called Paracelsus (1493-1541) is perhaps the most problematic figure in the history of medicine. Many episodes of his wandering life are tinged with legend. He has been considered a quack, a paranoid schizophrenic, a genius, a mystic philosopher, an initiate to secret sciences, a precursor of the psychology of the unconscious, an eminent psychotherapist, a pioneer of modern medicine, or a mixture of all these. Few authors are more difficult to read and more untranslatable. Sigerist says that "perhaps no one but a German can really understand him." His writings are an incoherent succession of abstruse philosophical concepts, abuse against his enemies, affirmations based on his belief in astrology, alchemy, witchcraft, and other superstitions, interspersed with good medical insights or striking aphorisms: "The highest foundation of medicine is love"; "What the Greeks have told is not true for us; every truth originates in its own country"; "Do not hold the effect of curses as nonsense, ye physicians, ye have no inkling of the power and might of the will"; "The child needs no star or planet: his mother is his planet and his star." On the positive side are Paracelsus' teaching of a new pharmacology based on the use of mineral substances (sulphur, antimony, mercury, and others), his emphasis on the effects of suggestion, his belief in the efficacy of healing springs, his interest in

occupational diseases of the miners, his concern for cretins and other feeble-minded persons ("Fools are our brethren; like us they were saved by Christ"). Paracelsus died prematurely, leaving few adherents and no organized movement; a great part of his writings were lost or remained unpublished. He had the good luck to find almost four centuries after his death an admirer, Karl Sudhoff who published his extant works. But Paracelsus had already become a legendary figure and was made the hero of novels and theatricals. The (true or fictitious) story of his spectacular burning of Galen's works on the public place in Basel in 1527 acquired a symbolic value and was paralleled with Luther's burning of the papal bull on the public place in Wittenberg. It is ironic that Basel, where Paracelsus had failed, was the home of another medical reformer, Felix Platter (1536-1614), who carried out some of the reforms vainly attempted by his predecessor.

Platter's life is better known than most physicians' because he left his autobiography, his almost lifelong diary, his correspondence, the catalogue of his collections, and all of his writings. He studied medicine in Montpellier and lived the rest of his life in Basel. He became a brilliant practitioner who was called as a consultant to kings and princes; as a teacher he made the University of Basel famous and wrote standard textbooks on medicine; as a scientist he advanced Vesalian anatomy, clinical medicine, and psychiatry. In his medical works Platter described diseases exclusively as he had seen them in his practice, never quoting any author, never concealing his ignorance or

his doubts, and giving case histories of his own patients as illustrations. This might seem a matter of course today, but at that time physicians used to follow the descriptions of the old masters, with case histories borrowed from the classics. As Paracelsus had done before him, Platter gave up the old classification of diseases "from head to heels" and introduced a new principle. Platter's descriptions are models of clarity. Each condition is subdivided under three headings: *genera, causae, curatio* (symptoms, causes, treatment). With Platter practical medicine acquires the precision of a scientific discipline; medicine is detached from philosophy and becomes a branch of natural science.

Certain historians of medicine have pointed out that the Renaissance was a period of great suffering for the mentally ill. According to Walsh the hospitals were much better and the insane more humanely treated in the thirteenth century than later. Kirchhof writes that in the Middle Ages great help was provided to the insance by monasteries, brotherhoods, and pilgrimages. Wherever such institutions were abolished by the Reformation, mental patients were abandoned to the harsh treatment of public civilian authorities.

The evil culminated with the witch psychosis of the sixteenth and seventeenth century. The belief spread that witches committed crimes in alliance with the devil and that they had organized a universal conspiracy to

destroy mankind. In order to eradicate the alleged evil, extraordinary forms of prosecution and trial were used. The *Malleus Maleficarum,* a guide for the Inquisitors conducting witch trials, gives a sinister picture of the delusion; its third part amounts to a textbook on the technique of brainwashing. Thousands of women of all ages and walks of life confessed the most improbable crimes. Some of them undoubtedly were neurotic or psychotic, but a great many were normal individuals who accused themselves under the impact of mental and physical torture. Witch hunts, inaugurated by the Inquisition, were pursued actively by lay civilian authorities, Protestant and Catholic alike. Among the few who dared openly to defend the incriminated was Johann Wever (1515-1588). Though sharing himself the contemporary belief in witchcraft, Weyer tried to demonstrate that the supposed witches were victims of the demon rather than his allies. His book contains many interesting clinical cases, but lacks psychiatric systematization. Later Weyer came to be considered a great pioneer of psychiatry and to be called, not without exaggeration, the promoter of the "First Psychiatric Revolution."

Those asylums for the humane treatment of the insane that had been founded in Spain in the fifteenth century were isolated institutions, supported by rich patrons or local authorities. A crucial development began with Juan Ciudad Duarte (1495-1550). A pious and eccentric merchant in Granada, he suffered an acute psychotic episode and was treated in the local hospital with merciless flogging. After his recovery he founded a hospital where patients

were treated humanely; he operated it with the help of a few volunteers. His organization grew; after the founder's death it was declared the Order of the Hospitalers, and Juan Ciudad was canonized as Saint John of God. This Order created and operated general and mental hospitals. All institutions of the Order worked according to the same rules and were run by men trained at the same place, so that experience could be collected and transmitted. These institutions spread over Spain, Italy, France, and other countries. Later they served as models to Philippe Pinel and Jean-Etienne Dominique Esquirol when they devised modern mental hospitals. It is not surprising that the first mental hospital episodes to be found in European literature appear in Cervantes' *Don Quixote.* (Until then mental disease had often been described in poetry, novels, or on the stage, but not the mental hospital.) In one episode of the novel an inmate of the Seville asylum protests to the archbishop that he is unduly retained, whereupon the archbishop sends his chaplain to examine the patient. In Avellaneda's continuation of the first part, Don Quixote is the victim of numerous cruel practical jokes and is treacherously committed in the Toledo asylum; the reader is left to suppose that he will stay there for the rest of his life. This probably brought Cervantes to write the second part of the novel: the hero recovers his sound mind on his death bed; far from being just the victim of ridiculous delusions, Don Quixote now appears as a personification of the human condition.

Early Scientific Psychiatry

The advent of modern science was a slow and gradual process, and it took a long time until it extended to psychiatry. During the Renaissance man had learned to perceive reality as it is and not as it should be; now man attempted to fathom the depths of nature and elicit her laws. This implied the use of new methods, such as systematically conducted experiments and measurement techniques, and of new instruments, such as the microscope. In natural history the principle of specificity came to the foreground. This evolution started at the end of the sixteenth century and developed during the seventeenth and the eighteenth centuries. Among its theoreticians were Francis Bacon and Descartes; among its pioneers Copernicus, Kepler, Galileo, Newton, and Vesalius and Harvey in medicine. But new systems arose, founded partly on science and partly on speculation. Such were iatromechanicism (Borelli, Baglivi), iatrochemistry (Van Helmont, Sylvius), and the "animism" of Georg Ernst Stahl (1660-1734). The latter was to exert a great influence upon German Romantic psychiatrists. Actually seventeenth- and eighteenth-century medicine was a curious mixture of genuine science, loyalty to antiquated doctrines, and new irrational systems—all three often in the same man.

Psychiatry was not yet an independent discipline. However, it underwent a noteworthy evolution. To the extent that Galenism was

overthrown, mental diseases ceased to belong to humoral pathology and were correlated with disturbances of the nervous system; what was formerly attributed to “black bile” began to be labeled as nervous ailments.

Several of the new pioneers of medicine remained staunch believers in Galenism. In Italy Paolo Zacchias (1584-1659), a man eminent both as a physician and a lawyer, gave in his *Quaestiones medico-legales* (1621-1635) an inexhaustible mine of documents and expounded a new system of psychiatric diagnosis. He is generally considered the founder of forensic psychiatry. In England Thomas Willis (1622-1675) was, in spite of his belief in Galenism, a keen clinician and indefatigable experimenter who made outstanding discoveries in the anatomy and physiology of the nervous system. He integrated neurology and the study of the neurovegetative system into psychiatry.

Among the new trends was that of the systematists. Sydenham had emphasized that infectious diseases are specific entities: they exist in their own right independently of the sick individuals they affect. Efforts were made to work out an allover classification of diseases in natural species, genera, and classes. The first attempt was probably that of Frangois Boissier de Sauvages (1706-1767), who taught botany and medicine in Montpellier. An outline of his system appeared in 1732 and was considerably enlarged in his *Nosologia methodica* published in Latin in 1763 and in French in 1770. Diseases were

divided into ten classes. The bulk of mental diseases belonged to Class VIII, divided into 4 orders and 23 genera. Among the latter, melancholia contained 14 species. Each species was illustrated by short clinical descriptions, either from Boissier's practice or from other authors. Clinical documents were gathered from every possible source, even from travelers, so that the Malayan "running amok" was incorporated into a European textbook. Boissier's work was far from being a tedious catalogue of diseases; there were lucid introductions to the whole book and to each part; it was written in a clear and flowing style and filled with interesting facts. No wonder it inspired a long series of successors, among them the Swedish naturalist Carl Linnaeus, the English physician William Cullen (who coined the term "neurosis"), and eventually Philippe Pinel. In spite of the artificial character of their classifications, the systematists exerted a useful influence on the development of medicine (including psychiatry). They advanced the practice of looking more attentively for new diseases and facts and organizing material in a more accurate and comprehensive way. It sufficed to replace the terms "classes," "genera," and "species" with "parts," "chapters," and "paragraphs" to obtain the pattern of the nineteenth-century textbooks.

A powerful trend toward rationalism developed under the impact of the cultural movement called the Enlightenment. It forwarded the cult of reason, the concept of society as created for man, and the belief in science. Typical is Voltaire's definition of the word "folie" (insanity) in his *Dictionnaire*

philosophique: "A brain disease that keeps a man from thinking and acting as other men do. If he cannot take care of his property he is put under tutelage; if his behavior is unacceptable, he is isolated; if he is dangerous, he is confined; if he is furious, he is tied." We see here mental illness equated to brain disease, its clinical picture to intellectual disorders, its treatment to the protection of society. In view of the opposition of rationalism to any kind of superstition, the belief in demons and witches gradually receded; demonomania ceased to be considered a preternatural condition and was understood as a man's delusion of being possessed; the term "obsession" lost its meaning of being assaulted by evil spirits and took on its present meaning. La Mettrie, in his book, *L'Homme machine* (1748), contended that certain hard criminals (later called the "moral insane") should be considered sick individuals.

The concept of the unconscious (if not the term) appeared with Leibniz's discussion of the "small perceptions." However, there had already been many observations on the unconscious activities of the mind, even among rationalist philosophers. Descartes wrote in his treatise, *Les Passions de l'ame* (1649), that unexplained aversions may originate from occurrences in early childhood: the event is forgotten, the aversion remains. In another place Descartes told of his propensity for falling in love with cockeyed women and how, thinking about it, he remembered that as a child he had been in love with a young girl who had that defect; after he had understood the connection

his predilection disappeared. However, it did not occur to him nor to anybody else that such observations might be utilized for mental healing. Some kind of rational psychotherapy existed in the guise of consolations, exhortations, and admonishments. There also were various other attempts. Diderot relates how the wife of one of his friends was afflicted with the vapors (the fashionable neurosis of eighteenth-century ladies). He advised the husband to simulate the symptoms of his wife's illness. The husband did so, and the wife, who was very much in love with him, took so much care of him that she forgot her own ailments and recovered.

Many psychological problems were known and debated by Catholic priests. For a long time the only objective classifications and descriptions of sexual deviations were to be found in the treatises of moral theology. In Germany certain Protestant ministers practiced with success "Cure of Souls" (*Seelsorge*); they effected what amounted to a kind of brief psychotherapy by relieving the person of the burden of a pathogenic secret and helping to overcome the situation. In England the famous preacher John Wesley practiced medicine, opened dispensaries, and wrote a book, *Primitive Physics,* in order to give people a basic knowledge of medicine and hygiene; he was one of the first to use electricity as a therapeutic agent and had a profound understanding of many emotional problems. The Quakers included the insane among the unfortunates for whom they were concerned.

During the seventeenth and the eighteenth centuries the number of mental institutions in Europe increased. They derived from two opposite models: the prison and the monastery. Institutions of the incarcerative type have been the subject of many descriptions. Who has not heard of the horrible conditions in Bicetre before Pinel conducted his reform? Michel Foucault contends that the modern philosophy of the mental institution was a product of the Age of Reason, that is, a reaction against "unreason": since the sight of the "fools" had become intolerable, they were hidden from the rest of mankind and incarcerated in large institutions together with the criminals, the cripples, and the beggars.

The other type of mental institutions derived from the monastery. Saint Vincent de Paul (1576-1660) founded institutions for delinquents where they received humane treatment. A glimpse of the treatment methods may be found in one episode of Abbe Prevost's novel, *Histoire de Manon Lescaut et du Chevalier des Grieux* (1731). As a punishment for his misbehavior, the Chevalier was committed to the Maison de Saint-Lazare in Paris; he was treated with firm kindness, isolation, silence, reading of serious books, and frequent conversations with tactful religious men. Actually we know very little about the results of this kind of therapy. But we are better informed about one of the institutions of the Order of the Hospitalers of Saint John of God, the Charite of Senlis, not far from Paris. The archives of that institution were preserved and utilized as the basis for an excellent monograph by Dr.

Helene Bonnafous-Serieux. The inmates were classified into four groups: the *insenses* (mental defectives), the *fous* (psychotics), the *libertins* (amendable behavior disorders, and the *scelerats* (dangerous psychopaths). According to their behavior the inmates were placed in one of three sections: the *force* (maximum security), the *semi-liberte* (medium security), the *liberte* (inmates enjoying certain privileges. The treatment was individualized. Emphasis was laid on the religious character of the institution, and inmates were invited to join the morning prayers and Mass. Every new inmate was given a pseudonym under which he was henceforth known; he had to wear a uniform that was more religious than prisonlike in character. The "director of the inmates" had a personal interview with each one of the inmates every day. There was a library, but no work therapy. There was no question of chains, whips, or cages and no demonology. Patients benefited from the medications known at that time and from a kind of rational psychotherapy. The registers show that many patients recovered, and it was reported that certain *libertins* improved their behavior.

We thus see that by the end of the eighteenth century there existed a small number of monastic institutions for a minority of privileged patients and a large number of incarcerative institutions where the poor lived in dreadful conditions. Meanwhile, a trend toward "sensitiveness" had appeared and a concern for the disadvantaged and rejected members of the great human family. An Englishman, John Howard, made a systematic inquiry into

the state of the prisons all over Europe. Institutions were opened and methods devised for the education of the blind, the deaf-mute, later of the idiots and feebleminded. Humane treatment was introduced in a few public mental hospitals, notably by Vincenzo Chiarugi in Florence, by Joseph Daquin in Savoie, and by Philippe Pinel (1745-1826) in Paris.

Few pioneers of psychiatry reached a fame comparable to Pinel's. However, recent historical research has shown that the current accounts of his life are covered with legend. For many years Pinel lived in Paris as a medical journalist and translator with a small medical practice, working upon a *Nosographie philosophique* in the style of Boissier de Sauvages. In 1793 he was appointed as physician to the medical wards of the hospital of Bicetre. The administration was in the hands of the "Governor" Pussin, an able man who was much concerned with the welfare of the patients and had already achieved several improvements. Pinel benefited from Pussin's experience and collaboration and gave his medical authority to the reforms. In 1795 Pinel was appointed to the Salpetriere hospital; he introduced the same reforms there, too. In 1801 he published his *Medico-Philosophical Treatise on Insanity,* expounding a clear and humane system for the care of mental patients. Contemporaries depict Pinel as a small, shy, unassuming, often absent-minded man with speech difficulties, but kind and good-humored. In later years a number of young physicians became his enthusiastic pupils. Pinel acquired the prestige of a hero: he had achieved his humane reforms in the

notorious Bicetre (also a prison and house of arrest for vagabonds) during the Terror, the worst period of the Revolution. Thus, he in his later years was a legendary figure, and after his death he became the patron saint of several generations of French alienists. Actually he had achieved a decisive step toward the foundation of a scientific and humane psychiatry.

Modern Scientific Psychiatry

With the nineteenth century began a new era of psychiatry. Within the framework of medicine—now a fully scientific discipline—psychiatry became an autonomous specialty (as were already surgery and ophthalmology). Attempts were made to give psychiatry a firm basis, either in brain anatomy or physiology, or even in a general "science of man" (one example was Cabanis's *Rapports du physique et du moral de I'homme* in 1802). Old Galenism and speculative systems were discarded, but new semiscientific systems based on a mixture of speculation and sound observation appeared on the periphery of psychiatry. Such were phrenology and mesmerism: their adherents elaborated fantastic speculations, but also made useful discoveries and contributed in their own way to the development of psychiatry.

The evolution of modern scientific psychiatry may be divided into three periods, which largely overlap each other:

1. From 1800 to 1860 the center of psychiatric activity was the mental hospital. Its main concern was the description and classification of mental diseases, and the devising of a "moral therapy," together with the study of brain anatomy.

2. From 1860 to 1920 the center of psychiatric activity was the university psychiatric clinic. The trend was toward the elaboration of great psychiatric systems. A striking development occurred in the study of neuroses and

culminated in the creation of schools of dynamic psychiatry.

3. After 1920 came a kind of psychiatric explosion, with an almost boundless widening of the field of psychiatry and its division into a multitude of subspecialties.

Asylum Psychiatry (1800-1860)

The main feature of the period of asylum psychiatry was the appearance of a new type of physician who devoted his whole time and activity to the mentally sick. These men sought to found, operate, and reform "asylums" satisfying the demands of science and humanity and open to all categories of mental patients. The old Charites institutions were sometimes taken as models, but the developments took different forms in various countries.

The main school of alienists flourished in France among a group of physicians who had been Pinel's pupils or proclaimed themselves his successors. Most prominent among them was Jean-Etienne Dominique Esquirol (1772-1840). "At the beginning of the continuous development of psychiatry stands the outstanding personality of Esquirol," wrote Karl Jaspers. Esquirol devised a system of clear psychopathologieal concepts and gave their present definition to terms like illusion and hallucination, remission and intermission, dementia and idiocy. He inaugurated the use of asylum statistics for the study of the causes, course, and prognosis of mental disease. He proclaimed that "an insane asylum is a therapeutic instrument in

the hands of an able physician, and our most powerful weapon against mental illness." He laid the foundation of a collective therapy, analyzing the influence exerted by the patients upon each other and grouping them accordingly. He wrote the first really scientific textbook on mental diseases, which was also the first to have illustrations, a book remarkable for its style and clear clinical descriptions. He became the director of the National Asylum of Charenton, which had been rebuilt according to his own plans on the site of a former Charite of the St. John of God Hospitalers. He visited every place where mental patients were kept in France, "house by house, hospital by hospital, prison by prison." These inquiries resulted in his magnificent illustrated treatise on the construction of asylums. Esquirol was also foremost in forensic psychiatry and the author of the French law on the insane (1838).

A young French physician, Laurent-Jesse Bayle, discovered in 1822 that "general paresis" was not a complication—as believed until then—but a specific mental disease with constant cerebral lesions. This encouraged the alienists eagerly to study cerebral pathology with the hope of discovering new specific entities. Their efforts, however, brought fewer rewards than did the clinical observation of mental patients. Thus, Etienne Georget distinguished from idiocy and dementia a third condition, "stupidity" (transient, reversible impairment of intelligence). It was observed that mania and melancholia could succeed each other and alternate in such a way that they must constitute one identical condition. This discovery was published

simultaneously by Jean-Pierre Falret and by Jules Baillarger in 1854. Ulysse Trelat gave fine descriptions of the *folie lucide* and Charles Lasegue of the delusions of persecution.

A new trend was open by Jacques-Joseph Moreau de Tours's book on hashish (1845), showing that this drug produced a state of delusions and hallucinations that—he believed —was for a few hours identical with the manifestations of insanity and afforded an experimental approach to its study. On this basis he came to consider the dream as the key to the knowledge of mental life, and the *desagregation* (in today's language, "regression") as the basic psychopathological process.

Benedict-Augustin Morel (1809-1873) published in 1852 a description of *demence precoce,* not as a disease entity, but as a peculiar form of rapid evolution of mental illness toward a state of severe emotional impairment (the term was later misunderstood to mean "dementia at an early age"). He also described phobias under the name of *delire emotif* (emotional delusions). Morel inaugurated the psychiatric application of physical anthropology and genealogy. He photographed patients, measured their skulls, took plaster casts of their heads, investigated their lives and the lives of their parents and ancestors. This was the basis for his theory of degeneracy. Degeneracy, Morel said, was a gradual process; its manifestations became worse from one generation to the next, until the descendants were sterile, which

automatically ended the process. But Morel also discussed the ways of checking the progress of degeneracy and making it reversible; in these studies were the beginnings of social anthropology and mental prophylaxis. Morel also introduced the psychiatric use of etherization, that is, studying a patient's reactions under the administration of ether as a means of diagnosing between hysteria and organic disease (as today with narcoanalysis).

In the meantime German psychiatry, starting from a very different background, had undergone its own evolution. It seems that the German asylum tradition issued more from the prison than the monastery, and this is, according to Kirchhof. the reason for their tremendous use of coercive measures. On the other hand, German psychiatry underwent the strong influence of Romanticism and of Schelling's philosophy of nature. Whereas French alienists based their nosology on the empirical study of clinical cases, their German colleagues often tried to isolate abstract types deduced from a psychological frame of reference. German psychiatry soon developed into two trends: the *Physiker* (organicists) and the *Psychiker* (who emphasized the psychological origin and treatment of mental illness).

Among the *Physiker* were Johannes Friedreich, also known as one of the first historians of psychiatry, and Maximilian Jacobi, author of a treatise on the architecture of mental hospitals.

The *Psychiker* took over from Stahl the notion of the role of emotions in the etiology of mental illness. Each one of them developed his own views about the human mind and the nature of mental illness with great originality and audacity. Johann Christian Reil (1759-1813), though also a brain anatomist, expounded in his *Rhapsodien* (1803) an extraordinary program of psychotherapy for mental illness, including the use of a "therapeutic theater." Johann Gottfried Langermann (1768-1832) is considered a pioneer of occupational therapy. Johann Christian Heinroth (1773-1843) pointed out the role of "sin" (in modern language, guilt feelings) in psychopathology; he, too, devised an extensive program of psychotherapy for mental illness. Karl Wilhelm Ideler (1795-1860) emphasized the effects of frustrated sexual drives in the psychogenesis of mental diseases. Heinrich Wilhelm Neumann (1814-1884) devised an original system of medical psychology. He discussed the relationship between anxiety and frustrated drives, and he described the masked manifestations of sexuality among psychotic patients. All these men were skeptical in regard to the current psychiatric nosologies; they shared the belief in the emotional causation of mental illness and the possibility of psychotherapy for even severe psychotics. They anticipated much of what Eugen Bleuler, C. G. Jung, and the psychoanalysts were to teach as great novelties several generations later.

One belated representative of German asylum psychiatry was Karl Ludwig Kahlbaum (1828-1899), who spent his career in remote asylums and

whose publications were ignored for a long time. His main contribution to psychiatry was his descriptions of hebephrenia and catatonia (the former delegated to his collaborator, Ewald Hecker, in 1871; the latter in his own monograph, 1874). The validity of Kahlbaum's concepts was accepted later by Emil Kraepelin who made hebephrenia and catatonia two subforms of dementia praecox.

In Belgium Joseph Guislain taught that almost all mental diseases had emotional causes and were rooted in an all-pervading, underlying feeling of anxiety. In his institution in Ghent he organized an excellent system of work therapy. Wonderful accounts of moral therapy were also published by those who visited Pietro Pisani's institution in Palermo, Sicily.

In England William Tuke's pioneer work in the "Retreat" near York was pursued by descendants and their collaborators. One of the latter, M. Allen, founded his own institution at High Beach and wrote a highly instructive account of his therapeutic methods. To give only one instance: patients with violent agitation, accompanied by an attendant, were sometimes allowed to ramble about and scream in a forest for a whole day, with a subsequent lessening of their agitation. Henry Maudsley (1835-1918) began his *Physiology and Pathology of the Mind* (1867) with a chapter about the unconscious and the impossibility of exploring the human mind through introspection. Maudsley advocated the use of a "physiological method" that

would take into account the "plan of development" of the mind (in the animal, the infant), the study of its "degeneration" (in the dream, delirium, insanity), and of its "progress and regress" throughout history.

In the United States Benjamin Rush (1745-1813) introduced "moral treatment" at the Pennsylvania Hospital in Philadelphia. Other mental institutions operated along similar lines. Isaac Ray (1807-1881) founded American forensic psychiatry, and Thomas Kirkbride (1809-1883) is famous for his book on the construction of mental hospitals.

Throughout the period of asylum psychiatry, a noteworthy discrepancy is often found between the theoretical views of the alienists and the real state of their mental hospitals, as pictured by visitors. The term "moral treatment" was given many conflicting meanings. In France Francois Leuret (1797-1851) used to treat delusional patients with icy cold showers until they came to recognize their "errors"; he called that method "moral treatment."

Outside asylum psychiatry ran a kind of underground current centered around the use of "magnetic sleep," later called hypnosis. Mesmer, Puysegur, and a long succession of followers treated many neurotic and psychosomatic patients. They developed a full-fledged First Dynamic Psychiatry, which was later to give birth to the modern schools of dynamic psychiatry.

University Clinic Psychiatry (1860-1920)

The historical examples of Morel and Kahlbaum showed how difficult it was to achieve important creative work in a mental asylum. For that reason the center of scientific activity gradually moved to the psychiatric university clinic, a threefold institution for treatment, teaching, and research. For some reason German psychiatry outdistanced France around i860 (with the exception of the field of neuroses), but as time went on, psychiatry became more international.

A new type of psychiatrist arose, the university psychiatrist who worked with a team of collaborators and pupils and was provided with well-equipped laboratories. Techniques of brain anatomy were improved, new biological methods and experimental psychology were resorted to. The field of psychiatry expanded swiftly. Among the new clinical pictures were alcoholism, morphinism, cocainism, neurasthenia, and traumatic neuroses.

Wilhelm Griesinger (1817-1868) is usually considered the founder of German university psychiatry. Possessing an eclectic mind, he introduced Herbart's psychological concepts into psychiatry, but his contention that "mental diseases are brain diseases" was taken as a slogan by the adherents of organicism. At that time Rokitansky and Virchow were laying the foundations of cellular anatomo-pathology, which appeared to be the one firm basis of all medicine. This encouraged psychiatrists to rebuild psychopathology on a similar basis. Theodor Meynert (1833-1892)

supplemented his objective anatomical findings with hypotheses on the functional opposition between the brain cortex and brain stem and on the role of physiological brain disturbances. However, he was not so exclusively organicist as he is usually depicted; he pointed to the psychogenesis of homosexuality and other sexual deviations. Carl Wernicke (1848-1905) attempted a brilliant synthesis of brain anatomy, physiology of the nervous reflex bow, and associationist psychology. He considered the brain an associative organ and the soul as being "the sum of all possible associations." Only the most elementary mental functions are localized in the cortex, he said; the higher ones, including consciousness, are products of the associative activity. Unfortunately these men and many of their colleagues fell into "brain mythology," the tendency to explain all mental phenomena in terms of real or fictitious brain structures.

The credit for overcoming "brain mythology" as well as the current nosological confusion belongs to Emil Kraepelin (1856-1926). An eclectic researcher, Kraepelin combined neuroanatomical research with experimental psychology and a thorough investigation of the patients' life history. In the sixth edition of his textbook (1899) he defined the two great endogenous psychoses: manic-depressive psychosis (the old "circular illness") and dementia praecox. The latter comprised three subforms: hebephrenia, catatonia, and paranoia. Contemporaries felt that Kraepelin had shed definitive light on the chaos of psychiatric nosology. His classification was

widely adopted in Europe and America.

In Zurich Auguste Forel (1848-1931) started with discoveries in brain anatomy but shifted toward a dynamic concept of the mind. Among his pupils were Eugen Bleuler and Adolf Meyer. Eugen Bleuler (1857-1930) sought a deeper psychological understanding of psychotic patients; he revolutionized the concept of dementia praecox, which he called schizophrenia. He introduced many new terms such as autism, ambivalence, and schizoidism.

In France Valentin Magnan (1835-1916) extended the theory of mental degeneracy so widely that this diagnosis covered almost the whole realm of psychiatry. His fame, however, was the result of his clinical studies on alcoholism. But the main French contribution to psychiatry was the work of a neurologist, Jean-Martin Charcot (1825-1893), and of an internist, Hippolyte Bemheim (1840-1919). These two men gave the official stamp of approval to the use of hypnosis, thus making it a respectable procedure, though their theoretical concepts and therapeutic use of the phenomenon differed widely. A large part of the teaching of the old magnetists and hypnotists was rediscovered. From about 1880 to 1900 hypnotism and suggestion were widely investigated and utilized.

In England probably the most original contribution to psychiatry was made by a neurologist, Hughlings Jackson (1834-1911). He conceived of

man's neurological and mental structure as a hierarchy of functions, resulting from differentiation and perfection through evolution. Nervous and mental disorders were explained by "dissolution" (regression) to inferior, older levels of functions. In such disorders Jackson distinguished negative symptoms resulting from the loss of a higher function and positive ones resulting from the activation of functions of a lower level. Jackson's theory had a great impact on many neurologists and psychiatrists.

In the United States George Beard (1839-1882) described "neurasthenia," a state of physical and mental exhaustion, as a neurosis of modern, and especially American, life. Beard's ideas met with great success. S. Weir Mitchell (1829-1914) devised a standard method for the treatment of neurasthenia by means of rest, isolation, feeding, and massage. After the turn of the century the main American contribution to psychiatry came from Adolf Meyer (1866-1950). In his individualized, psychobiological approach, Meyer interpreted mental disorders as being faulty reactions to life situations, which he tried to understand with the help of a thorough study of the patient's life history and development.

Gradually several branches of psychiatry expanded and tended to become sciences in their own right. Thus, the field of sexual pathology had been explored by forensic psychiatrists. Now a brilliant systematization was effected by Richard von Krafft-Ebing (1840-1902). His *Psychopathia Sexualis*

(1886) was the starting point of the flourishing new discipline of sexology. Another forensic psychiatrist, Cesare Lombroso (1836-1909) founded a school of criminal anthropology in Italy. He conceived of it as being a branch of biological medicine, but when sociologists and lawyers joined his group the newer criminology became an autonomous science.

We have seen that Charcot and Bernheim had incorporated into medicine a part of the teachings of the First Dynamic Psychiatry. Their attempts, however, were short-lived. The first man who undertook to build a new dynamic psychiatry was Pierre Janet (1859-1947). Janet was able to correlate hysterical symptoms with "subconscious fixed ideas" and bring a cure by means of a "psychological analysis." He then elaborated a new theory of the neuroses, of mental energy, of the "hierarchy of tendencies," and eventually a vast conceptual model that illuminates in some way virtually every phenomenon of the mind. But whereas Janet had kept closely within the bounds of traditional psychiatry, Freud and the founders of the newer dynamic schools openly broke with official medicine.

The work of Sigmund Freud (1856-1939) is so widely known that it is hardly necessary to recall its main features. Among his theories are those of the dynamic unconscious and the deciphering of symptoms, the interpretation of dreams, repression and other defense mechanisms, the development, fixations, and regressions of libido, child sexuality, the

superego, the Oedipus complex, the sexual origin of neuroses. Freud introduced a new approach to the unconscious by means of free associations, and analysis of resistance and transference: he developed a new approach to therapy by means of a development and resolution of a transference neurosis. From the beginning Freud made of psychoanalysis a movement, then an organization of a new type that had no parallel in modern times, that is, a close, tightly structured organization with its official doctrine and rules for membership, including a long initiation in the form of a didactic analysis. Gradually psychoanalysts extended their interpretations to sociology, anthropology, literature, art, religion, education, and all manifestations of cultural life. Some of its adherents had the feeling that the history of psychiatry was now divided in two periods: before and after Freud.

Psychoanalysis was the starting point of a vast development of dynamic psychiatry. Among Freud's disciples were orthodox and deviant groups. Both Alfred Adler (1870-1937) and Carl Gustav Jung (1875-1961) developed a system that was basically different from psychoanalysis. Adler's individual psychology is a pragmatic or concrete system centered around the dialectic of the individual's striving for superiority versus his community feeling. Jung's analytic psychology centers around the concepts of the collective unconscious, with the archetypes, and the process of individuation.

The new dynamic psychiatric systems grew outside the realm of

"official" medicine. Their theories extended far beyond the traditional limits of psychiatry. This was a manifestation of a new trend that could be called the "psychiatric explosion."

The Psychiatric Explosion (1920—)

After World War I it became obvious that the psychiatric university clinic could no longer remain the only center of psychiatric progress. Kraepelin founded in Munich the first *Forschungsamtalt* (psychiatric research institute). It was discovered that considerable impetus could be given to scientific progress if specialists could be liberated from daily treatment and administrative work and devote their whole time to carefully planned research projects. Similar institutes were founded in Germany, Russia, America, and later in other countries.

From that time on, the field of psychiatry continually expanded. Former branches became autonomous disciplines (for instance, child psychiatry, sexual psychopathology, clinical criminology), and new branches were founded. Among the latter were genetics (Rüdin, Luxemburger), biotypology (Pende, Kretschmer, Sheldon), reflexology (Pavlov) electroencephalography (Berger), psychiatric endocrinology (Manfred Bleuler), intelligence testing (Binet and Simon, Terman), projective testing (Rorschach, Murray, Szondi), organo-dynamic psychiatry (Henri Ey), general psychopathology (Jaspers),

phenomenology (Minkowski), existential analysis (Binswanger). There also was a great development in social psychology, transcultural psychiatry, family psychiatry, psychosomatic medicine, and a variety of approaches to community psychiatry.

Among the new therapeutic methods we may mention perfected forms of ergotherapy (Herman Simon), malaria therapy (Wagner von Jauregg), narcotherapy (Klaesi), narcoanalysis (Horsley), cardiazol therapy (Meduna), insulin shock therapy (Sakel), electric shock therapy (Cerletti), psychosurgery (Egas Moniz), and last but not least, the pharmacotherapy of mental diseases (Laborit and many others). In psychotherapy a great variety of new methods were introduced, in addition to the adaptation of psychoanalysis to the treatment of children and psychotics. We may mention Rogers's nondirective therapy, Frankl's existence therapy, Schultz's autogenous training, and various methods of behavior therapy. Not less numerous are the varieties of group therapy, therapeutic communities, and psychodrama.

The description of all these clinical and therapeutic developments will be an absorbing and arduous task for psychiatric historians of the future.

Meantime, the traditional principles that had ruled psychiatry for a long time were shaken. Henri Ey had warned that the boundless expansion of psychiatry—which he called "panpsychiatry"—would inevitably lead to a

reaction in the form of the dissolution of psychiatry. This is exactly what present-day psychiatry is witnessing. A number of "antipsychiatrists" now proclaim that mental illness does not exist; what is called by that name is nothing but the artificial product of social repression; psychiatric treatment is nothing but a disguised form of punishment, of social violence; a sojourn in a mental hospital can never cure a patient but only make his condition worse; mental hospitals should be closed and psychiatrists take up another profession. As Henri Ey had predicted, "panpsychiatry" has led to "antipsychiatry."

Thus, the outcome of 25 centuries of efforts is that the basic principles of psychiatry are in need of careful revision. This is not unique to psychiatry and reminds one of what Bachelard once wrote: "All scientific knowledge must be, at every moment, reconstructed. ... In the work of science only, one can love that which one destroys; one can continue the past while denying it; one can honour one's master while contradicting him."

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