THE HISTORY OF PSYCHIATRY

PGY II Lecture

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Introduction: The history of western psychiatry may be viewed from many directions: the train of scientific advancements that have brought it to its present level of technology; the flow of underlying philosophical assumptions and tenets, especially the relation of mental and physical phenomenon, across time; the influence of social and religious institutions on mental illness and the field of psychiatry; the development of the different modern schools of psychiatric and psychological practice; and the actual place and treatment of the mentally ill in society. I will touch on all of these briefly. The study of this area necessitates an appreciation of the history of science, history in general, literature, the social sciences, and philosophy. This results in a vast area of consideration. Many things will only be briefly mentioned. I will follow a roughly chronological approach, discussing each of the above themes where possible.

Pre-Classical and Classical Influences: Most non-western and probably early western cultures distinguish between natural and supernatural causes of illness and hardship, not isolating what would be presently considered mental illness. Methods are culturally designated for the understanding and response to these events. All societies recognize episodes of extremely aberrant behavior, which we would consider madness or insanity. The evidence for very early aspects of mental illness in western society is little and limited. Nonetheless, some indications can be addressed.

Egyptian and ancient Middle Eastern influences can be seen, often as they were incorporated into Greek culture. For instance the importance of dreams and dream interpretation. The Judaic tradition, as evidenced in Judaic scripture, saw insanity as the result of heredity, physiology, improper sexual behavior, failure to uphold ritual prescriptions, idleness, but most importantly as a punishment from God directly or through the agency of evil spirits or demons, as in the story of Saul. Those with mental illness appear to have been treated with benevolence, similar to children, but they were often feared and avoided if violent. Laws were instituted for their care and limiting their responsibilities and obligations. These beliefs and practices play an important role in later Christian beliefs.

Much of western beliefs about mental functioning can be traced to Greek and Roman sources. As seen through mythology and the Homeric and other epics, mental illness was often seen as directly due to the involvement of the gods in early Greece. Likewise, cures were also seen as coming from the gods. A relationship can be seen in later Greek literature between moral failure and insanity, such as the gods punishing someone for arrogance. There is also a sense of madness as emotional imbalance due to events or trauma. Both of these may be seen in the Greek tragedies. There is an increasing emphasis on achieving a balance between emotions or passions and reason.

The increasing emphasis on natural knowledge and an equal de-emphasis of the role of the gods occurs in the 5th and 6th centuries B.C. These continue into the theories of Hippocrates in the 4th century B.C. who believed that illness was the result of an imbalance between the four bodily humors: blood, black bile, yellow bile, and phlegm, which correspond to the four basic qualities of matter: heat, cold, moisture, and dryness. A predominance of one

element also determined basic character types. He further argued that certain illnesses, especially epilepsy were not divine, but nervous illnesses. Madness was often seen as a disturbance of black bile (*melaina chole*) or later melancholia. Hysteria was attributed to the movement of the uterus. As a consequence of these beliefs, treatment was aimed at restoring hormonal balance through the use of purgative, vapors, baths, and special diets. These ideas formed the center of much of medicine until the 17th century.

The philosophy underlying these beliefs saw people as endowed with characteristics at birth that needed education and training to be fulfilled. There was an increasing acceptance of natural laws. Passion and immorality were increasingly seen as derived from the interaction of natural laws (*physis*) and the influence of irrational customs (*nomos*). For instance Plato (428-348 B.C.) saw the *psyche* or soul as active and immortal. The *psyche* had three parts: appetite, reason, and temper. Irrational behavior was seen as an inevitable part of human life, to be overcome by reason. Illness came from a loss of balance between the *psyche* and the body or *soma*, or through self-deception. Reason and rational thought are the highest of virtues. Whereas the body was temporary and of secondary importance.

Aristotle (384-322 B.C.) the student of Plato, accepted the humoral theory of Hippocrates, taking it further seeing that bile mediated between the mind and the body. Whereas Platonic ideas emphasized a division between mind/soul and body, Aristotelian ideas recognized more of an interaction between these entities. He also taught knowledge was the direct consequence of the senses, rather than innate or divinely given. This exemplifies the interaction between mind and body. He emphasized experience and empirical knowledge. In a parallel manner, he emphasized the role of ritual in treatment, providing by catharsis.

During the Hellenistic period, with the spread of Greek culture through the Middle East and the eastern Mediterranean region, there was a growth of both rationalistic religion and mystery cults. Both focused on individual salvation. Eastern ideas entered the western tradition from India and the Middle East. Important centers for learning and experimentation developed, especially at Alexandria. Here a school of anatomy developed that argued for different functional areas in the brain.

Although most of the evidence is indirect and scant, the actual treatment of those with mental illness appears to have been relatively humane and there was little stigma, as we now understand it. Often those with mental illness were given special accord, being seen as partially sacred in their suffering. On the other hand there is some evidence that the mentally ill were met with ridicule, avoidance, and censure.

The Romans borrowed and expanded on Greek ideas and beliefs. They were a very practical society, specializing in engineering, warfare and legal matters. There is evidence of the legal status of those with mental illness. Their rights and freedoms were limited, but there is no evidence of harsh treatment or marked stigma. Asclepiades (1st century BC) building on the atomic hypothesis of Democritus, rather than the humors, distinguished phrenitis (metal excitement with fever) from mania (mental excitement without fever) and advocated treatments consisting of the use of light, diet, music, intellectual stimulation, and physiotherapy. Stoic philosophers and other healers emphasized the control of rational thought over emotions and passions. The most famous of Roman physicians, Galen (130–200 A.D.) was influenced by Hippocrates, the Anatomic School of Alexandria, and Stoic Philosophy, advancing a humoral theory of illness. He described several syndromes

including dysthymia, paranoia, and the role of sexual tension and anxiety in hysteria. He developed a system of spirits (forces), beginning with physical spirits, associated with the liver and modified through digestive and reproductive functions to become vital spirits, associated with the heart and modified through circulatory and respiratory functions to become animal or psychic spirits, associated with the brain and nerves. Emotional disturbance was not due to failure of reason, but due to an imbalance between aspects of the soul, which had rational, irrational, and lustful parts.

Therapy during Roman times appears to have consisted mostly of humane confinement, decreased exposure to stimuli, and the encouragement of reading, education, and participation in drama. Whether this was only for the upper classes or extended to the population as a whole is unclear. In addition a great deal of healing took place at the temples of Apollo, through the Cult of Asclepian. Sufferers would enter the temple, undergo purification rituals, take special diets, and use narcoleptic fumigations that would induce sleep. Music was also used to sooth and create the right atmosphere. During the dream the god Asclepian would appear and produce a cure. There are many tablets surviving that attest to cures.

Middle Ages: With the ascendancy of Christianity to predominance in the Roman Empire and the later collapse of the Roman Empire, Christian dogma became the basis of philosophical inquiry in the west. Platonic ideas were combined with Christian teachings, creating a worldview that dominated in the west for several centuries. St. Augustine (354-430 A.D.) championed Platonic conceptions of the mind, including the essential dichotomy between body and mind/soul. The mind was seen as having three parts: reason, memory, and will, while memory, in turn, had three parts: the unconscious, the preconscious, and the associative. Posidonius, in the 4th century, postulated three divisions of the brain with imagination in the forebrain, understanding in the midbrain, and memory in the hindbrain. There were efforts to build a correspondence between the humoral theories of Hippocrates and Galen and Christian belief. Psychological issues were seen within a theological and moral framework. Medieval concepts of mental illness stressed that individuals had free will and were responsible for their actions, but that illness (including mental illness) came from sin and resulting punishment from God or possession by the devil. Theological and humoral concepts were not incompatible in that theological precepts addressed ultimate causes of illness, i.e., why a certain person became ill, rather than specific mechanisms of illness. Thus melancholia was seen as a trial of faith. Mental illness was seen as either the result of sin or as a test of faith. For instance of the seven deadly sins – pride, covetousness, lust, anger, gluttony, envy, and sloth – sloth (*acedia*) had a clinical profile, presenting with boredom, depression, obsessions, anxiety, and a variety of psychosomatic symptoms. It was especially seen to inflict isolated monks, novices struggling to achieve spiritual ends, and hermits. Isolation was felt to contribute to it and it was treated with prayer, community involvement, and work. Since sin was central to mental illness, religious activity was central to cure. Mental illness was seen as alienation from God, thus return to God was essential for cure. Treatises were written on pastoral guidance. Confession and penance were essential to the cure. Certain monasteries became centers for the treatment of mental illness, as well as other illnesses, which were also seen as due to lack of faith and sin. In addition, earlier treatments using purgatives, bloodletting, and such practices as trepanation were continued.

During the High Middle Ages, from the 11th century on, there was a

gradual change in the worldview. Through contact in Spain and in the Holy Lands via the Crusades, Islamic culture had a strong impact on western culture. In the Islamic world of the 7th century and beyond, classical Greek and other Hellenistic ideas were elaborated. The teachings of Hippocrates, Galen, and the philosophy of Aristotle were combined to create an advanced level of science and medicine. Through the Koran's teachings that the mentally ill are precious to God, asylums were established in Baghdad in the 8th century, Damascus in the 9th century, and several in Egypt, that were renowned for their humane treatment of the mentally ill. There was a focus on providing a calm and relaxed environment, with fountains, gardens, and the use of soothing baths, perfumes, music and special diets. Under this influence, Constatinus Africanus (1020-1087) founded a medical school in Salerno.

The introduction of Aristotle to the west resulted in a shift away from Plato and a growing emphasis on empiricism. St. Thomas Aquinas (1225-1274) reintroduced Aristotelian ideas of the mind into western thought. A growing separation of mind and soul developed. The mind was equated with the Greek *psyche* and the Latin *animus*, while the soul was equated with the Greek *pneuma* and the Latin *anima*. In Aquinas' effort to combine rationalism with Christian dogma, he argued that the soul could not be sick and that insanity was a somatic phenomenon. Illness was the result of deficient reason due to either too intense passions or an effect of intoxication or other external factors on psychic apparatus. This proposition has been seen as a precursor of the later organic school of psychiatry that developed principally in 19th century Germany. The growing emphasis on reason over faith laid the groundwork for later Renaissance and Enlightenment philosophies.

To what degree these philosophical stances impacted on the everyday lives of the people or the treatment of the mental ill is unclear, but it is likely that the impact was small. Within feudal society and rural villages popular beliefs continued from pagan times and were provided a veneer of Christian belief. Beliefs in spirits and supernatural phenomenon were quite common. Nonetheless Christian charity was extended to the chronically mentally ill, as well as the poor. There are records describing rural madmen as roaming the countryside, being maltreated and neglected. They were identified with the demonic. In the growing cities and towns, facilities were developed – hospices, leprosaria, and almshouses – where the poor, outcast, and mentally ill could be confined and maintained. Hospitals specifically for the care of the mentally ill were rare. It is unclear, although it is possible, that the mentally ill were the focus of persecution, as were Jews, lepers, and heretics.

Early Modern (Renaissance Period): From the 15th and 16th centuries there was an increasing secularism of society and a decreasing power of the Church. There is an important demographic change as well, with increasing urbanism and market economy. During this period there were advances in mathematics and physics, a growing emphasis on experimental science, much of which further challenged the worldview maintained by the Church. This is seen in the discoveries of Galileo and Newton. Science was often seen as contradicting Church teachings, resulting in a crisis in the worldview of the elite and powerful. There was a growing humanism, with man, not God being the center of attention and study.

Nonetheless, humoral concepts of illness developed in the 4th century B.C. by Hippocrates and expanded by Galen (130-200 A.D.), persisted until the 17th and 18th centuries. As described above, in the humoral concept illness was the result of humoral imbalance and treatments were oriented to restore

balance. Beginning in the 12th century institutions were established for the treatment of mental illness at Metz (1100), Uppsala (1305), Bergano (1325), Florence (1385), and Valencia (1409). The details of actual treatment in these facilities is unclear, but probably did not differ from that described earlier, relying on purgative and other means to restore humoral balance.

A cultural backlash to the humanism developing in the Renaissance and the waning of church power in relation to secular power resulted in the Inquisition and the series of witch crazes that began in the 12th century through the 18th century. This greatly influenced the treatment and care of the mentally ill in Europe and North America. It has been argued that many of those tried and executed as witches were mentally ill, but the evidence for this is contradictory. Nonetheless, physicians were often involved in these cases, especially if demonic possession was suspected. This is evidence that early scientific and occult beliefs existed side by side during this period. Humanist physicians such as Paracelsus (1493-1541) and Weyer (1515-1588) opposed concepts of mental illness based on witchcraft and possession, stressing environmental causes. Although these men are celebrated today for taking a stand against witchcraft phenomenon, their impact during their own lives was probably minimal.

The works of literature, especially Shakespeare, evidence recognition of emotional conflict as a source of mental suffering. Hamlet is a striking example of this. Documentation of medical practice in the early 17th century show the use of natural and supernatural treatments intermingled. There did not appear to be a significant degree of stigma. Treatment appears to have varied from region to region, whether under Catholic or Protestant control, and among classes.

Modern Period (17th and 18th Centuries): During this period there was increasing urbanism and commerce. States became all powerful and world exploration and domination increased. Industrialization increased and large segments of the population were displaced.

The basic philosophical model of the mind undergoes profound change. Descartes (1596-1650), using the atomistic and mechanical concept of nature developed by Galileo and Newton, emphasized a division between the spiritual aspects of the soul and the mental aspects of the mind. He also saw an interaction between mind and body, which was even more bi-directional than previously held. The mind, as opposed to the body, which was seen primarily in mechanical, materialistic, and quantifiable terms, was seen as unbounded, non-material, and primarily limited to the realm of thought, consciousness, and will. He recognized a pattern of interaction in which physical sensations would create mental phenomenon, which in turn would result in a physical reaction (the reflex arc). There were two types of ideas: derived, which developed from experience and sensation; and innate, which developed out of the mind.

These ideas were developed during the Enlightenment into the Empiricist and Associationist model of the mind that is associated with such thinkers as Locke (1632-1704), Berkeley (1685-1753), Mills (1773-1836), Condillac (1715-1780), and others. They held that the mind (thought processes and consciousness) was acquired through experience, via the senses only. That the mind derived from elemental sensory experiences that accumulated and were associated into larger aggregates of ideas, that this association of ideas through contrast with each other grew into larger mental functions, such as consciousness, reflection, imagination, and abstraction. This was a highly passive process, although already present associations could interact with new

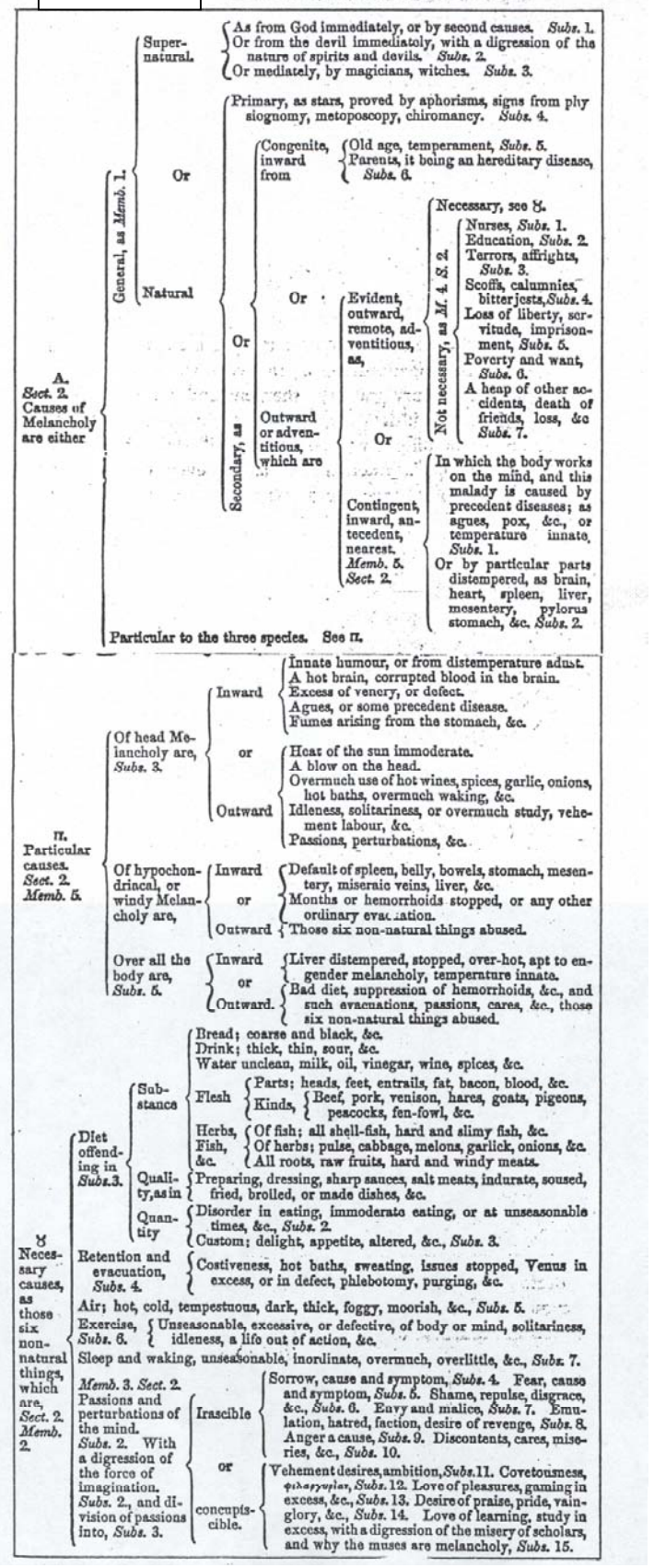
experiences. This was in contrast to the original Aristotelian model that saw the mind as very active and as essentially digesting new experience and sensation into previous knowledge.

The growing knowledge resulting from anatomical studies of the human body, within a mechanical world view, resulted in multiple etiologies of mental illness, including spiritual, external environmental and internal, as seen in Richard Burton's description of Melancholia in 1620. Burton (1577-1640) combined Puritanical moralism and classic ideas into his description of melancholia (See Fig. #1). During this period there was an increasing number of syndromal descriptions, emphasizing natural as opposed to spiritual causes of mental illness. There was an emphasis on medical and psychiatric classification in line with increasing taxonomies in other sciences.

The work of Sydenham (1624-1689) emphasized the clinical approach, in an effort to delineate course and natural history of disorders. He especially described hysterical and neurotic conditions, exemplifying an increasing awareness of non-psychotic illnesses by medicine, specifically those affecting the middle and upper classes. Reason was seen as controlling the passions and insanity was often equated with the irrational.

During the 17th and 18th centuries there was an increasing number of mentally ill. Whether this was an actual increase in the number

Fig. #1 BURTON'S SYNOPSIS



or the loss of traditional supports for the mentally ill through the loss of extended families with industrialization and urbanization, resulting in their being cast out on society more, is unclear. However, the growing number of socially recognized mentally ill, combined with the growing number of people displaced into poverty. Prisons, almshouses, and other institutions expanded greatly to meet the threat that these people were perceived as demonstrating toward the orderly movements of the state. Protestant ethics places a person's value on their ability to work and be productive. Increasing wealth was seen as a sign of divine grace and that a person was chosen by God. Poverty and mental illness were seen as a sign of loss of grace.

Most mental patients were treated with neglect and ridicule as seen in the charging for tours of the insane asylums, like Bethlehem hospital in England, were the inmates would be placed on display.

Modern Period (19th and 20th Century):

During this period clear national trends can be identified. Early on Germany remained preoccupied by the metaphysics of mental processes, developing the idea of Vitalism in which there is a transformation of the concepts of soul/spirit into a vital force in all organisms. Rational control over emotions was stressed, but little difference in the practical treatment of those with mental illness is recorded.

In England, the early 1700s brought legal efforts to end witchcraft accusations and to separate the insane from other inmates in almshouses and other institutions. The first facilities for pauper insane were opened. Battie (1704–1776) worked to provide treatment to the poor insane and not to just house them. He hypothesized that madness was the result of either the over excitement of the sensibilities or insensibility. He separated internal and external causes. He advocated treatment that included separation from the family, decreased stimuli, routine activity and occupation, what later came to be known as the Moral Treatment. Cullen (1710–1790) also saw mental illness as the over excitement or the atony of the nervous system, with mania being an example of over excitement. He advocated the use of opium as a sedative. He too urged moderation over the passions and appetites. The influence of Protestant ideas can be seen in these therapies.

In France there existed both royal hospitals and those under the auspices of the Catholic Church. These hospitals advocated a form of Moral Treatment. German influence can be seen with the appearance of the concept of Vitalism. Mental illness was also seen as the result of or lack of tension in the nervous system. Rousseau, in his advocacy of self-observation and the romantization of nature, had a profound effect on the early psychiatry of France. The Ideologues were a group of philosophers and physicians, Diderot being one of the more famous, who like Locke saw the psyche as arising from sensations to produce reason and emotions. They advocated a practical and concrete appreciation of these ideas, advocating practical application and mental health reform. Carbonis (1757-1808) advocated not only for the influence of external effects on sensibilities, but there was an internal influence on sensibilities from the internal organs and the nervous system itself, both of which were unconscious. Mental illness was the result of disturbances in sensibilities. He advocated for reforms in the mental hospitals of Paris.

Thus reform movements developed in Europe, with Chiarugi (1759-1820) in Florence, William Tuke (1732-1822) and his sons and grandsons in England, and Pinel (1745-1826) in Paris. These reformers urged the removal on bonds and the cessation of cruelty toward the mentally ill, advocating instead various

element of Moral Treatment. While the others were physicians, the Tukes were not. They were Quakers who were motivated by the treatment that they witnessed of other Quakers in the insane asylums of England. In reaction they established The Retreat (1796). The growing recognition of the evils of the absolute state in the 17th century tied mental illness to social oppression. In France the proponents of the French Revolution believed that once a just state was established and liberty reigned, that there would be little need for insane asylums. Pinel was an Ideologue and he brought reforms to Bicêtre and Salpétrière. He emphasized the importance of the patient's history in the understanding of the symptoms. He understood insanity to be a disturbance in self-control and identity (alienation).

In the U.S. there was initially harsh treatment of the mentally ill, but the 18th century Enlightenment influences resulted in a more optimistic outlook for the treatment of insanity. Quaker influences, seeing people as basically good, contributed to this ideal. In 1756 Franklin, with others, helped to found Pennsylvania Hospital the first general hospital in the U.S. Later in 1773 at Williamsburg the first state supported hospital for the insane was established. Benjamin Rush (1745-1813), influenced by Pinel and others, advocated for mental illness as a disease of the brain and for Moral Treatment. In addition to the common elements of Moral Treatment he also utilized bloodletting, purges, and emetics. Therefore, within Moral treatment, much of treatment continued to be based on essentially hormonal concepts. Between 1825 and 1865, 30 hospitals were built in the U.S.

By the late 1800s medicine was established as a discipline and psychiatry was one of its latest specialties. By the early 1800s hospital reforms were occurring in Germany. In the medical schools and hospitals of Germany great strides were being made in neurology and neuropathology through such physicians as Westphal, Kalbaum, Meynert, Wernicke, Kraft-Ebing, and Möbius. Griesinger (1817-1868) had advocated for the combination of neurology and psychiatry. The Vitalistic theories of an earlier Germany gave way to an emphasis on physiology. An increasing localization of brain functions was occurring. New hospitals were being built in Europe, including Burgölzl in Zurich.

Moral Treatment advocated enlisting the healthy parts of the patient through separation from the family and a strong connection with the doctor. These efforts were designed to increase internal control. The term moral was used because in inferred emotional or psychological, but also suggested optimism. At this time, most physicians saw mental illness as a disease of the brain. Elements of Locke's sensationalism and associationism, with Scottish philosophy's emphasis on common sense, Quaker morality and humanitarian values combined to provide the underlying foundations of concept of mental illness and its treatment. Mental illness was seen as primarily coming from external sources, either predisposing or precipitating. Organic disease of the brain was separated from Functional illness, in the terms of Pinel and Esquirol (1772-1840), when no organic lesion could be demonstrated. There was assumed to be not yet visible structural alterations. Identification was dependent on 18th century neurohistology, physiology, and chemistry. Moral Treatment advocated cultivation of self-control, good habits, a quiet environment, a strong relationship with the doctor, activities to increase self-esteem, and re-education. Beyond the elements of Moral treatment there was increased use of medications, including belladonna, aconite, and opium. Hospitals claimed 60 to 70% cure rates. However, these treatments were available only to a select few.

Nonetheless, with the increased number of mentally ill occurring with the industrial revolution and the rising urbanism seen in Europe, the original mental hospitals developed in the 15th century during Renaissance humanism, and derived from Islamic models, were overwhelmed and became warehouses or prisons for the mentally ill through the late 16th and 17th centuries. The reform movements of the 18th and 19th centuries were again overwhelmed by the rapidly increasing demand for placement of the mentally ill. In the U.S., by 1861 there were 48 asylums, each of which treated about 200 patients, all of whom were white, primarily middle class. There were about 8,500 hospitalized patients in the U.S., with a total population of 27 million. With increased industrialization, urbanization, and immigration resulting in increased poverty, disease and delinquency, hospitals for the insane became overcrowded and there was a proportional decrease in treatment. This was equally true in Europe. Heredity was emphasized etiologically over the environment. The use of restraints increased. There was increasing acceptance of organic causes of mental illness (via Griesinger and the Germans) as opposed to environmental causes. There was increased pessimism as to the treatment of mental illness. Psychiatry focused on categorization and autopsy studies and less on treatment. The concept of Degeneration developed in France. The growing number of poor and with them the mentally ill, and their increasing marginalization and condemnation, has been seen as the cornerstone of the modern stigma against mental illness.

This Empiricist-Associationist model of the mind was taken by German scientists and studied for the first time using techniques being developed in the young and growing field of physiology, resulting in the German school of Experimental Psychology, associated with Wundt (1832-1920), which later came to the U.S. where it developed into Structuralism under Titchener (1867-1927), a student of Wundt's. These schools were academic, non-clinical, and interested in discovering the elemental structure of consciousness and its relation to physiology, primarily though a methodology of introspection. It focused on such areas as perception and memory. It was believed that by understanding the nature of the atomistic building blocks of conscious mental phenomenon the laws that governed their association and combination into higher mental faculties could be determined, parallel to concepts in chemistry. This model of the mind has greatly influenced later developments in psychology and psychiatry.

Consequently, by the 19th century two schools of etiological beliefs existed, the somatic and psychic. The somatic school saw mental illness as having physical causes such as brain lesions or disturbed nerves, whereas, the psychic school understood mental illness as due to emotional stress. Yet these two schools shared a common model of the mind. In the 19th century, through the work of Kraepelin, Bleuler, and Janet, Associationist concepts became important in theories of psychopathology. Mental illness was seen as the result of breakdown in the associative functioning of the mind. Inherited vulnerability to associative breakdown (dissociation) was stressed. It is at this point that the modern schools of psychology and psychiatry with their own models of the mind emerge. These are the Functional-Descriptive, Behaviorist (Cognitive-Behaviorist), Psychoanalytic, Interpersonal, and Gestalt/Existentialist/Humanists schools.

Functional-Descriptive

The Functional-Descriptive school in many ways is not a school, but

rather the essential underpinnings of much modern psychology and psychiatry. It is not closely associated with any one person, like psychoanalysis is with Freud. It derives much of its development, however, from the influence of Darwin. It is eclectic in methodology, but is essentially observational, Positivist, and Empiricist.

Darwin's influence on psychology has been tremendous. He erased much of the gap held to exist between humans and other animals, initiating comparative studies, subsequently launching the fields of animal psychology and ethology. He shifted the focus from structural models of the mind (i.e., Associationist models) to functional models (how do mental functions aid adaptation?). He expanded methodologies beyond the physiological and introspective, utilizing observation, comparison, and data from multiple fields. The importance of individual differences came to the front. Furthermore, Darwin discussed many specific ideas that are later taken up by the various schools: the existence of unconscious mental processes and conflicts, the importance of dreams, behavior as symbolic, and the importance of drive and sexual excitement.

If these ideas are combined with the Objective-Descriptive School of Psychiatry that began with Kraepelin and Janet, one gets the heart of the modern medical model of psychiatry. This school can be traced back through the humoral theories of Hippocrates and Galen. In the U.S. in the 19th century with the failure of the Moral Treatment movement to meet the needs of mental health a competition developed between the Alienists, who ran the asylums, and a group of psychiatrists who had strong ties to neurology. Several of these, such as Mitchell and Hammond, who had served in the Civil War, began to emphasize organic causes to mental illness. Beard's description of Neurasthenia can be seen as part of this organic conceptualization of mental illness. However, they were not able to offer any advances in treatment over those holding control over the asylums, thus their practical impact was quite limited. The Alienists, who ran the asylums, had become organized and established the Association of Medical Superintendents of American Institutions for the Insane in 1844, later to become the American Psychiatric Association.

Similar to the Neurobehaviorists in the U.S., parallel efforts occurred in Europe with Maudsley (1835-1918) and Hughling Jackson in England and Broca in France, whose work supported localized functions in the brain. Darwin had a strong effect on Jackson who described the nervous system as composed of evolutionary levels. This resulted in a model of the brain with localizable and hierarchically organized structures and functions that developed under evolutionary pressure. In this all behavior was explained as elaborations on sensory initiated reflexive responses. This model found clinical support in the neurologic sequelae that were attributed to the prolonged epidemic of *encephalitis lethargica* between 1917 and 1930 and the discovery of *T. palidum* as the cause of general paresis in 1917. The development of the various shock treatments in the first half of the 20th century and the later use of medications, including the discovery of the antimanic effects of lithium in 1949, further contributed to this position. It was debated at the turn of the 20th century whether or not the cellular theory applied to the brain or if the brain was the result of a large syncytium or reticular net. Cajal was able to demonstrate the integrity of neurons in the 1890s. In 1906 Sherrington argued that the key function of the brain was integrative and was able to demonstrate the role of sensory and motor neurons in the reflex arch, giving further support to the developing view of the brain as hierarchical. This Structuralist model of the brain appeared parallel to the Lockian model of the

mind as associational. Increased understanding of the cellular structure of the brain and to some degree its functional correlates, when connected with the associational ideas of psychology, resulted in a very powerful model of mental processes.

Kraepelin (1855-1926) was a student of Wundt, and although he seems to have accepted an essentially Associationist model of the mind, his emphasis is primarily clinical and not theoretical. Consequently, the understanding of disease as advanced by Virchow becomes central, with such concepts as incidence, distribution, anatomy, pathogenesis, course, and outcome, being the critical concern of psychiatry. He is important for going beyond the simple differentiation of syndromes by their differences in presentation, but advanced knowledge as to their etiology and outcome in relation to presentation. Nonetheless, illness was seen as the breakdown of the functional connection between mental processes, or the dissociation of psychic elements. Inherited predispositions play a critical role. He recognized that different presentations could come from the same disease and that different diseases could give similar presentations. For this reason etiology and course became important. Like Darwin, he stressed the importance of comparisons.

Whereas Kraepelin focused primarily on the psychosis, Janet (1859-1947) studied the neurosis. Janet, through the study of such phenomena as somnambulism, fugues, contractures, anesthesia, and obsessions emphasized the role of trauma. In his view, trauma results in an emotional reaction, which is repressed, but reappears, through the alteration of consciousness, to repeat the experience of the trauma. Similar to Kraepelin, these states are seen as the result of breakdown of higher psychological functions, such that the smooth and effective functioning of the mind is interrupted. Various experiences, or even whole mental or physical processes, are disassociated from the rest of mental functioning.

The Functional School of Psychology began with William James (1842-1910). While sharing many of the underlying assumptions of the Structuralist or Objective-Descriptive School of Psychiatry, the Functional School of Psychology also held some fundamental differences. In his Principles of Psychology he attacks the Structuralists, giving a new direction to psychology. Like the Structuralists he emphasizes conscious mental processes, but even more strongly emphasizes the tie with the body and the brain. He argues that experience cannot reliably be broken down into essential elements, but is a whole. Experience can be analyzed, but there is nothing certain in how this should be done or what the results will be. Simple, elemental sensations do not exist, but are part of a larger whole. Consciousness is an ever-changing stream of cumulative phenomena. The mind is selective as to what it focuses on among the constant and ever changing flow of stimuli that enter the mind, primarily for the purpose of adaptation. With James the focus in psychology shifts to a more pragmatic understanding of the mind and how various psychological functions aid daily life and adaptation. Furthermore, the center of psychology shifts from Germany to the U.S. Out of this functional and pragmatic focus in psychology has come intelligence testing and many of the other areas of psychological testing, as well as modern neuropsychology that seeks functional and anatomical correlations.

Both the Structuralist and Functionalism School of Psychology emphasize the practical, functional study of mental phenomenon, specifically mental illness. In both, there is also an emphasis on the role of the brain, of physiology and anatomy. Methodology is eclectic and draws on other fields

such as epidemiology, neurology, and neuroscience. In both of these the emphasis is not so much on the meaning of symptoms to the individual, abstract psychological constructs, the dynamics of individual behavior and interaction, or even developing a model of the mind per se (although on is often implied) as it is on the empirical study of process and function.

Psychoanalysis

Psychoanalysis did not originate in academic psychology, which was focused in university laboratories and was concerned with normal psychology and topics like perception, sensation, etc. On the contrary psychoanalysis is focused on abnormal behavior and treatment. In addition, it is more focused on the unconscious than the conscious. Yet it shares a basic background with Behavioralism and Functionalism in that it is mechanistic and evolutionary in nature.

Precursors to Psychoanalysis

Freud read Darwin and was very influenced by his ideas, including the presence of unconscious mental processes and conflicts, the significance of dreams, the symbolic nature of bizarre behavior, and the importance of sexual excitement. Darwin (via Romanes, to whom Darwin had given his notes on social behavior) wrote on the mental evolution of man, especially in the relation of childhood behavior to adult behavior and in the appearance in childhood of sexual drive. Darwin wrote that people are driven by biological forces (love and hunger).

Hedonism of the 18th and 19th centuries, which stated that people are motivated to gain pleasure and avoid pain, also influenced Freud. In 19th century Europe, especially Vienna, there was a popular and academic focus on sexuality, prior to Freudian theorizing, especially on sexual dysfunctions and childhood sexuality.

Other influences on Freud and the development of psychoanalysis include the work of Gottfried Leibnitz (1646-1716) who recognized that mental events ranged from fully conscious to unconscious. Johann Friedrich Herbart (1776-1841) developed Leibnitz's ideas further, stating that ideas become conscious if compatible with ideas already in consciousness and if not they are "inhibited." Furthermore, ideas compete for consciousness. In addition Freud was influenced by the developments in psychophysiology of the 19th century, such as the work of Helmholtz (1821-1894) and Fechner (1801-1887) who saw psychological phenomena as open to study via the techniques of physics and physiology, promoting a mechanistic model of psychology in line with Empiricist/Associationist beliefs. Specifically Fechner demonstrated the existence of psychological thresholds. He often used the "iceberg" metaphor for the mind, in that the majority of mental functions were below the surface. It is clear that Freud read Fechner and that from him he derived the "pleasure principle", the notion of psychic or mental energy, a topographical model of the mind, and the idea of a destructive instinct.

Hypnosis played a role in the development of psychoanalysis. Although Franz Anton Mesmer (1734-1815) developed mesmerism or animal magnetism, James Braid (1795-1860) legitimized the scientific study of hypnosis. Jean Martin Charcot (1825-1893) used hypnosis to treat hysteria as a neurologist. Pierre Janet (1859-1947), Charcot's student, further emphasized the psychic nature of hysteria via the role of fixed ideas, impaired memory, and unconscious forces.

In accord with the development and application of hypnosis, the discussion of unconscious mental phenomena was popular in both public and scientific circles in the late 1800s. The existence of the unconscious was well recognized but no one had a clear means of studying it. Also catharsis was a well recognized and frequently discussed topic in German intellectual circles.

Charcot saw hysteria as due to faulty heredity, which when combined with a traumatic event (subjectively determined) and the emotions generated in the trauma, produced somatic manifestations. Yet Charcot's examination of the patient was essentially neurological, looking for hysterical stigmata-zones of anesthesia and hysterogenous zones-that could trigger an attack. Charcot further postulated a link between the ideas and emotions involved in the trauma and the subsequent symptoms, but this was not delineated. Charcot's most important contribution was the recreation or demonstration of hysterical symptoms through hypnosis in susceptible people. Hypnosis was seen as heightened suggestibility, suggesting that there is a range of phenomena between the normal, the hypnotic and the hysterical. Thus ideas and emotions triggered by trauma are separated from associations and are placed in a different state (the unconscious), later emerging in a weakened state of consciousness. Thus emotions and ideas could be transformed into symptoms. Although Janet and Charcot did not know why this occurred, its recognition was an important step. Up to this time the emphasis in psychiatry was in the demarcation of syndromes, based on the delineation of differences in symptoms.

Breuer, through hypnosis, demonstrated a connection between symptoms and forgotten memories, but his technique remained close to Charcot, being focused on symptom relief, while meaning and relationship played little role. Breuer, like Janet, assumed an underlying weakness explained the tendency to dissociation and that psychic elements were associated out of contingency and habit. What was significant about the trauma was it ability to evoke strong emotion. Furthermore, the unconscious appeared selective for certain impressions and hypersensitive to these. Relief required discharge of both repressed idea and affect.

At this time, through the work of Janet, Charcot, Breuer, and others interest in hysteria grew greatly, but important questions remained unanswered. Patients with hysteria remained suggestible, changeable, and challenging. Freud extended the traumatic sequence established by Janet and Breuer back in time and in content. What changed in technique was a shift on the part of the physician from active to passive. Rather than simply a temporal relation between symptoms, symptoms are related through a larger structuring of the mind, that involves normal mental activity as well. Not only did the traumatic idea (wish) and affect need to be made conscious but also the defense against them. Thus conflict resulted in repression, not simply trauma. That conflict was trauma. Freud found that traumatic events were linked to other traumatic events, extending backwards into time. It became clear that there was a linkage of little traumas, because the traumatic moment brought to awareness the existence of conflict and repression. The most recent event (unlike the earlier events that produced conflict) resulted in symptoms, not only because it brought incompatible elements together to create conflict, but also because these had gained sufficient energy and could no longer be contained by just repression. Thus the recognition of both wishes and their prohibitions came to importance. Through this the meaning of the traumas became critical, as well as their momentary awareness to the patient being what caused the defensive reaction. Thus what became important in the trauma was not so much the trauma itself, the feelings engendered, nor

the subsequent lapse in consciousness, but the patient's wish and the reaction to it. This resulted in a dialectic between certain wishes and the reaction of disgust that they aroused. Symptoms were the syntheses of wish and counterforce. This suggested a dynamic structure. The curative technique was not just catharsis, but the necessity of bringing to the surface as many psychic elements as possible, their connection, and keeping them conscious so they could be worked with and not repressed again. Thus treatment moved from a simple uncovering and catharsis to repetitive, emotional and intellectual reconstruction of trauma and its meaning. Therefore, dissociation was not the product of an inherently weak mental structure, but the active product of a personality reacting to conflict. This was not only Associationist in nature, but also dynamic.

Sigmund Freud

Freud (1956-1939) began his study of medicine at the Univ. of Vienna but took eight years to complete his studies due to his interest in neurophysiological research, specifically investigation of the sexual anatomy of eels and the physiology of the fish nervous system. He entered private practice in neurology for financial reasons, receiving his M.D. degree in 1881. Shortly after starting his practice he met Breuer, a successful physician who befriended and supported him. They collaborated on cases, especially the famous case of Anna O. In 1885 he went to Paris to study with Charcot, where he learned the importance of sexual matters in hysterical symptoms. After being disappointed with the results of hypnosis, often managing only temporary and partial cures, he developed the technique of free association (the German is probably more appropriately translated "intrusion" or "invasion"). The idea was to talk openly and freely, revealing all thoughts, similar to the Associationist research technique of introspection. The connections, or intrusions, were not seen as random however, but often led back to childhood, especially sexual memories, which Freud saw as the cause of neurosis in 1886. At the age of 41 in 1897 he came to the realization that many (but not all) of these "memories" were fantasies. This however did not change the basic concept that neurosis was the result of repressed sexual material.

Freud, who was married in 1886, saw sex as degrading and stated that at age 41 he had given it up. About this time he began his self-analysis via dream interpretation. Dream analysis resulted from the positivist belief that everything has a cause. Specifically he believed that dreams were symbolic of unconscious material (which is an ancient idea). His self-analysis eventually resulted in The Interpretation of Dreams. In 1909 he visited the U.S., the mark of his growing international fame. However, in 1911 he broke with Adler and in 1914 with Jung. In the 1920s psychoanalysis became a system of psychology and not just of treatment. In 1933 Hitler opposed Freud's beliefs, but Freud would not leave Vienna until Austria became part of the Third Reich. He died in 1939 in London.

Psychoanalytic Theory

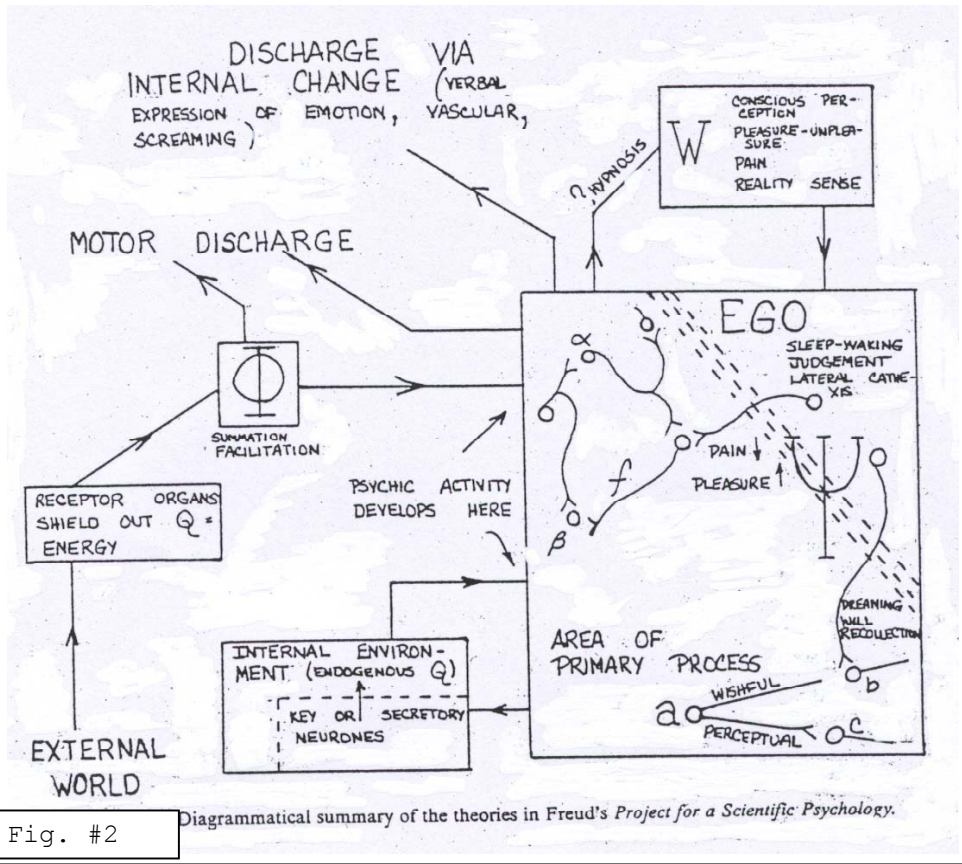
The therapeutic technique that Freud developed flowed from the observation that while having a patient free associate, resistances were often met which lead to the idea of repression of painful material. Effort was then directed at overcoming this resistance. Earlier Schopenhauer had developed the concepts of resistance and repression, but Freud denied knowing this. Furthermore, the relationship with the patient was important, because it

allowed the recurrence of the conflict. This required that the therapist be passively and neutrally observant. He noted that the patient needed to develop a special relationship with the therapist such that feelings for the parents were placed onto the therapist ("transference"). These phenomena had previously frightened Breuer, causing him to abruptly terminate therapy with Anna O. In this process, dreams were considered disguised wish fulfillment, having both manifest and latent content. Although aspects of the symbolization of the latent content may be universal, they nonetheless must only be interpreted in the context of the individual. It also became clear that the uncovering of conflict alone was sometimes not enough to remove symptoms and even made symptoms worse at times.

Through these efforts Freud focused on areas not traditionally studied, or seen as inappropriate, by traditional psychology. In many ways Freud saw himself as more of a researcher and scientist than a clinician. His therapeutic technique was also his research technique, which consisted of observation of the patient's verbal and behavioral communications. Hypothesis as to their significance would be developed and checked with further data from the patient, looking for internal consistency. This method though provided no checks on Freud's analysis of the data however.

Evaluation of Freud's ideas reveals a mechanistic determinism derived from the German Experimental Psychology school in which all mental events are determined and can be studied using positivist and materialist terms. Freud's theory of the mind is essentially neurophysiological. He sought to tie his model with a physiological appreciation of mental phenomena explained as the natural outcome of physical properties, as seen in "Project for a Scientific Psychology" (See Fig #2). Much of this attempt was modeled after properties of physics. Later he moved away from an emphasis on physics, recognizing the restrictions inherent in a mechanical model.

At first Freud developed the topographical model (1895) of the mind with its conscious, preconscious, and unconscious sections (See Fig. #3). The conscious aspects of the mind were seen as the tip of the iceberg and insignificant when compared to the power of the unconscious. The power of the unconscious derived from the presence of the instincts. In



Diagrammatical summary of the theories in Freud's *Project for a Scientific Psychology.*

Fig. #2

the unconscious, instinctual drive energy, forbidden wish, and repeated early trauma combined to demand expression. Connections or associations are made in the unconscious not through logic, but through opposites, substitutions, condensations, without attention to time or space. Drives have aims (i.e., satisfaction) and objects (things that satisfy). The actual German term, usually translated as instinct, gives a meaning closer to "driving force" or "impulse", rather than the connotation of innate instincts of animals. These are seen as aimed at reducing internal stimulation through behaviors, such as eating, sex, etc. He recognized two types (although he acknowledged that there might be more)- life instinct, which is concerned with self-preservation and survival of the species and is manifest as energy (libido); and death instinct, which is destructive and aggressive and maybe directed either inwards or outwards. Initially the life instinct was seen as far more important in mental life than the death instinct, that sex was more important than aggression, but he later believed that they were equally important. The unconscious operates on the pleasure principle via primary process while consciousness operates via the reality principle and through secondary process. Thus conscious mental activity is the compromise between unconscious drives and wishes and the defenses against them. The preconscious is where material not actively repressed may be easily recalled.

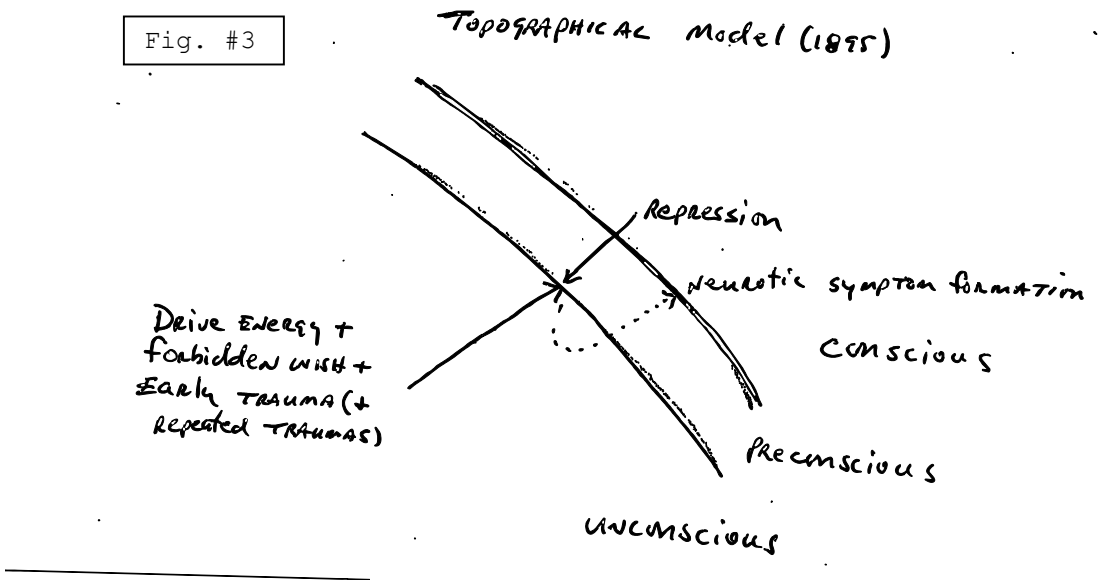
Trauma played an important role in the Topographical Model. Initially Freud sought the objective circumstances of the trauma, but he soon realized that it was the subjective meaning, the wish and the fantasy that mattered. The wishes were believed to represent biological forces. With the questioning of the role of traumas, more emphasis was placed on infantile wishes and psychosexual development.

The realization that much of the Ego is unconscious resulted in his third, and final model, the Structural Model. The relationship between the conscious and the unconscious changed with the development of the concepts of Id, Ego, and Superego. All three of these have inborn elements, but the Ego and Superego are largely structured by experience. The Id is the most primitive and inaccessible part of the personality. It contains the instinctual forces that determine behavior, libidinal and aggressive drives/wishes. The Id operates on the pleasure principle, reducing tension (libidinal energy) that arises in the id. Reduction of tension requires interaction with the surrounding world, resulting in the development of the Ego.

The Ego represents reason and rationality. The German word *Ich* which is traditionally translated as Ego, more closely resembles the subjective I. Ego represents the executive agency, with controlling and regulatory functions (defenses), reality testing, mediating between the world, the Id, and the Superego. The Ego operates based on the reality principle in order to check the demands of the Id until they may be properly met. The source of energy for the Ego is controversial and changed with time. Initially the Ego derived its power from the Id in working to satisfy id demands. This gives rise to the metaphor of horse and rider. It also appears though that the drives of the Id are opposed by the Ego with its own energy through repression and symptom formation.

The Superego develops through interaction with the parents and their teaching of rules through reward and punishment. The Superego is the agency of conscience that sets internal standards, using guilt and shame/pride and satisfaction. The Superego has two segments: the Ego Ideal, which is a set of standards, which contain desired, rewarded prescriptions, and the unconscious

Fig. #3



conscience which enforces standards through negative prescriptions. Thus the Superego contains both restrictive rules and ideal goals. Formation of the Superego allows self-control.

Therefore, the Ego is caught between the opposing Id and the Superego, while trying to navigate reality. Too much pressure on the Ego results in anxiety. Freud recognized three types of anxiety: objective (that arises from actual dangers in the real world), neurotic (arises from the danger of instinctual gratification and the ensuing punishment), and moral anxiety (arises in relation to conscience in response to thinking about or doing something forbidden by the conscience). Anxiety increases tension, which then the person strives to reduce. The Ego reduces anxiety through defense mechanisms (unconscious denials or distortions of reality). Defense mechanisms include identification, repression, sublimation, projection, reaction formation, fixation, and regression.

Freud is one of the first theorists to stress development, feeling that the adult personality is essentially formed by age 5 years. Childhood is divided into a series of psychosexual stages, each focused on the satisfaction of sensual pleasure by means of stimulating a specific erogenous zone. Inappropriate stimulation (either too much or too little) results in a personality fixated on that zone. The stages are the oral, the anal, the phallic, which leads into the Oedipal complex that culminates in development of the Superego and a period of sexual latency. With the onset of puberty the child enters the genital phase.

The basic premises of psychoanalysis are therefore first psychic determinism. This prescribes that behavior is not random, but has psychological causes. Furthermore, it recognizes the existence of a dynamic unconscious. Behavior arises or is motivated fundamentally out of wishes, needs, or instincts. It is therefore spontaneous and not dependent on

external stimuli. Essential to the understanding of behavior is the recognition of psychic conflict in which one or more psychic needs come into conflict and that behavior is largely the result of compromise formation. Psychoanalysis takes a genetic point of view, meaning that behavior is shaped by developmental sequences and that early experience is formative for later experience. In addition human behavior is adaptive and must confront environmental ("reality") demands. Finally all behavior is multiply determined, meaning that it gratifies more than one demand. Later psychoanalytic concepts have taken one or more basic elements of Freud's theory and altered them. The primary outgrowths of Freud's theory include Ego Psychology, Object Relations Theory, and Self Theory.

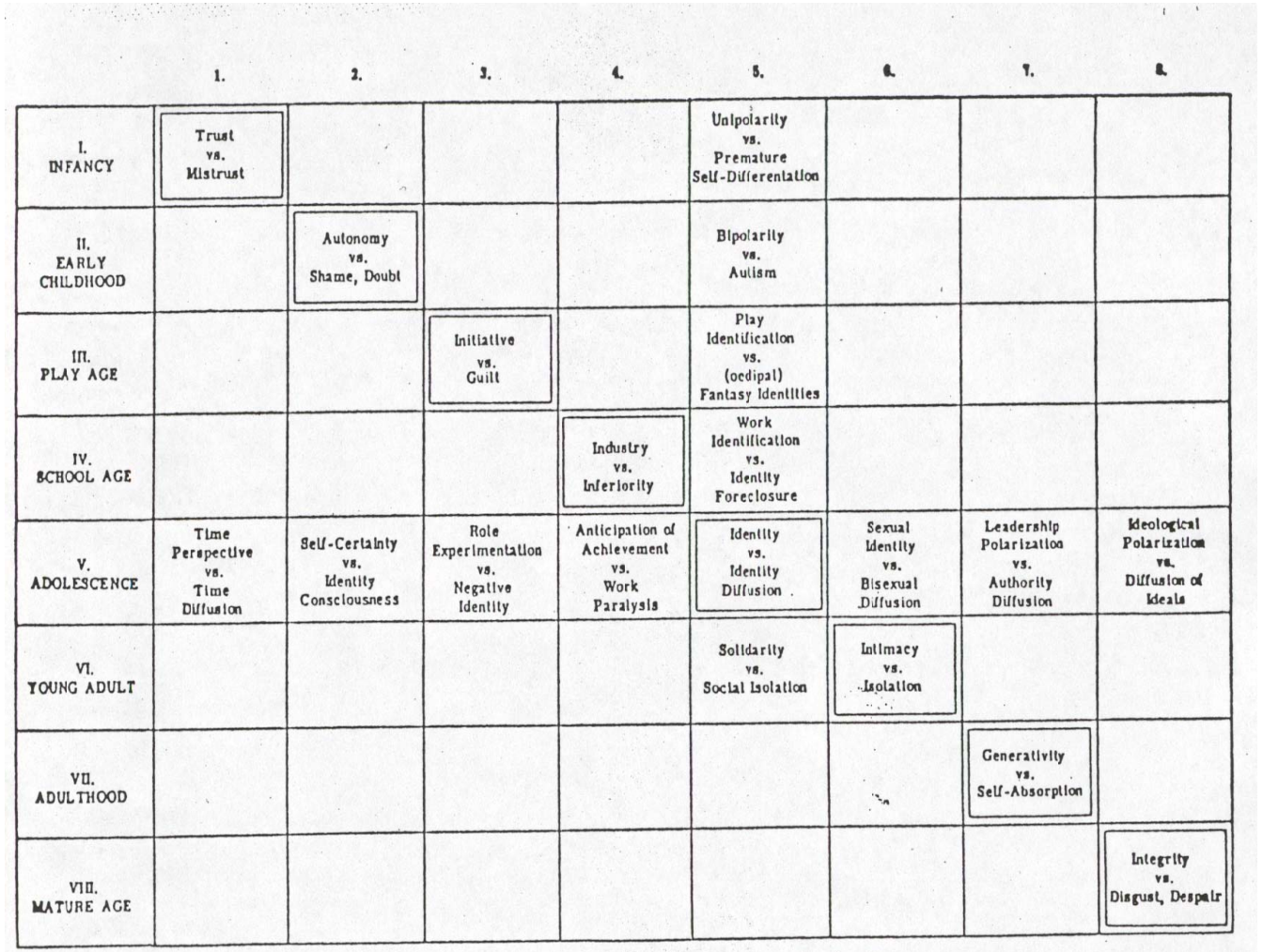
Ego Psychology

Ego Psychology emphasizes the Ego and the Superego in controlling the Id and in adapting to the environment. In Ego Psychology the focus became how drives are dependent on cues and stimuli from the environment.

Important people in the development of Ego Psychology are Anna Freud (1895-1982) who wrote The Ego and the Mechanisms of Defense and Heinz Hartman (1894-1972). In Ego Psychology and the Problems of Adaptation Hartman describes that parts of the ego are not due to conflict, but are autonomous. Erik Erikson (1902-1994) expanded the concept of developmental stages from just dealing with biological drives, into dealing with cultural and interpersonal factors (See Fig. #4). Each stage has a task which is not just psychosexual but psychosocial. Movement between stages is not smooth, but epigenetic-step-wise. The ego develops through the process of identification, introjection, resulting in ego-identity, which presages object relations.

Erich Fromm (1900-1980) expands on the Freudian Oedipal complex as the root of neurosis to include a struggle with the parent's authority and the child's fear of this authority and eventual submission to it. Since humans are social and must function within a society, they must give up some of their own will to that of society. Societies are historical, political and economic entities that must respond to objective realities and limitations. In order for a society to function within these limits it needs people who will function within that society. These people "must acquire the kind of character which makes them *want* to act in the way they *have* to act as members of the society... They have to *desire* what objectively is *necessary* for them to do. *Outer force* is to be replaced by *inner compulsion*, and by the particular kind of human energy which is channeled into character traits" (Fromm 1944:381). The goals of society are gained at the relative expense of the individual through socialization, which involves the development of some potentials and the restriction of others. This process first occurs in the home. From this perspective, guilt is the fear of displeasing others whom one fears (Fromm 1944:381-382). Human existence is both dependent upon and restricted by society. Therefore, aggression, as in suicide, results from either a loss of structure or from being overwhelmed and made helpless by society (Fromm 1973:331). As can be seen in the above Ego Psychology recognizes not only inter psychic conflict, but social conflict and the relation between the two.

Fig. #4



	1.	2.	3.	4.	5.	6.	7.	8.
I. INFANCY	Trust vs. Mistrust				Unipolarity vs. Premature Self-Differentiation			
II. EARLY CHILDHOOD		Autonomy vs. Shame, Doubt			Bipolarity vs. Autism			
III. PLAY AGE			Initiative vs. Guilt		Play Identification vs. (oedipal) Fantasy Identities			
IV. SCHOOL AGE				Industry vs. Inferiority	Work Identification vs. Identity Foreclosure			
V. ADOLESCENCE	Time Perspective vs. Time Diffusion	Self-Certainty vs. Identity Consciousness	Role Experimentation vs. Negative Identity	Anticipation of Achievement vs. Work Paralysis	Identity vs. Identity Diffusion	Sexual Identity vs. Bisexual Diffusion	Leadership Polarization vs. Authority Diffusion	Ideological Polarization vs. Diffusion of Ideals
VI. YOUNG ADULT					Solidarity vs. Social Isolation	Intimacy vs. Isolation		
VII. ADULTHOOD							Generativity vs. Self-Absorption	
VIII. MATURE AGE								Integrity vs. Disgust, Despair

FIG. 1. Erikson's life cycle of stages. (Erikson E: Childhood and Society. New York, WW Norton, 1950).

Object Relations Theory

Melanie Klein (1882-1960) focused on the oral stage, developing substages: Paranoid position, with an omnipotent self and hostile other and the Depressive position, with a dependent and helpless self and an essential other. Drives become the amalgam of Id wishes, internalized objects, and affect states.

In psychoanalytic Object Relations Theory representations of the self and of significant others ("objects"), are seen as lying within the ego (Jacobson 1964 and Mahler 1968). "By *self* we mean the total of one's own person, physical and mental, as distinct from other persons (objects) outside oneself" (Maltsberger and Buie 1980:63). Conceptually the mind consists of an *internal world* (the ego, the id and the superego, much of which is unconscious, but which enables subjectivity) and the *inner world* (equivalent to the representational world, the visual stage of the mind). On the stage are seen *images* of the self and others, which are a specific view at a particular time and situation, and *representations*, which "are more enduring schemata than images, constructed by the ego out of the multitude of realistic and distorted images which the individual has had at different times" (Maltsberger and Buie 1980:63). Not all images and representations are conscious. "The *sense of self* is therefore the subjective, conscious consequence of balanced structures, representations, and affects related to and under the control of the ego" (Maltsberger and Buie 1980:64). The Ego can be seen as consisting of an "action self" and other "sub-selves' acquired through experience by such processes as introjection, identification, loving imitation, and the solution of various basic conflicts" (Litman and Tabachnick 1968:76).

Difficulties during the development (especially the period Mahler describes as separation-individuation) may result in defects of Ego development (such as difficulty orienting to the external world, understanding cause and effect, and controlling dangerous wishes), which impair an individual's ability to adapt (Litman and Tabachnick 1968:76). Situations that overwhelm the person's ability to function and adapt can cause a fragmentation of the Ego.

It is not unusual in patients to see that their inner life is often divided between a weak and helpless sense of self and a cruel, contemptuous, inner, but alien presence (Maltsberger and Buie 1980:64). The patient may not be able to tolerate aloneness due to difficulty in or failure to incorporate an image of the loving and comforting mother/other. Aloneness or the threat of aloneness reminds them of the anxiety and sense of abandonment experienced during separation. Having had to endure the powerlessness and incompetence of early childhood alone results in difficulty handling loss and separation later. Failure to identify with the good mother may result also in intense feelings of helplessness and worthlessness as well as inability to tolerate aloneness, such that subsequent failure or loss produce a sense of worthlessness and even self-hatred.

Self Theory

Heinz Kohut (1913-1981) argues that both the infantile grandiosity/exhibitionism along with idealization of the parent results in self-object relations, which form the basis of personality development.

Healthy development depends on the mother's capacity for empathy, allowing herself to be idealized as well as idealize. It is the breakdown of self-development that results in aggressive and sexual drives (disintegration products) which leads to deficits in the self, causing conflict. Therefore, Self-Psychology reverses the direction of many of the structural relations held in traditional psychoanalysis. There is less emphasis on drives per se as autonomous, but rather their linkage to objects and less focus on mechanical energy.

Behavioral (Cognitive-Behavioral)

Behavioral Models:

1) Strict Behavioralists-Pavlov and Thorndike initiate learning theory with the separate and simultaneous recognition of the "Law of Effect" or "Reflex Conditioning." Thorndike's ideas are a direct outgrowth of Associationism, but focused on the association between a given situation and the response, not internal associations. He allowed for some mentalistic concepts, such as satisfaction. Pavlov (1849-1936), at essentially the same time came up with the similar notion of conditioned reflexes. His work explored and developed the notion of conditioning and then later extinction. Pavlov recognized that in humans words can be conditioned stimuli, thus there is a primary signal system in animals made of physiological responses and a secondary signal system-language in humans. Regression in mental illness involves movement for the secondary signal system to the primary. In treatment the secondary signal system can influence the primary system.

Actual behaviorism began as an acknowledged revolt against structural/functional psychology and psychoanalysis by Watson (1878-1958) in 1913. He stated that the older psychologies must give way to a psychology based solely on observable behavior and studied in terms of stimulus and response. He rejected all mentalistic concepts (thus an anti-mind model) such as consciousness, seeing it as in many ways equivalent to the notion of soul, in other words unprovable. His ideas had three main sources: 1) animal psychology, 2) Functionalism, and 3) Objectivism/mechanism.

Animal psychology moved from a focus on subjectivity and analogy with humans via introspection to the direct use of objective observation. Thorndike and Pavlov are examples of the influence of animal psychology on behaviorism. Fuctionalists after Titchener, like Cattell, had previously stressed the need for increased objectivity and the abandonment of introspection. The need for objectivity can be traced to Descartes and Comte (1798-1857), the founder of positivism, which states that there are knowable facts based on what is observable.

Watson continued the empirical/Associationist mechanistic/atomistic approach to psychology, seeing stimulus-response associations being the basic elements of behavior. Despite the call for the abandonment of all mentalistic ideas and introspective techniques, he did allow for the use of verbal reports, saying that verbal responses were observable. Essentially a person is seen as a "stimulus-response" machine. He did see behaviorism as the study of all behavior, human and animal, which could be broken down into s-r units. Responses can be both learned and unlearned (i.e., innate) as well as explicit (overt and observable) or implicit (inner organism responses such as pulse change, glandular secretions, etc.). Complex responses that involve

movement through time and space are called acts. Stimuli may be either simple or complex, but complex stimuli can be analyzed into simpler stimulus units. The hope was that the analysis of s-r units would lead to behavioral laws.

The brain is seen as a "mystery box." Watson became an extreme environmentalist, seeing all behavior as learned and that there are no inherited capacities, temperaments, or talents. There are not instincts. He emphasized learning, and although he recognized conditioning, he saw practice as far more important. Emotions are bodily responses to stimuli, thus implicit behavior. Emotions consist of three unlearned responses-fear, rage, and love. Thought, too, is implicit motor behavior in that thought starts as talking to oneself accompanied by tiny vocal motor movements, but eventually becomes removed from the motor response through conditioning. Watson's contributions to psychology are part of the larger cultural movement from idealism to pragmatism and realism in the early 20th century. Watson's theory is criticized because it neglects meaning, free choice, as well as innate structuring of behavior.

Edward Chace Tolman (1886-1959) expanded Watsonian Behavioralism to include the notion of behavior as purposeful. He also developed the concept of intervening variables between the stimulus and the response, specifically: physiological drive, heredity, previous training, and age (point in development). Thus s-r becomes s-o-r, with o=organism.

Clark Leonard Hull (1884-1952) saw behavior also in purely atomistic and mechanistic terms, but did develop the concept of frame of reference for behavior. He also saw the importance of intervening variables, especially drives but saw them as internal deviations from a biological optimum that then acted as a stimulus for behavior. Hull saw behavior within an evolutionary context.

Burrhus Frederick Skinner (1904-1990) emphasized strict behaviorism, using inductive techniques to avoid *a priori* theoretical bias, which was descriptive and focused on responses to stimuli. Skinner is important for the development of operant conditioning, which is different from respondent behavior. In the later an unconditioned stimulus is tied to a conditioned stimulus to produce a response, such that the unconditioned stimulus subsequently produces the response. In the former random behavior is tied to a conditioning reward, which then increases it frequency. He felt the later to be much closer to what happens in real life. Through operant conditioning he studied the effects of different schedules of reinforcement. He also studied verbal behavior and language acquisition. Out of operant conditioning developed the concept of behavior modification. Skinner continued these ideas, seeing people not as sick, but as having failed to learn appropriate adaptive responses. Maladaptive behaviors are solely the result of reinforcing environmental events and internal processes such as expectations and self-reinforcing thoughts are discounted.

Joseph Wople (1915-1997) used these ideas to develop a number of therapeutic techniques: reciprocal inhibition, systematic desensitization. However, Wople utilization of imagination and imagery implies recognition of internal processes.

2) Cognitive and Social Behaviorists recognize that learning distorts the perception of new experiences, but unlike strict behaviorists, the cognitive perception of events is important. This also varies from psychodynamic theories that focus on the unconscious meaning of perceptions. Thus internal events-thoughts, beliefs, and perceptions are important in that they influence learning and result in a unique relationship between each

person and their environment. Both an appreciation of the environment and the unique individual variables, as well as how these two interact, are important to understanding a situation. The interaction between environmental factors and individual factors is studied through the appreciation of an individual's distinct cognitions and expectations. Two important concepts: behavior potential-the idea that behaviors that more frequently led to positive reinforcements in the past are more likely to happen again; and expectancy-which is the person's probability estimation that a certain reinforcement will follow a certain behavior. The two are tied together because the level of a behavior's behavior potential depends on the person's expectancy level. One difficulty in understanding abnormal behavior has been why certain behaviors remain common (have a high expectancy level), but rarely leads to positive reinforcement. In actuality the environment often rewards these behaviors. People develop generalized expectancies, such as the belief as to whether they or the environment control reinforcement (locus of control). Bandura has developed social learning theory with such concepts as vicarious conditioning and self-reinforcement systems. Thus people learn pathological systems and can reinforce them just by thinking about them, which may be an even more powerful reinforcement than external reality. Self-reinforcement is often tied to self-expectations (which are often unrealistically high and explicit) with failure to meet these resulting in self-denial or even self-punishment. Fictional contingencies and fantasized consequences may come to control behavior more than real external social relations. Thus through direct observational learning maladaptive patterns develop, often relating to expectancies of harm and subsequent fear and a sense of inability to cope with the anticipated harm, leading to lowered self-evaluation. Defensive behaviors result, which may reinforce harm expectations and lowered self-evaluation. Much of the observational learning comes from observing parents maladaptive patterns. These dysfunctional expectancies and self-evaluation have become the center of social learning theory. These are primarily cognitive processes that may then lead to affective responses.

The work of Albert Ellis (1913-) stresses that effective cognitive learning can not take place in the face of highly aroused emotions, giving primacy to emotions at these times. Therapy consists of learning improved cognitive control methods. Learning these may occur through observational learning aided by self-verbalizations.

Efforts have been made to combine social learning theory with both psychoanalysis (as in the work of Dollard, Miller, and Mowrer) and with biology (as in the work of Eysenk, Meehl, and Millon).

Today most of behavioral psychology is of the cognitive/social learning variety, see strict behaviorism as too simplistic and removed from actual life. Therefore behavioral psychologists, especially social learning theorists, see psychopathology as complicated patterns of learned, maladaptive responses. Personality is the result of social experiences through learning during the early formative stages of childhood. Explanation of behaviors, cognitions, or affects is best done through reference to the social experiences in which they were learned, not through genetic, maturational, or conflictual processes. This emphasizes process over content.

The basic tenets of cognitive/social learning theory include learning principles, methods of behavioral control, family communication styles, the unique nature of early learning, and social reinforcement.

Learning Principles:

1) Contiguity-environmental elements that occur together or immediately sequential will become associated. Re-occurrence of one element will evoke the other. This relates to both response learning (the association of stimulus and response) and expectancy learning (the association of stimulus with stimulus).

2) Instrumental learning (operant conditioning)-the organism eventually learns to discriminate between stimuli that result in pain and those that result in pleasure. This involves expectancy learning such that stimuli that are associated with painful stimuli are avoided, while those associated with pleasure are sought. This results in intentional behavior to seek pleasurable reinforcement. The environment is actively manipulated to obtain reinforcement. Thus initial learning may be either the result of intentional actions or accident. Series of instrumental responses are linked into coping strategies (complex series of manipulative acts used in relation to certain people and situations to avoid negative reinforcement and obtain positive reinforcement).

3) Vicarious learning-the child's ability to acquire whole sequences of behavior through observation and practice. Thus exposure to social models results in incidental learning, while direct parental effort and the child's own instrumental behavior all result in learning.

4) Implicit learning-the ability to arrange experiences and symbolic elements into unique patterns of association.

Abnormal learning is the result of the adopting of parental aversions, irritabilities, attitudes, anxieties, and interpersonal styles by children. One of the most important elements of early learning is parental attitude and feelings toward the child, determining whether or not the child learns a sense of acceptance or rejection. Rejection results in a deep and pervasive sense of isolation in a hostile world. Instrumental learning results in various self-protective strategies, such as avoidance, apathy and indifference, imitation of parental rejection and scorn directed towards others. Other parental attitudes besides rejection are learned such as being seductive, manipulative, and exploitative, etc. (Lacks a concept of whether or not children learn certain things at certain times-a preset developmental sequencing of learning).

Methods of Behavioral Control:

Another element in childhood learning is the method of behavior control utilized. Punitive methods may result in overly obedient and hesitant controlled behavior, while at the same time being highly critical of others. Inability to satisfy parental demands results in instrumental anxiety, a sense of hopelessness and helplessness, avoidance and withdrawal. Contingent reward methods may result in an excessive need for social approval and dependency. Inconsistency in method, resulting from irregular, contradictory, and capricious parental behavior results in the inability of the child to learn consistent, unconflicted strategies, which results in withdrawal and noncommitment. Protective methods prevent the development of normal competencies, a sense of inferiority and frailty. Self-observation of inadequacies and failures confirms these impressions. Indulgent methods result in strategies that are inconsiderate of others, demanding, tyrannical, uncooperative, and even anti-social behaviors.

Family Communication Styles:

A third factor is family communication styles. Families develop their own patterns of communication and interaction and unless these are rational and reciprocal they may be ineffective in the outside world. One example is the "double-bind" in which the child is contradictory messages and expectations, which prevents successful satisfaction.

The Nature of Early Learning:

Early learning is persistent and durable. Learned behaviors can be changed or eliminated. One method for doing this is extinction which occurs through the repeated exposure to situations similar to the original learning situation, but which provide opportunities for alternative learning and outcomes. Yet there are a number of factors that make early childhood learning very difficult to extinguish. Much of early childhood learning, especially prior to age 4 or 5 is pre-symbolic, which results in an inability to reproduce verbally later. There is also a deficiency in the ability to recognize logical relationships between events and objects, thus learning is rather random. This further makes reproduction of the early learning situation difficult because of the unawareness of elements in the environment that are important stimuli but which lack logical connections. Early learning results in the differentiation and association of various elements into categories. Thus stimuli may be quickly and broadly generalized which makes extinction difficult.

Social Reinforcement:

Social reinforcement occurs through several means within the context developed by significant others. Repetitive experiences within the context of the family greatly contribute to learning. Sequences of interactions become established in the family through reciprocal reinforcement. In the family context, the family quickly develops an image of the child based on distinct elements, which then come to be expected. This is social stereotyping, such that behavior different from what is expected may be discounted and not reinforced.

Furthermore social learning is cumulative, such that previous learning guides, shapes, and distorts subsequent events and learning. This results in the development of a system of threat expectancies, which may lead to misinterpretation of the environment usually in a self-protective manner. Stimulus generalization, the tendency to interpret stimuli as if it were previous stimuli, results in behavioral generalization, the tendency to react to new stimuli as if it were old stimuli (transference). Behavioral generalization may elicit reinforcing responses.

Gestalt/Existential/Humanist Psychology

Gestalt psychology began as an attack on Wundtian atomistic psychology. The basic concept was that the combination of sensory elements produced something more than the sum. Kant (1724-1804) in opposition to the British Empiricists felt the mind actively took sensory elements and combined them into a meaningful whole, quite differently than the passive process of association. Early Gestalt psychologists held that the act of perceiving was as important as the content of what was perceived. Experiments in physics and physiology supported this, for example in music a melody evokes a response more than just a series of notes. William James was an early influence on Gestalt psychology. Goethe and the philosophy of phenomenology, the unbiased

description of immediate experience, also had an influence. Physics, and the investigation of force fields and wave theory, as opposed to atoms also had an influence. The early German Gestalt psychologists began as Wundtian students [Max Wertheimer (1880-1943), Kurt Koffka (1886-1941), and Wolfgang Köhler (1887-1967)]. With the rise of Nazis in Germany Gestalt psychology immigrated to the U.S. They developed principles of perceptual organization and the notion that learning/problem solving required situational evaluation and mental sequencing, rather than simple trial and error as Behavioralists argued. Furthermore they argued that learning occurred more effectively when the elements of learning were organized into meaningful wholes rather than simple practice and repetition. Kurt Lewin (1890-1947) the originator of Field Theory is probably the best known of Gestalt psychologists. Gestalt psychology recognizes consciousness and urges it's study while recognizing that the methodology can never be as precise as in behaviorism.

Existential Psychiatry developed in relation to Kraepelinian objective/descriptive psychiatry. The psychiatry of Kraepelin and the concept of dementia praecox were not helpful in the understanding of paranoid states. Two separate paranoid processes were seen, which developed psychosis and delusions of either a slow insidious or abrupt onset, but there was often no marked deterioration and lived essentially normal lives. Objective criteria did not seem to distinguish these two types of paranoia, but their subjective experience did. Karl Jaspers (1883-1969) noted that in those of acute onset there was often a sudden, foreign, vivid physical experience that preceded and formed the nucleus of the latter delusions. The other could be seen as growing out of the person's previously warped personality. The experience of those with sudden onset was not understandable. He devised the concept of "inward understanding", the ability to go inside the patient's experience and understand it. This could occur in the insidious forms, but not the abrupt. The importance of this is the recognition that phenomena, which appear essentially similar to the outside observer, have markedly different internal subjective experience. This places an emphasis on inner, subjective experience and the ability to share in that experience. In return the physician directly expresses their feelings to the patient. Thus the emphasis becomes an emotional *contact* between physician and patient, which is seen as healing. The physician must empathize with the pathological part of the patient, not just their healthy side. The doctor must seek empathy with the patient, because the patient is usually incapable of initiating the process.

There is still an acknowledgement of dissociated psychic elements, but the emphasis is not on understanding them, but sharing them. Through this process the distinction between normal and abnormal blurs and the distinction is seen as artificial and socially constructed. Conflict within therapy results from a failure of empathy.

Humanistic Psychology developed in the 1960s also in opposition to psychoanalysis and behaviorism. Like Gestalt psychology Humanist psychology recognizes the existence of consciousness and the wholeness of human nature and conduct. It also emphasizes the role of free will, individual creativity, and spontaneity in behavior. Humanistic psychology draws on Gestalt psychology and certain neo-Freudian psychoanalysts, especially Ego Psychology, that de-emphasizes biological and psychological determinism. It developed in the U.S. at a time of dramatic social change and a cry against dehumanizing elements in society. They see most of the vast amount of research data coming from behavioral psychology with its atomistic s-r approach as having little to do with the understanding of human nature, visualizing as it does humans as

stimulus response machines. They also opposed the reductionistic nature of psychoanalysis. Humanistic psychologists emphasize the uniquely human aspects of experience such as love, hate, fear, humor, affection, and the meaning of life. The development of Humanistic psychotherapies was an important influence in the field and many of these draw on the work of Lewin. Important in humanistic psychology are:

Abraham Maslow (1908-1970) who developed the concept of a Hierarchy of Needs: 1) physiological needs, 2) security and safety needs, 3) belonging and love needs, 4) esteem needs, and 5) self-actualization. His researched focused on the study of successful people, those felt to have achieved self-actualization.

Carl Rogers (1902-1987) developed client-centered psychotherapy, developing a theory of personality very similar to Maslow. It differs in that he worked with disturbed individuals rather than normal individuals. He does not recognize unconscious or developmental determinism. What is important is subjective experience. People are primarily motivated by a personality force toward self-actualization, which is an innate urge that may be either helped or hindered by early experience. Most important in this is the mother's regard for the child; ideal is the presentation of *unconditional positive regard*. The therapy has become quite popular and the theoretical approach has also received support. It is similar in its emphasis to certain Object Relations psychoanalysts, specifically Winnicott and Kohut.

Interpersonal Psychiatry

The school of Interpersonal Psychiatry begins with the basic assumption that sickness is affected by social phenomenon. The two great originators are Adolph Meyer (1866-1950) and Harry Stack Sullivan (1892-1949).

Meyer stressed moving below the surface, recognizing that some people can effectively interact socially, yet be in severe turmoil underneath. Humans are seen as fundamentally social. Both severe social circumstances and the more mundane, daily events of life mattered. While there may be ultimate causes as to why a social event has a profound effect on a person, Meyer was not particularly interested in these distant causes, but rather the role of more immediate life events. Meyer utilized the life chart in the hopes of being able demonstrate relationships between life events and mental illness, while using such concepts as habit to explain behavior (similarly to Kraepelin). People displayed "modes of adjustment" some of which were more effective than others. Some modes of adjustment like withdrawal were less adaptive and resulted in psychopathology. Thus illness was the result of bad circumstances being met with poor modes of adjusting. He recognized the importance of vicious cycles and self-fulfilling prophecies.

Similarly social intervention could also improve a person's mental situation. Therapy consisted of pragmatically oriented common-sense discussions that would come to terms with "fundamental sore points" and discuss direct solutions. It was important to address not only the individual's style of coping, but also aspects of the environment that could be changed. This connected with contemporary efforts of public health. Meyer is responsible for initiating the socially oriented attitude of American psychiatry that subsequently influenced other schools of thought-that external factors are as important as internal factors.

Sullivan, initially trained in psychoanalysis, emphasized the role of immediate social factors in psychopathology and how to manage these

psychotherapeutically. He especially emphasized the interactive elements in psychotherapy. Projection became central to interactions, being both unconscious and ubiquitous. Transference like phenomena occur on an everyday basis in all interactions and greatly affect the nature and course of interactions (*parataxis*). People were seen as "someone-in-relation-to-others." The personality was shaped by its early adaptation to the important, immediate people in the environment, similar to the understanding developed in Ego Psychology. In turn later relations were shaped to recreate these early experiences. Psychopathology lays not so much in an individual or in the environment but in the interaction of the two. Thus the interpersonal communication of emotions, expectations, and evaluations of others result in circular patterns of pathology, which are reciprocally reinforcing. Sullivan's understanding of early development focused on the interaction between mother and child, for example the role of mother's anxiety in determining anxiety in the child. This led into a developmental theory, emphasizing the development of concepts of self and modes of experience. He is especially important for his understanding of peer relations in adolescence.

More recently interpersonal psychiatry has become identified with the work of Klerman, which focuses on current social functioning, patterns of interpersonal interaction (for example dominance vs. submission, dependency vs. autonomy, and intimacy vs. avoidance).

Conclusion

Psychiatry is considered a preparadigmatic science, in that there is no one central paradigm. It is rather considered prescriptional, meaning that it is dominated by oppositional trends, for instance the mind and body or *psyche* and *soma* debates. As seen from earliest times there are trends that have continued into present. Modern neuropsychiatry can be traced to the humoral theories of Hippocrates. On the other hand "Psychodynamics, as used in contemporary psychiatry, deals with the quality of interpersonal relations, recurrent conflict patterns, and, ultimately, the *meaning* of actions and experiences" (Hendin 1991:1150). Meaning has both cognitive and affective components. Meaning has sociocultural determination. From earliest times efforts have been found to integrate these ideas, as in the assumed relationship of rational thought to passions, where ration is seen to control emotions and passion. Depending on the historical climate, emphasis has varied. Medieval thought saw all things in relationship to God. Illness, especially mental illness was based on man’s relationship with God. Yet through this time humoral treatments and beliefs remained. Effort was put forth to bring humoral ideas into line with the Christian worldview. With the reappearance of Aristotle in the west and the growing importance of observation and empiricist thought, a deistic model was questioned. This gradually gave way to Empiricist thought and an increasing understanding of biology and anatomy. Mental illness took on syndromal character and was seen as a disorder of the brain. Paradoxically at this same time with the growing rationalism and humanism, witchcraft beliefs became the strongest. Throughout this time the plight of the individual with mental illness, especially if not an elite member of society, had changed little. They were treated with varying degrees of fear, scorn, and torment. Movements toward humane treatment reoccurred through history. Originally coming from the east and Islam, first Church based monastic care occurred. In the 18th century with growing reaction against the absolutist monarchies of Europe, liberalism and

democracy, argued that mental illness was the condition of an oppressive authoritarian society. Etiology became tied to society and treatment to political liberation. When combined with Protestant ideals, especially through Quaker beliefs, Moral Treatment arose and spread through Europe and North America. Again, somewhat parallel to the time of the witchcraft frenzy, this was also the time of increased stigmatization of mental illness. As a consequence of the tremendous societal and demographic changes that were occurring in the 16th through the 19th centuries, with increasing urbanization, capitalism, and the industrial revolution, greater percentages of the population became marginalized as the poor, the criminal, and the insane. They provided the symbolic focus against which middle class values were organized. The Protestant work ethic became increasingly central to morality. The psychiatric profession played a role in the increasing isolation of the mentally ill through the medicalization of social unrest and the growth of the asylum movement. Moral Treatment was soon overwhelmed and the plight of the individual with mental illness again became one of isolation and degradation.

Through the growth of medicine and science and increased effort to understand and alleviate mental suffering occurred. This effort again had two poles – the somatic and the psychic. Out of these have arisen the various modern schools of psychology and psychiatry. With all the advances in neurobiology and psychodynamics, one can still question to what degree has the life of the individual with mental illness improved. Continuing stigma and economic factors continue to limit the relief of their suffering. Present efforts to integrate models of the mind hold great promise for increased understanding of behavior, but to what degree the fundamental causes of mental illness will be addressed by these efforts is unclear.

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