

Review Article

# How Attribution Theory Helps to Explain Psychiatric Nosology

Mario Dominic Garrett\* 

School of Social Work, San Diego State University, San Diego, USA

## Abstract

By exposing the assumptions made about dysfunctional behaviors, treatment options can be better understood. Belief in the cause of a disorder determines what is done to alleviate it. By applying attribution theory to psychiatric nosology—categorization of psychiatry dysfunctions—attributorial bias of clinicians can be shown. Primarily clinicians are biased to diagnose a patient's dysfunction as internal, stable and uncontrollable. In reality most dysfunctions are periodic/cyclical and therefore unstable and through behavioral therapy, most are controllable. By changing the attributions, a different meaning of mental illness emerges. Historical evidence illustrates how the attribution of aberrant behaviors has changed which consequently resulted in different theories and treatments. From 'spirits that invade the body' of the Middle Ages to the 'imbalance in the nervous energy' of the Enlightenment, beliefs dictated how people were treated. From the punitive treatments of the Middle Ages to the 'Moral Treatment' of the Enlightenment. With the attribution of biological determinism, a new age of psychopharmacology was ushered in. All these treatment fads rely on different attributions rather than on scientific evidence. With Mad Studies promoting the perspective of the patients who use the mental health care system, the attribution of disease changes again, and a greater emphasis is placed on the external, unstable, and controllable aspects of madness. According to the theory 'Power Threat Meaning Framework,' madness is a mental strategy that has become mismatched with its current context. The context determines the expression of dysfunction. Future treatment requires a population-based approach that offers social prescribing, short-term respite programs, and broad community-based cognitive-behavioral therapies. The objective is to focus on alleviating the anxiety and distress experienced by the individual and to aim for personal and functional recovery rather than to aim for a purely clinical recovery.

## Keywords

Attribution, Nosology, Moral Treatment, Anti-Psychiatry, Karl-Jaspers, Mismatch

## 1. Introduction

Attribution Theory emerged with the work of the social psychologist Fritz Heider in the 1940s and 1950s. The theory provides a framework for understanding how individuals explain causality. [1] There are two types of attributions. One is used to explore the causality of an outcome while the other

focuses on the disposition of a person. Both types involve attribution of causality on the basis of the dimensions of internal/external, stable/unstable, and controllable/uncontrollable, [2] among others. Causality of an outcome refers to what caused an event to occur, while disposition of a

\*Corresponding author: mgarrett@sdsu.edu (Mario Dominic Garrett)

**Received:** 17 July 2024; **Accepted:** 5 August 2024; **Published:** 20 August 2024



Copyright: © The Author(s), 2024. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

person refers to why a person behaves in a certain way. Both are part of the same process of perception [3] as people are 'naïve scientists' and they intuitively perceive causality. [1] Attribution forms an inherent feature of how our brain perceives the world.

A psychiatrist approaches a patient's clinical expressions with beliefs about the *causes* and *effects*. Their beliefs evolved from their own history, their culture, upbringing, and education. Psychiatrists make *suppositions* about causes that determines their *expectations* about its treatment. [4] All of these processes occur internally preceding conscious thought. [5] In a clinical setting, both causative and dispositional attribution are at play, as the cause of the dysfunction is paramount in the *medical* setting, while ascertaining the individual's role in the dysfunction provides the foundation for the *clinical* setting and determines treatment. [6] In a clinical setting there is an attributional bias where there is a tendency for the patient to attribute the cause of their actions to situational factors, external to them, while clinicians are more likely to attribute the same dysfunction to stable, internal factors, to the patient. [7] This bias predisposes psychiatrists to assume that the individual is responsible which determines the type of therapy assigned. [8] Attribution theory highlights the basic conflict in psychiatry, that patients see the situation as more influential while the clinician sees the patient as being more responsible. Such bias helps to explain the history of psychiatry.

## 2. Attribution in History of Science

Attributions are automatic causal beliefs that start in early development and can even be seen in one-year old children. [9] Not surprisingly, the development of science was founded on such causal beliefs as attributions are made unconsciously and instinctively. The creation of science, and later on, psychiatry, are founded on these causal attributes. These attributes have been perpetuated and resilient to change for centuries. Understanding these attributions help clarify the fundamental assumptions being made in the current psychiatric nosology, the Diagnostic and Statistical Manual of today (DSM-5.) A few examples of attributions made in the early development of science reveals a consistent thread of assumptions about the universe.

Folklore would have us believe that Thales of Miletus foretold the total solar eclipse that took place on 28 May 585 BCE that enabled him to argue that the universe is orderly. Allowing Thales to argue that the gods might be too busy to run the day-to-day universe, and they set in motion natural processes whereby the world could function by itself without having to defer to god all the time. The belief that there is an established order that can be studied, created the scientific method. It was a simple attribution that changed humans' trajectory—that the gods are too busy to run the day-to-day world. As a starting point, an attribution of a stable, predictable, and orderly universe allowed for the scientific search for that order. The belief came first.

All examples in history of science are based on changes in attributions. Empedocles of Acragas (5th century BCE) attributed the forces of nature to four elements of earth, air, fire, and water. He also introduced the concept of forces of attraction (love) and repulsion (strife) governing the interactions of elements. The attribution led to the belief that basic elements are in a relationship with each other. An attribution that proved to be a powerful narrative in explaining war, peace, love, and violence, and many other social, political, and also psychiatric events.

Lao-Tse (6th century BCE) emphasized great importance on observing and understanding natural patterns. While three of the greatest Western classical philosophers, Socrates, Plato, and Aristotle (5th-4th century BCE) focused on critical thinking, rational inquiry, and the pursuit of knowledge. Observation by itself is inadequate but there is a need to develop a method for extracting the underlying reality. Plato proposed that abstract, ideal forms, exist beyond the physical realm and that true knowledge lies in understanding these Forms. The attribution is that there are perfect Forms underlying perception, and where the concept of "normal" is formed. There is no way of testing this belief, as it was based on our mind's attraction to order. The Post-Socratic philosophers established many schools of philosophy all of them contributing their own attributions of the world: Cynicism, Skepticism, Epicureanism, Pyrrhonism, Stoicism, and many others. Some attributes developed on earlier ones, while other beliefs were criticized and developed into opposing attributes. Epicurus (4th-3rd century BCE) believed that everything is composed of atoms and that the physical world is all that exists and not Forms, giving us the foundation for physics. Such an attribute remains the most radical belief in science, that by looking deep enough the fundamental building blocks of nature can be uncovered. Psychiatry, as with many other sciences, is reliant on this attribution that dysfunction lies in the chemistry, biology and neurons: a 'broken brain,' a 'chemical imbalance,' 'misfiring neurons,' and 'bad genes.'

A long history precedes this Kraepelin revolution—after Emil Kraepelin, a 20<sup>th</sup> century German physicians—that promotes biological determinism in psychiatry and forms the foundation for the latest Diagnostic and Statistical Manual (DSM-5) and especially the Research Domain Criteria-RDoC. [10] The attribution that complex events, including behavior and thoughts, can be understood by looking at their constituent biological, chemical and neuronal parts. This has been the ultimate aim of psychiatry since its inception.

## 3. Attribution in Psychiatry

It was Alois Alzheimer's supervisor, Emil Kraepelin—the director of the Royal Psychiatric Clinic in Munich, where Alzheimer worked from 1903 to 1912—that would champion the attribution of biological disease in psychiatry. The attribution is that biological elements infect the brain and result in psychiatric illnesses. He did this primarily through the iden-

tification of Alzheimer's disease, the first and only disease that most researchers accept as purely biological. But it is not.

Kraepelin at the time was in competition with the Prague clinic run by the more accomplished Jewish director Arnold Pick and the Jewish neuroscientist Oskar Fischer who had already published 16 cases of Alzheimer's disease which he called presbyophrenia. [11] At a time of rising nationalism in Germany, Kraepelin was able to win the war of naming diseases, by claiming Alzheimer's disease as a unique and newly discovered biological psychiatric disease which portends to be the first of many to come. History initially forgot about the Prague institute for obvious racist overtones at the time. The biological determinism that Kraepelin championed morphed into the Eugenics movement that he wholeheartedly supported. All based on the false attribution that genes and biology determine traits, attitudes, and behavior, including psychiatric dysfunctions.

Even Thomas Szasz, that venerable critic of psychiatry, who indelibly declared mental illness to be a "myth" and a "metaphor," was so taken in by the Kraepelin's biological story of Alzheimer's disease that he reported that "Except for a few objectively identifiable brain diseases, such as Alzheimer's disease, there are neither biological or chemical tests nor biopsy or necropsy findings for verifying or falsifying DSM diagnosis." [12] (p. 2)

Alzheimer's disease was believed to be caused by misfolded proteins plaques (aggregation of beta-amyloids) and tangles (neurofibrillary tangles). [13] This attribution eventually got immortalized in The Amyloid Cascade hypothesis [14] and in 2018 the biological theory of Alzheimer's disease became the main theory supported financially by the National Institute on Aging. [15] But Alzheimer's disease, as the ultimate biological psychiatric disease, is far from being exclusively a biological disease. [16] There are many inconsistencies that indicate it is neither biological nor is it a disease. [17]

The correlation between having the biological markers and dementia declines with age. [18] In part, this lack of association reflects increasing morbidity among older people. Interestingly, approximately half of oldest-old with Alzheimer's disease have insufficient biomarkers to account for their 'disease', while the other half without 'disease' have the biological markers. [19] The heavily funded Research Domain Criteria (RDoC) that aims to transform all clinical diagnostic on the basis of biomarkers [20]—despite assurance that it looks at many aspects of disorders—is but a simplistic charade holding on to a failed belief that complex behaviors can be reduced to biology. They argue that nosology should be based on biomarkers, without any evidence to support this attribute. They will define clinical diseases not by its expression but by the biology.

Despite these glaring anomalies, the biological theory of Alzheimer's disease attracted the most funding not only within psychiatry, but within medicine overall. Alzheimer's disease research is now among the top three funded diseases in medicine overall competing with heart disease and cancer.

[21] This was the Holy Grail of psychiatry to attribute the cause of a clinical disease to biology and therefore, as the theory goes, by clearing the offending biology then the disease should disappear. But there was an attribution problem: although clearing the plaques and tangles should have cured the disease, in reality this therapy did not cure the disease. The attribution was wrong.

In 2016, Biogen/Eisai reported an Aduhelm study that reduced the plaques and also seemed to slow the cognitive decline but only after some questionable re-examining of the data. [22] For example, the placebo groups in the two studies performed differently from each other, indicating that there was too much variance to make any causal inference. There were also other methodological faults that were glaringly skewing the results. [23] There were multiple testing by conducting multiple statistical tests on the same data without appropriate adjustments that lead to an increased likelihood of false-positive results. Researchers also engaged in p-hacking, which involved selectively analyzing or reporting only statistically significant results. [24] When in 2021 the FDA approved Aduhelm, the commercial name for lecanemab, out of a patient population of 427, within a year three people had already died due to severe bleeding in their brain. Not only was the drug clinically useless it was also dangerous. The FDA could only approve the drug by statistical cheating. Never in the history of the FDA have all the members of its Advisory Committee resigned in protest (and possibly liability down the road). It is of no surprise therefore, that after three years on the market, Biogen in 2024 discontinued selling Aduhelm. [25]

This sad tragedy is one of many in psychiatry, and only highlights the power of attribution, and selective funding of scientific studies to substantiate what is, at its most basic, an ideological belief. Even Alois Alzheimer himself debated the veracity of the plaques and tangles being the sole contributor to dementia. [26] Although the biological determinants are the most powerful force in psychiatry (at least in theory formation) it was not the case for most of its early history. Before the Enlightenment psychiatry attributed madness to spirits invading the body. Such an attribution dictated that dysfunction is external, unstable, and uncontrollable and therefore the treatment was predictably violent, forceful and without consent.

## 4. Attribution in Abrahamic Religions

The medieval concept of 'bodily spirits' taking over the body can be traced back to the Stoic school of the fourth century BC, which was influenced by Aristotle. [27] However, such external attribution for behavioral dysfunction was augmented under the popularity of the three monotheism Abrahamic religions: Judaism, Christianity, and Islam. From a psychiatric perspective Abraham, and Moses, both had experiences that would today be defined as manifestations of primary or mood disorder-associated psychotic disorders. [28] Bodily spirits were accepted as religions experiences or ex-

planations for madness: a prophet or a witch. These religions consolidated people's supernatural dogmas into a rigid protocol of attribution that had few competitors. Madness was attributed to (evil) spirits taking over the (sane) mind, and the way to treat these external, stable, and uncontrollable spirits is to punish them out of the body. The sad part of this attribution was the consequential treatment imposed on patients.

It was the psychiatric treatment in asylums that defined the Middle Ages. Amariah Brigham an American psychiatrist in the 1880s summarized the conditions of patients at Priory of St. Mary of Bethlehem otherwise known as Bedlam hospital in London—that remained an anachronistic and unchanging time capsule of the medieval ages: “[The patients] were confined in badly ventilated apartments where they were never discharged but by death. The quiet, the noisy and the violent were all congregated together, and a majority were chained to beds by their wrists and ankles. No contemplation of human misery ever affected us so much: the howlings, execrations and clanking of chains gave to the place the appearance of the infernal regions.” [29] Mental illness was the possession by demons, a state of sin, or willful criminality and this attribution only left one solution for treatment, to restrain and beat the bodily spirits out of the person. Although treatments in the Middle Ages show a lot of variance, some studies report that other than class differences, the mentally ill were, on the most part, treated well, although these options might not have been effective nor pleasant. [30]

Attribution of mental illness changed with the cultural shift that came about with the Enlightenment. In the late 1700s science took over from religion as a method of understanding the world. Medical science started to believe that the causes of mental illness were earthly conditions rather than spirits. The Enlightenment brought with it Moral Treatment for the insane, a way of treating patients as sentient beings that have been placed in stressful and traumatic situations that caused them to react in an aberrant manner.

## 5. Moral Treatment

The story of Moral Treatment was best dramatized by the theoretical unchaining of insane patients by Philippe Pinel at Bicêtre Hospital in 1793. Pinel is often referred to as the “Father of Modern Psychiatry” as a result of this highly publicized gesture that was likely conducted by his assistant Jean-Baptiste Pussin. Pinel believed that society alienates individuals from their real selves. A belief he acquired from the teachings of Jean-Jacques Rousseau (1712-1778). He established a clear distinction between ‘alienated patients’ (from the French *ali én é* for insane) and vagabonds, beggars, and other marginal people. In this sense, ‘moral,’ meant emotional or psychological and not ethical. He slowly transformed care of the insane in general hospitals from the often punitive and cruel confinement to a person-centered therapeutic experience through the use of psychological intervention. [31]

There were rumblings of change well before this public event, as Moral Treatment evolved rather than erupted. In 1774 both Italy and England passed laws protecting the insane. In England, The Madhouses Act empowered the Committee of the Royal College of Physicians to grant licenses to house ‘lunatics’ in London. In Italy that same year the ‘*legge sui pazzi*’ (law on the insane) was introduced, defining the process to hospitalize insane individuals. As a result, a wing of Bonifacio the public hospital in Florence—under the great reformer of the Enlightenment the Grand Duke Pietro Leopoldo—was rebuilt for the purpose of admitting the insane. Leopoldo hired the young physician Vincenzo Chiarugi (1759-1820) to be in charge.

Vincenzo Chiarugi published his three-volume *On Insanity and Its Classification* and his later his Regulations (*Regolamento*) that instituted greater hygiene, abolished the use of chains and physical punishment, and to only use straitjackets and cotton strips in order to restrain violent patients usually at night due to a shortage of staff. [32] *Il-Regolamento* included plans of the premises of the hospital of Santa Maria Novella and the new hospital of San Bonifacio with descriptions and images of the kitchen and heating system, and views of the facade, as well as an organizational chart for both hospitals.

The 18<sup>th</sup> century also saw the prominence of academia, with the medical discipline taking center stage at the universities of Leyden (The Netherlands), Edinburgh (Scotland) and Vienna (Austria). The period of Enlightenment saw the next major development in psychiatric nosology by the notable Scottish physician William Cullen (1710-1790) at the University of Edinburgh. Cullen rejected George Ernst Stahl’s attribution of “soul” as a vital force managing the body, and he replaced it with “nerve energy.” Cullen moved the attribution of insanity away from the bodily spirit and closer to biology. In a way, Cullen reverted back to the ancient Egyptians’ emphasis on the heart and the ancient Greeks’ emphasis on the humors, when he focused on energies going around the body. Beliefs direct scientific study, they precede experimentation.

Initially, Cullen’s fame came from his belief that mental illness can be cured. He coined the term “neurosis,” and he attributed the cause of diseases due to excesses or deficiencies, local or general, of the hypothetical “nervous energy.” [33] From this attribution, the treatment was simple, either to excite or to dull the senses. Cullen’s contribution to medicine was not only in the categorization of psychiatric dysfunctions and the classification of therapies, but it was also with the introduction of placebo. [34] He regarded placebo as a treatment to please, but without any curative intent or hope, but it did not mean that a placebo was inert. Since sometimes he used placebo as a pain reliever using either mustard, an external treatment, or Dover’s powder, an internal treatment (made up of Ipecac and opium) given when a situation makes it “necessary to give a medicine.” Making the patient believe in the therapy is part of the psychotherapy. Cullen’s role in medicine and psychiatry has not diminished with time. New interpretations of his work, simplifying his contributions are

likely to fuel the ever-growing influence of reductionism in psychiatry. [35]

Germany had a similar awakening when Johann Christian Reil who brought a fundamental reform of insane asylums as “madmen” were treated as sick people who required medical care. He passionately advocated for the introduction of public insane asylums as well as the humane treatment of the “mentally ill,” and coined the word *Psychiaterie* (psychiatry)—a word that comes from the Greek *psukhē* ‘soul, mind’ combined with *iatreia* ‘healing’ from *iatros* ‘healer’—a healer of the mind, that replaced *alienist* as the new nomenclature, with some resistance from the French and the Italians.

In England, the death of the Quaker Hannah Mills in an asylum in York in 1790, brought about a new kind of hospital for the insane. William Tuke, a local businessman and a Quaker fellow, visited the York Asylum afterwards, and was horrified by the conditions. In response, he started appealing to fellow Quakers for funding that would later result in the first hospital for Moral Treatment called the “York Retreat for the Care of the Insane.” The popular media will have us believe that somehow Tuke replaced “...immoral with moral therapy.” [36] (p. 422), but all treatments were moral they just become more psychological. The Retreat was an exceptional Quaker experiment “...as a spiritual response to the challenge of secularizing, accelerating and bewildering world.” [37] (p. 22).

Across the pond, at the tail end of Moral Treatment, there were also rumblings of change that became exemplified, during the final throes of Moral Treatment, by another Quaker, Thomas Story Kirkbride. Kirkbride’s plan was to offer an airy and bright accommodation for only 250 patients (harking back to the Italian Vincenzo Chiarugi’s plans for the hospital of Santa Maria Novella and San Bonifacio). Wards had large windows, high ceilings and wide corridors. Arranged in a “V” formation, the hospital had with wards or “pavilions” arranged on either side each slightly staggered back away from the main entrance. New patients were segregated by gender, on either side of the main entrance, and then further segregated by condition. Patients with higher needs tended to be housed further away from the entrance. By the late 1850s, asylums had become symbols of both a belief in insanity’s possible cure, but also civic and social responsibility. A caring society and an expression of the ultimate expression of our humanity, there was even talk of the “cult of curability.” [38] Any self-respecting American town desperately wanted its own asylum. It was a source of jobs and pride. Postcards would frequently feature a lovely drawing of the area’s Kirkbride hospital.

## 6. Faltering Without Leaders

The movement of Moral Treatment gained two very prominent lobbyists who inadvertently brought down Moral Treatment for their zeal for asylum building. One in England and one in the United States. In the U.S. there was Dorothea

Dix (aka Elizabeth Meriwether Gilmer) who was a popular writer as she was the original syndicated women’s advice columnist. Throughout her career, more than 2,000 people wrote to her for advice, and about 60 million read her daily columns published in newspapers and magazines across the country. [39] She was also a New England Union Army nurse that brought her in touch with people suffering from insanity. She became the most prominent voice and a visible presence in the campaign to build state-funded asylums. Kirkbride and Dix communicated frequently, and she promoted the Kirkbride’s hospitals as a panacea.

In the United Kingdom, Elizabeth Fry (aka Betsy Fry née Gurney) was an extremely rich Quaker prison reformer, of the Barclays Bank and Fry Chocolate lineage, before going bankrupt later in life. She was referred to as the “Angel of Prisons” for her work in improving prisons especially for women. In England, by 1845 it became compulsory for counties to build asylums, and a Lunacy Commission was set up to monitor them. By the end of the century there were as many as 120 new asylums in England and Wales, housing more than 100,000 people. [40] These two prominent socialites lobbied for asylums as a cure-all, propelling the asylum-building mania that followed.

Comparing outcomes from different asylums, Retreats, including the York Retreat, had the longest duration of residence with an average of 4.7 years compared to other asylums. [41] (p. 65). But as these periodic depressive conditions improved and they were discharged, those with more severe and more permanent conditions, such as severe schizophrenia remained, eventually constituting a larger percentage of the resident population. “Consequently, the continuing accumulation of chronic and immovable patients made the process of ‘silting up’ in the asylum inevitable.” [42] (p. 126) The success of asylums is wholly reliant on gatekeeping—selecting individuals on the basis of their receptivity to treatment—by losing this control, asylums became transformed from being places of respite to becoming custodial warehouses. [43]

With a rapidly climbing admission rate that necessitated more staff that were never hired, and greater upkeep costs that were never allocated, with more severely impaired patients staying longer, and an aging patient base, all of these demographic factors resulted in diminishing standard of care. This quickly created a tipping point for these hospitals. Most psychiatric patients tended to have severely debilitated chronic problems and by the mid-20th century the buildings became exceedingly overcrowded. As an example, Buffalo’s asylum, designed for 600 was treating 3,600 patients. The largest, Pilgrim State Hospital on Long Island, at one point housed over 14,000 patients. [44] What could be moral treatment for 100 patients, the same treatment would “...become incarceration, neglect and amoral treatment for 1,000...Moral therapy has been demoralized.” [45] (p. 271).

A system of care principled on humane treatment that turned out to be so destructive, can only be understood by appreciating the beliefs behind it. [46] It was these socially

accessible beliefs that changed the trajectory. Humane treatment that requires high staff to patients ratios cannot be implemented when those ratios do not exist. Asylums by themselves do not provide respite. With help from the anti-psychiatry movement in the 1960, state mental hospitals were slowly defunded, abandoned, and consequently shuttered.

## 7. Attribution by Anti-psychiatrists

Psychiatrist themselves were perhaps the most critical and specific in their anti-psychiatry attacks. Most did not agree with the label “anti-psychiatrists” as most saw themselves as reformists rather than abolitionists. The term “Anti-psychiatry” was coined by the British psychiatrist David Cooper (1931–86), a venerable critic of psychiatrists as specialized psycho-police agents. [47] His writing, critical and flippant of psychiatry, seemed to have been overlooked over that of the more polished psychiatrists Ronald David Laing (1927-89) and Thomas Szasz (1920-2012). While Laing and Szasz were reformists, Cooper was an abolitionist and as a result he was shunned. Laing found Cooper’s books ‘embarrassing’ [48] (p. 195) while Thomas Szasz refrained from including Cooper among his group of early dissenters of psychiatry. [49] It seems that Cooper did not make it into the exclusive club as he was not diplomatic but polemic. In fact, Thomas Szasz rejected to be confrontational “We are lumped together as the cofounders and coleaders of the ‘antipsychiatry’ movement. My aim in this brief essay is to show that it ‘ain’t so.’” [49] (p. 331) Both Laing’s and Szasz’s approach was more systematic, more intellectual than Cooper’s. Laing addressed faults with the categorization of dysfunctions, while Szasz was concerned with the method of determining madness and the consequences of labelling someone with “mental illness.” Szasz worried about the legal uses and social repercussions of psychiatry’s “pseudomedical rhetoric.” [49] (p. 332) While Laing and Szasz addressed the language of psychiatry, Cooper attacked the culture of psychiatry itself. [50] Cooper was more radical and impassioned. If Laing and Szasz shared a brotherhood in criticizing their chosen profession, David Cooper shared a similar antipathy with the Italian psychiatrist and neurologist Franco Basaglia (1924-80). Both had Marxists leanings, as Cooper was influence by the Existential Marxist philosopher Paul Sartre while Basaglia was influence by the Marxist philosopher Antonio Gramsci. Basaglia saw the function of psychiatry similarly misplaced in its power to control. As he observed, psychiatry was a device which excluded an underclass of people who were not so much mad but miserable and poverty stricken. In the early part of the 1900s if you were rich and had mental health issues you either saw an expensive psychotherapists or went to an exclusive retreat that catered for the rich. Psychiatrists, on the whole, remained the caretakers of the poor.

The culture war on psychiatry was perhaps more forcefully pursued by the least known of the anti-psychiatrists, the

French psychiatrists Frantz Fanon (1925-1961). As a Black man born in the colony of Martinique, Fanon came to psychiatry from a different perspective than the rest of the disparate group of anti-psychiatrists. [51] He is rarely considered a significant contributor to this group as his work is usually associated with politics, in particular anti-colonial and anti-racism politics. But Fanon’s legacy will remain the most enduring as he is seeing a comeback in Mad Studies. Fanon saw firsthand how colonial psychiatrists used the label of madness as a pretext to subjugate poor and those ethnically and religiously different. He suggested that the errant behavior is “not the consequence of the organisation of his nervous system nor of a peculiar trait in his character, but the direct product of the colonial situation.” [52] (p. 250) Fanon revolution for psychiatry was directed at their capacity for internment of patients in asylums against their will, referring to asylums as “monsters.” Although he saw dysfunctions as real clinical problems and ones that should be treated, akin to medical ailments, he was also aware of how the political environment can augment and promote these ailments. An approach that resonates with today’s LGBTQI community. Fanon radically changed the attribution of dysfunctions from the biological to the social and political.

The anti-psychiatrists psychiatrists might have had an intellectual edge, but the real change in treatment of the insane came from authors journalists, writers, and researchers. As early as 1850 Charles Dicken’s in *A Walk in a Workhouse* described the sordid conditions of the poorhouses in London. The fear of becoming institutionalized was fictionalized in popular books at the time by Charles Reade’s *Hard Cash* (1863), Wilkie Collins’s *The Woman in White* (1859), Mary Elizabeth Braddon’s *Lady Audley’s Secret* (1862), and Joseph Sheridan Le Fanu’s *The Rose and the Key* (1871), among many others. Before the turn of the 19<sup>th</sup> century, the public already had an established fear of the consequences of mental infirmity.

It was also around this time that the first true investigations of the living conditions inside a mental asylum were conducted. In 1866 James Greenwood, a journalist with the *Pall Mall Gazette*, disguised himself as a vagrant in order to spend a night in the casual ward of a London workhouse from where he reported on the sordid and decrepit conditions of the place. Across the Atlantic, and following in his footsteps, in 1872 Julius Chambers, a reporter with the *New York Tribune* went undercover as a patient and was successful admitted to Bloomingdale Lunatic Asylum—a private New York hospital—diagnosed as a dangerous maniac. Chambers was placed in a ward for excited patients and remained there for a week. Following instruction from his editor at the newspaper to modify his behavior, he was later judged by the admitting physician to be much improved and relocated to the ward for quiet patients. The admitting physician encouragement him that in six or seven weeks he might be discharged. But after three weeks, a writ of *habeus corpus* for his release was served and consent was given that he be released without

further public legal proceedings. [53] From this experience Chambers published his book *A Mad World and Its People* (1876). Eventually this led to the release of twelve healthy patients, reorganization of the staff and administration at the hospital and, eventually, it led to a change in the lunacy laws. This was the first instance of public advocacy changing psychiatric laws.

In Britain, the Anglo-Irish journalist Lewis Strange Wingfield (1842-1891) was the first covert investigations into asylums in Britain. [54] Wingfield disguised himself to infiltrate a private London asylum for the purpose of researching his novel *Gehenna; Or, Havens of Unrest* (1882). In 1887 the American investigative journalist Nellie Bly feigned symptoms of mental illness to gain admission to a lunatic asylum from where she wrote *Ten Days in a Mad-House*. Mary Higgs, who provided shelter for destitute women in her cottage, retold their horrific stories in *Glimpses into the Abyss* (1906).

Out of all of this publicity, it was the 'plucky adventures against the lunacy doctors in 1880s London' [55] (p. 3) by one woman that changed laws. A saga that involved a relentless campaign by a Mrs. Georgina Weldon against a "mad doctor" L. Forbes Winslow, who on the behest of her estranged husband, tried to admit her to an asylum to get rid of her. In her campaign against the mad doctor, Weldon came across to the public as an amalgamation of Joan of Arc and P. T. Barnum the circus owner. [55] The evolving saga was broadcast in newspapers, medical journals, street advertisements, street protests, in lecture circuit, law courts, and in music halls where Ms. Weldon performed.

Back in the United States, when Frank Smith in 1935 admitted himself into a Kankakee hospital, leading to the articles *Seven days in the Madhouse* in the Chicago Daily Times, he recounted stories of the inmates, not only how they eat, sleep and wash, but also some of their experiences dealing with the alienists and nurses at the hospital. Smith interviews his inmates and gets their stories and what emerges is a mini culture, a subculture. [56] Some reports rightly won awards for their writing. In 1961 a World-Telegram staff writer Michael Mok won a Lasker prize for reporting from Kings County Hospital psychiatric division in New York. Mok gained admission as a patient for eight days where he documented the wantonness of the hospital. [57]

Journalist and researchers were getting more sophisticated in attacking psychiatry. Rather than documenting the failed services provided in asylums, change only became effective when they started going straight to the heart of psychiatry itself, the nosology and the belief system that promoted it. They realized that they needed to get to the attribution itself before any change is to happen, and they were right.

One of the first to attack the attributions through its capricious nosology was Maurice K. Temerlin. In 1968 Temerlin organized 25 psychiatrists to review an actor portraying a regular character with no mental illness. He placed some of the psychiatrists in one group who were told that the actor "was a very interesting man because he looked neurotic, but

actually was quite psychotic" while in the other group they were told nothing. Sixty percent of the first group diagnosed psychoses, most often schizophrenia, while no one in the second group diagnosed any mental illness. Psychiatrists developed and applied personal attributions to the same clinical expression of dysfunction.

This personalized attribution was again exposed by the researcher Myron Sandifer who showed interviews of American patients to fourteen psychiatrist from London, Glasgow, in the UK, and North Carolina, USA. She found variability in diagnoses with British and Scottish psychiatrists diagnosing manic depression more readily while American psychiatrists tended to diagnose depressive neurosis more frequently. Psychiatrists were found to apply their own attributions in the first three minutes of the clinical exam. [58] In another study a third of the American psychiatrists diagnosed the subject as schizophrenic while none of the English psychiatrists did. [59] And again, these personal attributions resulted in different diagnosis when videotapes of interviews with eight patients, three American and five English, were shown to 230 psychiatrists from the U.K. and New York. The results showed major disagreements between the American psychiatrists who were more likely to diagnoses a subject as schizophrenic then their British colleagues who again were more likely to diagnoses the same subject as depressive, or by other diagnostic categories such as manic illness, neurotic illness, and personality disorder. [60]

The variability in the diagnostic process was a blow to the Diagnostic and Statistical Manual of Mental Disorders—DSM-2. But the most infamous criticism came in 1973 by the psychologist David Rosenhan who made this variability a personal liability. Rosenhan had eight participants including himself feign hallucinations in order to be admitted to various West Coast psychiatric hospitals, but once admitted they all acted normally. Each was diagnosed with psychiatric disorders and were given antipsychotic medication. [61] Once an attribution is made, it is difficult if not impossible to reverse it. The lack of follow-up was an obvious failure in a system that favors incarceration. Similarly, Frank Sutherland who received coaching from a psychiatrist in order to accurately feign symptoms, spent 31 days in the late 1973 at Central State Psychiatric Hospital, where he never saw a psychiatrists but remained incarcerated. [62] Once an attribution was made in psychiatry, there was no further review, unlike in medicine.

Other experiments consistently substantiated this rigidity in attribution and then labelling of psychiatric dysfunctions. Betty Wells, a staff writer for Wichita Eagle, was voluntarily committed for eight days at Larned State Hospital in Kansas where she experienced degradation, torture, and best of all, the psychedelic drugs. [63]

In the 1980s the DSM-3 revolutionized diagnosis in terms of reliability but the validity remained unchanged as the foundation of attribution was retained. The new criteria assured psychiatrists that the effects of gender and race on di-

agnosis have become minimal. But in 1988, Marti Loring, and Brian Powell gave 290 psychiatrists the same transcript of a patient interview and told half of them that the patient was black and the other half white. They concluded that “Clinicians appear to ascribe violence, suspiciousness, and dangerousness to black clients ...Interestingly, black clinicians...also assign paranoid schizophrenic disorders to black men (although less frequently than do white clinicians).” [64] (p. 18) Such bias in diagnosis, attributing errant behavior to stable, internal characteristics of Black patients, remains to this day despite new diagnostic criteria. More recent studies still show that the patients’ race is related to diagnosis even when standardized diagnostic criteria are applied. [65] What all these anti-psychiatry activities demonstrate is that the fear of becoming labelled mad remains real. But what better testament to this fear than the patients themselves. The lasting vestiges of anti-psychiatry culminated with Mad Studies—a whole new movement championed by end users—a patient revolt of sorts.

## 8. Mad as Strategy

Mad Studies joined the other anti-psychiatrist groups and arose as a grass-root counter-voice against incarceration and ‘sane-ism.’ [66] Mad Studies embraces two inclusive approaches to bring about change. One approach advocate for better services by involving themselves in the administration of psychiatric services and decision-making, as the Italian psychiatrist Franco Basaglia did in the 1970s. The other approach is more radical and aims to transform the definitions of, and attitude towards madness. This is an attempt to change the attributes assigned to madness. Similar to the “gay” rights movement and the success they had in getting homosexuality classification removed from the DSM-3, Mad Studies aims to transform society to be more accepting of their self-perception and behavior. This latter group includes such approaches as Mad Identity and Culture; Madness Creativity, and Spirituality; Madness, Distress, and Disability; and Madness as a Dangerous Gift. [67] (p. 19) Mad Pride, Mad Identity, and Mad-activism all reclaim the word “mad” as a badge of honor without derogatory connotations. Such social justice movements are increasingly important in how clinicians view and address madness. [68] They are attempting to change the public attributions of madness while at the same time highlighting the lack of appropriate treatments.

Around half of all severe mental health patients do not take their prescribed medication. [69] Some of the reasons for not taking their medication is that for some patients the medication prescribed seems to exacerbate the conditions rather than alleviate it. [70] The intellectual and moral crisis in psychiatry has also underserved patients. The turf war that started more than a century ago between the three disciplines—psychiatry, psychoanalysis, and psychology—has made losers of all three, as they all lost their capacity to understand the rich and vibrant internal and social life of their patients.

Despite their bland approach, the American Psychiatric Association has been refining its diagnoses with little consideration for the valid arguments and criticism from the anti-psychiatric movement. The change in abusive therapies (lobotomies, blood-letting, trepanation, extreme teeth extraction, focal sepsis—“a theory that limped on both legs,” [71] and medically induced seizure—was brought about by changes in law and court cases and not through psychiatric knowledge or rules of conduct. The great reversal of un-pathologizing homosexuality in the DSM-3 was half-hearted as Robert Spitzer and his colleagues changed it to “ego-dystonic homosexuality” that still allowed for the divisive and useless conversion therapy, that Robert Spitzer himself recommended [72] and for which he later apologized. His attributions did not change. His personal attributes dictated psychiatric nosology. Attributions, anchors psychiatrists to a rigid system of beliefs about dysfunctions. Real change will only come when those beliefs are changed.

In the absence of a biomarker that defines madness, [73] determining when a behavior becomes dysfunctional is part of the “demarcation dilemma” namely distinguishing madness from any other kind of socially aberrant behavior. Justin Garson calls it a clash between two paradigms “madness-as-dysfunction and madness-as-strategy.” [74] What he is referring to is a change from attributing madness as a broken brain, versus attributing it as a valid response to dysfunctional situations.

Most madness has a functional utility by developing a mental and emotional strategy to avoid a painful reality. This change in attribution is radical as the patient is the one in charge and not their “broken brain.” Affective strategies can be unwelcome like depression. In this context, depression is relaying a condition that something needs to change, that the patients is not in a good place. Although the feeling is negative, the meaning is positive, it is informing the patient to change. A similar analogy is pain. Pain is always negative, but it informs patients that something is hurt and the context needs to change. Dealing with pain, without addressing the underlying cause of the pain is what has killed more than a million Americans since 1999 in the “opioid pandemic.” [75]

Reframing the issue as an adaptive feature rather than as a dysfunction helps the individual to come to terms with the psychiatric episode. One experiment differentiated two psychiatric groups where one was given the dysfunctional message while the other was given the adaptive message. People exposed to the “madness as strategy” explanation tended to be more optimistic about treatment. [76] Changing the attribution changes the outcome. This explains why in the late 1960s, the World Health Organization-WHO reported that the long-term outcome for schizophrenia was better in the developing than in the developed countries. [77] This became known as the “Outcome Paradox.” Although there are many confounders, one stark difference is that in Africa and the sub-continent people with a psychotic episodes are more likely to be diagnosed with “acute transient psychoses” rather

than with “schizophrenia.” Suggesting that there is a belief, an attribute, that these psychotic episodes are temporary, or periodic, and can happen to reasonably healthy people. There is also an appreciation of how the social context not only mediates illness, but also moderates it. The familial association of schizophrenia that was seen in studies among twins, is not to be found in genetics, but in social context, especially the conditions of early development. [78]

Madness is not only part of human history, but madness is an essential element of our history as it is made by people that would be considered “mad.” Andrew Scull has made a point of highlighting how ‘unreason’ is an “inescapable part of our shared human experience”. [79] (p. 1066) Robert Burton (1577-1640) described madness as having a divine “intent,” while Plato called it “Divine Madness.” [80] Philippe Pinel (1745-1826) who promoted moral treatment similarly argued that some dysfunctions are ‘cathartic and healing,’ and like a fever should be allowed to run its course. Later Johan Christian August Heinroth (1773-1843) referred to hallucinations and delusions as a coping mechanism for trauma. As Garson summarized, some dysfunctions are purposeful not pathological, and they are a “manifestation of the mind’s intrinsic design.” [74] A few examples illustrate this theme of Madness-as-Strategy. Since the majority of people who’ve received a diagnosis of Borderline Personality Disorder (BPD) have a history of trauma, abuse, or neglect—maladaptive parenting, negative offspring/parenting-offspring outcomes [81]—then being mistrustful would therefore be a realistic survival strategy in this social context. This strategy of our mind protecting us, becomes obviously discordant in different contexts, and it is this mismatch that creates the dysfunction. [82] Mismatch, that was first identified in our biological development, has radical consequences in our psychology.

One of the possible explanations for the “Outcome Paradox” is that the expectation is different. The attribution for the behavior instead of being internal, stable, and uncontrollable, to one where it becomes external, unstable, and controllable. The outcomes are predictably in line with the attributions. History teaches us that the context determines the labels applied in psychiatry.

During slavery in the USA the physician Samuel Cartwright, who was honored by the Harvard and Baltimore medical societies, defined two new diseases, ‘drapetomania’—the uncontrollable urge to escape—and ‘dysesthesia aethiopica’—for disobedience, destroying property, and refusing to work as a slave. [83] Today psychiatrists acknowledge that there are social conditions that cause dysfunction to be pathologized. Homosexuality did not go away, and homosexuals did not change their behavior, the only change was the public perception of the behavior, it became accepted. The public attribution for the behavior changed, and eventually this change impacted psychiatric nosology. Reversing the attribution can also have positive implications for the general public.

A century earlier, in 1913, the psychiatrist and Existential

philosopher Karl Jaspers published the *General Psychopathology*. Karl Jaspers’ views were in contrast to Emil Kraepelin as he was arguing to review the whole life-history of the patient. In principle the DSM-3 was Anti-Jaspers as it was Pro-Kraepelin, pushing for a biological causes of dysfunction that later gave rise to psychopharmacology—especially after the 1950s when lithium was introduced for mania, chlorpromazine for schizophrenia, and imipramine for depression. Jaspers contends that all diagnoses are based on an archetype, an “ideal type” with individual dysfunctions being either close-to or far-away from this ideal point—related to Platonic ‘Forms’ and what is termed as “essentialism” in psychiatric nosology. Health is defined by the average, while illnesses are defined deviation from the average. [84] A diagnosis is therefore an arbitrary judgement on behavior that is on a spectrum and likely to be periodic. Change needs to come from a population level and not from an individual level.

Geoffrey Rose has shown that there are both individual as well as population approaches to prevention. In this case, population prevention provides better overall outcomes than individual prevention. Although population-prevention holds great promise it is rarely seen in public policy, and never seen in psychiatry. That is because it is a tough sell. Not only because psychiatry traditionally focuses on individual cases (and, more importantly, how they get paid), but also because population-prevention has low success rate (e.g., compare population anti-smoking campaigns against individual treatment). Although population-level prevention is not as effective as individual-based prevention, because of the larger number of participants, the population approach has much larger outcomes. Reducing the incidence or prevalence within a population moves the mean of that population. [85]

## 9. Conclusion

Psychiatry is at a cross-roads. If the ambition is to help people gain personal control over their lives, then a population approach is required, there is no other way to achieve this ambition. The current reductionist approach of categorization dysfunction without theory (as with the DSM), coupled with the lack of effective treatment is fertile ground for alternative approaches to grow. The current attribution that these psychiatric dysfunctions are internal, unstable, and uncontrollable will result in an ever-increasing surge of diagnosable aberrant behaviors in the near future. Everyone will be diagnosed with a psychiatric illness. This epidemic will provide an existential impetus for effective treatment. However, there is no panacea as the behaviors are complex and what is required is radical, innovative, and comprehensive. If dysfunction is believed to be an external, controllable, and unstable event, then population-based prevention becomes an obvious choice.

The attribution is that madness emerges as a pragmatic strategy for a peculiar situation that no longer exist or are exaggerated (mismatched). This strategy is unique for the

individual and lies on a dimension with variable intensities. It is likely to be periodic, stable, and predictable and involve a learning process that eventually solidifies them into personality traits as a developmental feature that require cognitive-behavioral therapy in order to modify this cycle of negative attributes. This new psychological theory is represented by the Power Threat Meaning Framework. [86]

Most psychiatric dysfunctions are mild and moderate. Everyone has variants of these mad behaviors, as they are initially a valid response to peculiar situations. Such insights give greater emphasis to the external influences and to break away from the clinicians' bias of attributing causality to the patient's 'broken brain,' and 'chemical imbalance,' but rather to adjust their context. Effective treatment lies on a dimension that includes social prescribing, [87] as well as developing community retreats that cater for short-term respite programs. [88] Delivering nurturing support when experiencing periodic and variable psychiatric episodes allows individuals to gain resiliency and coping strategies to deal with future predictable episodes. The teachings of Moral Treatment, the Anti-Psychiatrists, Karl Jaspers, Power Threat Meaning Framework, and Mad Studies might converge into a more humane, and new moral treatment that will alleviate distress and aim for personal and functional recovery rather than aiming exclusively at clinical recovery.

Note: This paper is generated from a forthcoming book "Beliefs That Create Madness" by the same author.

## Abbreviations

APA	American Psychiatric Association
DSM	Diagnostic and Statical Manual
RDoC	Research Domain Criteria

## Author Contributions

Mario Dominic Garrett is the sole author. The author read and approved the final manuscript.

## Funding

There are no sources of funding to declare.

## Data Availability Statement

No data was utilized in this review.

## Conflicts of Interest

The author declares no conflict of interest.

## References

- [1] Heider F. The psychology of interpersonal relations. Psychology Press; 2013 May 13. <https://doi.org/10.4324/9780203781159>
- [2] Graham S. A review of attribution theory in achievement contexts. *Educational Psychology Review*. 1991 Mar; 3: 5-39. <https://doi.org/10.1007/BF01323661>
- [3] Jones EE, Davis KE. From acts to dispositions the attribution process in person perception. In *Advances in experimental social psychology* 1965 Jan 1 (Vol. 2, pp. 219-266). Academic Press. [https://doi.org/10.1016/S0065-2601\(08\)60107-0](https://doi.org/10.1016/S0065-2601(08)60107-0)
- [4] Kelley HH, Michela JL. Attribution theory and research. *Annual review of psychology*. 1980 Feb; 31(1): 457-501. <https://doi.org/10.1146/annurev.ps.31.020180.002325>
- [5] Tait P. Affect theory and performance intention. In *Forms of Emotion 2022*. Taylor & Francis. <https://doi.org/10.4324/9781003124832-2>
- [6] Hammond KR. Probabilistic functioning and the clinical method. *Psychological review*. 1955 Jul; 62(4): 255. <https://doi.org/10.1037/h0046845>
- [7] Jones EE, Nisbett RE. The actor and the observer: Divergent perceptions of the causes of behavior. In *Preparation of this paper grew out of a workshop on attribution theory held at University of California, Los Angeles, Aug 1969*. 1987. Lawrence Erlbaum Associates, Inc.
- [8] Yager J, Kay J, Kelsay K. Clinicians' cognitive and affective biases and the practice of psychotherapy. *American Journal of Psychotherapy*. 2021 Aug 1; 74(3): 119-26. <https://doi.org/10.1176/appi.psychotherapy.20200025>
- [9] Leslie AM. The perception of causality in infants. *Perception*. 1982 Apr; 11(2): 173-86. <https://doi.org/10.1068/p110173>
- [10] Morris SE, Sanislow CA, Pacheco J, Vaidyanathan U, Gordon JA, Cuthbert BN. Revisiting the seven pillars of RDoC. *BMC medicine*. 2022 Jun 30; 20(1): 220. <https://doi.org/10.1186/s12916-022-02414-0>
- [11] Goedert M. Oskar Fischer and the study of dementia. *Brain*. 2009 Apr 1; 132(4): 1102-11. <https://doi.org/10.1093/brain/awn256>
- [12] Szasz T. *Psychiatry: The science of lies*. Syracuse University Press; 2019 Feb 28. <https://doi.org/10.2307/j.ctv17vf3p6>
- [13] Salahuddin P, Siddiqi MK, Khan S, Abdelhameed AS, Khan RH. Mechanisms of protein misfolding: Novel therapeutic approaches to protein-misfolding diseases. *Journal of Molecular Structure*. 2016 Nov 5; 1123: 311-26. <https://doi.org/10.1016/j.molstruc.2016.06.046>
- [14] Hardy JA, Higgins GA. Alzheimer's disease: the amyloid cascade hypothesis. *Science*. 1992 Apr 10; 256(5054): 184-5. <https://doi.org/10.1126/science.1566067>

- [15] Jack Jr CR, Bennett DA, Blennow K, Carrillo MC, Dunn B, Haeblerlein SB, Holtzman DM, Jagust W, Jessen F, Karlawish J, Liu E. NIA-AA research framework: toward a biological definition of Alzheimer's disease. *Alzheimer's & Dementia*. 2018 Apr 1; 14(4): 535-62. <https://doi.org/10.1016/j.jalz.2018.02.018>
- [16] Garrett MD. Psychopathology of Dementia: Psychology's Pivotal Role. *European Journal of Medical and Health Sciences*. 2021 Oct 20; 3(5): 61-9. <https://doi.org/10.24018/ejmed.2021.3.5.1039>
- [17] Garrett MD. *Politics of Anguish*. Kindle. USA. 2012.
- [18] Savva GM, Wharton SB, Ince PG, Forster G, Matthews FE, Brayne C. Age, neuropathology, and dementia. *New England Journal of Medicine*. 2009 May 28; 360(22): 2302-9. <https://doi.org/10.1056/NEJMoa0806142>
- [19] Crystal HA, Dickson D, Davies P, Masur D, Grober E, Lipton RB. The relative frequency of dementia of unknown etiology increases with age and is nearly 50% in nonagenarians. *Archives of neurology*. 2000 May 1; 57(5): 713-9. <https://doi.org/10.1001/archneur.57.5.713>
- [20] Insel T, Cuthbert B, Garvey M, Heinssen R, Pine DS, Quinn K, Sanislow C, Wang P. Research domain criteria (RDoC): toward a new classification framework for research on mental disorders. *American Journal of psychiatry*. 2010 Jul 1; 167(7): 748-51. <https://doi.org/10.1176/appi.ajp.2010.09091379>
- [21] Garrett MD. The pitfalls of crowdfunding Alzheimer's disease research. *International Medicine*. 2019; 1(2): 78-89. <https://doi.org/10.5455/im.36591>
- [22] Knopman DS, Jones DT, Greicius MD. Failure to demonstrate efficacy of aducanumab: An analysis of the EMERGE and ENGAGE trials as reported by Biogen, December 2019. *Alzheimer's & Dementia*. 2021 Apr; 17(4): 696-701. <https://doi.org/10.1002/alz.12213>
- [23] Whitehouse P, Gandy S, Saini V, George DR, Larson EB, Alexander GC, Avorn J, Brownlee S, Camp C, Chertkow H, Fugh-Berman A. Making the case for accelerated withdrawal of aducanumab. *Journal of Alzheimer's Disease*. 2022 Jan 1; 87(3): 1003-7. <https://doi.org/10.3233/JAD-220262>
- [24] Alexander GC, Emerson S, Kesselheim AS. Evaluation of aducanumab for Alzheimer disease: scientific evidence and regulatory review involving efficacy, safety, and futility. *Jama*. 2021 May 4; 325(17): 1717-8. <https://doi.org/10.1001/jama.2021.3854>
- [25] Storey D. Biogen Announces Plan to Discontinue Alzheimer's Drug Aduhelm. *Psychiatrist.com*. 2024 Feb 1. Accessed (05/21/2024) from: <https://www.psychiatrist.com/news/biogen-announces-plan-to-discontinue-alzheimers-drug-aduhelm/#:~:text=The%20company%20plans%20to%20focus,its%20effectiveness%20and%20high%20price>
- [26] Garrett MD. Multiple Causes of Dementia as Engineered Senescence. *European Journal of Medical and Health Sciences*. 2020 Apr 21; 2(2). <https://doi.org/10.24018/ejmed.2020.2.2.227>
- [27] Trener C, Horden P. Madness in the middle ages. In *The Routledge history of madness and mental health 2017* Apr 7 (pp. 62-80). Routledge. <https://doi.org/10.4324/9781315202211-4>
- [28] Murray ED, Cunningham MG, Price BH. The role of psychotic disorders in religious history considered. *The Journal of neuropsychiatry and clinical neurosciences*. 2012 Oct; 24(4): 410-26. <https://doi.org/10.1176/appi.neuropsych.11090214>
- [29] Brigham A. The moral treatment of insanity. *The American Journal of Psychiatry*. 1994 Jun.
- [30] Elkin BG. Madness in the Middle Ages: an Examination of the Treatment of the Mentally Ill in the Medieval Era Based on Order and Gender.
- [31] Gerard DL. Chiarugi and Pinel considered: soul's brain/person's mind. *Journal of the History of the Behavioral Sciences*. 1997 Sep; 33(4): 381-403. [https://doi.org/10.1002/\(SICI\)1520-6696\(199723\)33:4<381::AID-JHBS3>3.3.CO;2-7](https://doi.org/10.1002/(SICI)1520-6696(199723)33:4<381::AID-JHBS3>3.3.CO;2-7)
- [32] Kitsantas, P. The Bonifacio Hospital: reforming psychiatric hospital care. *Hektoen International A Journal of Medical Humanities* 2015. Accessed (3/1/2024) from: <https://hekint.org/2017/02/23/the-bonifacio-hospital-reforming-psychiatric-hospital-care/>
- [33] Cullen W. *Synopsis nosologiae methodicae*. 1780.
- [34] Kerr CE, Milne I, Kaptchuk TJ. William Cullen and a missing mind-body link in the early history of placebos. *Journal of the Royal Society of Medicine*. 2008 Feb; 101(2): 89-92. <https://doi.org/10.1258/jrsm.2007.071005>
- [35] Dyde S. Cullen, a cautionary tale. *Medical history*. 2015 Apr; 59(2): 222-40. <https://doi.org/10.1017/mdh.2015.7>
- [36] Scull AT. Moral treatment reconsidered: some sociological comments on an episode in the history of British psychiatry. *Psychological Medicine*. 1979 Aug; 9(3): 421-8. <https://doi.org/10.1017/S0033291700031962>
- [37] Tuke S. *Description of the retreat: An institution near York, for insane persons of the Society of Friends (1813)*. Kessinger Publishing; 2010. Accessed (2/28/2024) from: <https://digitrepo.nlm.nih.gov/ext/mhl/2575045R/PDF/2575045R.pdf>
- [38] Deutsch A. *The mentally ill in America: A history of their care and treatment from colonial times*. Columbia University Press; 1937 Dec 31. <https://doi.org/10.7312/deut93794>
- [39] Library of Congress. *Dorothy Dix: Topics in Chronicling America*. n.d. Accessed (3/22/2024) from: <https://guides.loc.gov/chronicling-america-dorothy-dix>
- [40] England H. *The Growth of the Asylum-a Parallel World*.
- [41] Thurnam J. *Observations and Essays on the Statistics of Insanity: Including an Inquiry Into the Causes Influencing the Results of Treatment in Establishments for the Insane: to which are Added the Statistics of the Retreat, Near York*. Simpkin, Marshall; 1845.

- [42] Smith L. Welcome release: perspectives on death in the early county lunatic asylums, 1810-50. *History of Psychiatry*. 2012 Mar; 23(1): 117-28. <https://doi.org/10.1177/0957154X11428700>
- [43] Scull A. *Madhouse: A tragic tale of megalomania and modern medicine*. Yale University Press; 2007.
- [44] Harcourt BE. Reducing mass incarceration: Lessons from the deinstitutionalization of mental hospitals in the 1960s. *Ohio St. J. Crim. L.* 2011; 9: 53. <https://doi.org/10.2139/ssrn.1748796>
- [45] Sederer L. Moral therapy and the problem of morale. *The American Journal of Psychiatry*. 1977 Mar 1; 134(3): 267-72. <https://doi.org/10.1176/ajp.134.3.267>
- [46] Goffman E. *Essays on the social situation of mental patients and other inmates*. Doubleday; 1961.
- [47] Chapman A. Re-Coopering anti-psychiatry: David Cooper, revolutionary critic of psychiatry. *Critical and radical social work*. 2016 Nov 1; 4(3): 421-32. <https://doi.org/10.1332/204986016X1473688814636>
- [48] Mullan B. *Mad to be normal: Conversations with RD Laing*. Free Association Books; 2017.
- [49] Szasz T. "Knowing What Ain't So": RD Laing and Thomas Szasz. *The Psychoanalytic Review*. 2004 Jun 1; 91(3): 331-46. <https://doi.org/10.1521/prev.91.3.331.38304>
- [50] Wall O. *The British Anti-psychiatrists: From institutional psychiatry to the counter-culture, 1960-1971*. Routledge; 2017 Sep 13. <https://doi.org/10.4324/9781315170121>
- [51] Eromosele F. Frantz Fanon in the time of mad studies. *World Futures*. 2020 Apr 2; 76(3): 167-87. <https://doi.org/10.1080/02604027.2020.1730737>
- [52] Fanon F. *The Wretched of the Earth* (paperback edition).
- [53] Chambers J. Curtain-raiser and explanation for the undercover investigation of the Bloomingdale Lunatic Asylum *The New York Tribune*. August 31, 1872. Accessed (05/21/2024) from: <https://undercover.hosting.nyu.edu/s/undercover-reporting/item/13853>
- [54] Donovan S, Rubery M. Amateur Lunatics: Investigative Journalism, Asylum Reform, and the Undercover Authorship of Lewis Wingfield. *Victorian Literature and Culture*. 2022 Dec; 50(4): 721-55. <https://doi.org/10.1017/S1060150321000152>
- [55] Walkowitz JR. Science and the seance: transgressions of gender and genre in late Victorian London. *Representations*. 1988 Apr 1(22): 329. <https://doi.org/10.1525/rep.1988.22.1.99p0211a>
- [56] Smith F. Seen Days in the Madhouse. *Chicago Daily News*. 1935-07-26; Accessed (05/21/2024) from: <https://undercover.hosting.nyu.edu/s/undercover-reporting/item/12011>
- [57] Mok, M. I Was a Mental Patient. *New York World-Telegram & Sun*. 1961-03-23; Accessed (05/21/2024) from: <https://undercover.hosting.nyu.edu/s/undercover-reporting/item/12000>
- [58] Sandifer MG, Hordern A, Timbury GC, Green LM. Psychiatric diagnosis: A comparative study in North Carolina, London and Glasgow. *The British Journal of Psychiatry*. 1968 Jan; 114(506): 1-9. <https://doi.org/10.1192/bjp.114.506.1>
- [59] Katz MM, Cole JO, Lowery HA. Studies of the diagnostic process: The influence of symptom perception, past experience, and ethnic background on diagnostic decisions. *American Journal of Psychiatry*. 1969 Jan; 125(7): 937-47. <https://doi.org/10.1176/ajp.125.7.937>
- [60] Kendell RE, Cooper JE, Gourlay AJ, Copeland JR, Sharpe L, Gurland BJ. Diagnostic criteria of American and British psychiatrists. *Archives of General Psychiatry*. 1971 Aug 1; 25(2): 123-30. <https://doi.org/10.1001/archpsyc.1971.01750140027006>
- [61] Rosenhan DL. On being sane in insane places. *Science*. 1973 Jan 19; 179(4070): 250-8. <https://doi.org/10.1126/science.179.4070.250>
- [62] Sutherland F. *Personal Experience: Central State Conditions Found Poor*. Nashville Tennessean. 1974 Jan; 20.
- [63] Mills B. *Trip Into Darkness*. Wichita Eagle and Wichita Beacon. 1974 Accessed (05/21/2024) from: <https://undercover.hosting.nyu.edu/s/undercover-reporting/item/14322>
- [64] Loring M, Powell B. Gender, race, and DSM-III: A study of the objectivity of psychiatric diagnostic behavior. *Journal of health and social behavior*. 1988 Mar 1: 1-22. <https://doi.org/10.2307/2137177>
- [65] Garb HN. Race bias and gender bias in the diagnosis of psychological disorders. *Clinical Psychology Review*. 2021 Dec 1; 90: 102087. <https://doi.org/10.1016/j.cpr.2021.102087>
- [66] Costa L, Ross L. Mad Studies Genealogy and Praxis. *International Mad Studies Journal*. 2023; 1(1): e1-8. <https://doi.org/10.58544/imsj.v1i1.5239>
- [67] Rashed MA. *Madness and the demand for recognition: A philosophical inquiry into identity and mental health activism*. Oxford University Press; 2019 Jan 17. <https://doi.org/10.1093/med/9780198786863.001.0001>
- [68] Baumer, N., & Julia Frueh, J. What is neurodiversity? *MIND & MOOD* 2021. Accessed (2/11/2024) from: <https://www.health.harvard.edu/blog/what-is-neurodiversity-202111232645>
- [69] Semahegn A, Torpey K, Manu A, Assefa N, Tesfaye G, Ankamah A. Psychotropic medication non-adherence and its associated factors among patients with major psychiatric disorders: a systematic review and meta-analysis. *Systematic reviews*. 2020 Dec; 9: 1-8. <https://doi.org/10.1186/s13643-020-1274-3>
- [70] Mert DG, Turgut NH, Kelleci M, Semiz M. Perspectives on reasons of medication nonadherence in psychiatric patients. *Patient preference and adherence*. 2015 Jan 13: 87-93. <https://doi.org/10.2147/PPA.S75013>

- [71] Nolan P. The focal sepsis hypothesis: a theory that limped on both legs. *British Journal of Mental Health Nursing*. 2023 Nov 2; 12(4): 1-8. <https://doi.org/10.12968/bjmh.2023.0022>
- [72] Carey B. Psychiatry Giant Sorry for Backing Gay 'Cure'. *New York Times*. 2012. Accessed (05/21/2024) from: <https://www.nytimes.com/2012/05/19/health/dr-robert-l-spitzer-noted-psychiatrist-apologizes-for-study-on-gay-cure.html>
- [73] Abi - Dargham A, Moeller SJ, Ali F, DeLorenzo C, Domschke K, Horga G, Jutla A, Kotov R, Paulus MP, Rubio JM, Sanacora G. Candidate biomarkers in psychiatric disorders: state of the field. *World Psychiatry*. 2023 Jun; 22(2): 236-62. <https://doi.org/10.1002/wps.21078>
- [74] Garson J. Is Madness an Evolved Signal? Strategy Versus Dysfunction. *Mad In America*. 2024. Accessed (05/21/2024) from: <https://www.madinamerica.com/2024/02/madness-evolved-signal-justin-garson-strategy-versus-dysfunction/>
- [75] CDC-Centers for Disease Control and Prevention. Drug Overdose Deaths. n.d. Accessed from (05/10/2024) from: <https://www.cdc.gov/drugoverdose/deaths/index.html#print>
- [76] Schroder HS, Devendorf A, Zikmund-Fisher BJ. Framing depression as a functional signal, not a disease: Rationale and initial randomized controlled trial. *Social Science & Medicine*. 2023 Jul 1; 328: 115995. <https://doi.org/10.1016/j.socscimed.2023.115995>
- [77] Hopper K. Recovery from schizophrenia: An international perspective. Oxford University Press (OUP); 2007. <https://doi.org/10.1093/oso/9780195313673.001.0001>
- [78] McCutcheon RA, Marques TR, Howes OD. Schizophrenia-an overview. *JAMA psychiatry*. 2020 Feb 1; 77(2): 201-10. <https://doi.org/10.1001/jamapsychiatry.2019.3360>
- [79] Scull A. Madness in civilisation. *The Lancet*. 2015 Mar 21; 385(9973): 1066-7. [https://doi.org/10.1016/S0140-6736\(15\)60591-8](https://doi.org/10.1016/S0140-6736(15)60591-8)
- [80] Canavan TL. Robert Burton, Jonathan Swift, and the tradition of anti-Puritan invective. *Journal of the History of Ideas*. 1973 Apr 1; 34(2): 227-42. <https://doi.org/10.2307/2708727>
- [81] Bozzatello P, Garbarini C, Rocca P, Bellino S. Borderline personality disorder: Risk factors and early detection. *Diagnosics*. 2021 Nov 18; 11(11): 2142. <https://doi.org/10.3390/diagnostics11112142>
- [82] Damm JF. A Framework for Mental Health Based on the Evolutionary-Mismatch Paradigm.
- [83] Willoughby CD. Running away from drapetomania: Samuel A. Cartwright, medicine, and race in the Antebellum South. *The Journal of Southern History*. 2018 Aug 1; 84(3): 579-614. <https://doi.org/10.1353/soh.2018.0164>
- [84] Kapusta A. KARL JASPER'S CONCEPT OF MENTAL ILLNESS AND CONTEMPORARY CLASSIFICATIONS.
- [85] Rose G. Sick individuals and sick populations. *International journal of epidemiology*. 2001 Jun 1; 30(3): 427-32. <https://doi.org/10.1093/ije/30.3.427>
- [86] Raskin, J. D., Maynard, D., & Gayle, M. C. (2022). Psychologist attitudes toward DSM-5 and its alternatives. *Professional Psychology: Research and Practice*, 53(6), 553. <https://doi.org/10.1037/pro0000480>
- [87] Cooper M, Avery L, Scott J, Ashley K, Jordan C, Errington L, Flynn D. Effectiveness and active ingredients of social prescribing interventions targeting mental health: a systematic review. *BMJ open*. 2022 Jul 1; 12(7): e060214. <https://doi.org/10.1136/bmjopen-2021-060214>
- [88] Alliance CR, Carers NSW Research Team. Repositioning respite in consumer directed service systems.