

Leo Kanner and the
Psychobiology of Autism

by

Sean Cohmer

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Graduate Supervisory Committee:

J. Benjamin Hurlbut, Chair
Jane Maienschein
Manfred Laubichler

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ABSTRACT

Leo Kanner first described autism in his 1943 article in *Nervous Child* titled "Autistic Disturbances of Affective Contact". Throughout, he describes the eleven children with autism in exacting detail. In the closing paragraphs, the parents of autistic children are described as emotionally cold. Yet, he concludes that the condition as he described it was innate. Since its publication, his observations about parents have been a source of controversy surrounding the original definition of autism.

Thus far, histories about autism have pointed to descriptions of parents of autistic children with the claim that Kanner abstained from assigning them causal significance. Understanding the theoretical context in which Kanner's practice was embedded is essential to sorting out how he could have held such seemingly contrary views simultaneously.

This thesis illustrates that Kanner held an explicitly descriptive frame of reference toward his eleven child patients, their parents, and autism. Adolf Meyer, his mentor at Johns Hopkins, trained him to make detailed life-charts under a clinical framework called psychobiology. By understanding that Kanner was a psychobiologist by training, I revisit the original definition of autism as a category of mental disorder and restate its terms. This history illuminates the theoretical context of autism's discovery and has important implications for the first definition of autism amidst shifting theories of childhood mental disorders and the place of the natural sciences in defining them.

DEDICATION

To my Dad.

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TABLE OF CONTENTS

CHAPTER	Page
1 INTRODUCTION	1
2 THE BIOLOGY OF ADOLF MEYER'S PSYCHOBIOLOGY	8
The Child Study Movement	15
The Pragmatist, Functional Influence on Meyer	18
The National Committee on Mental Hygiene	20
Psychobiology: A Science of Man	22
3 THE LOST KEY: LEO KANNER'S PSYCHOBIOLOGY	26
Individuality, Personality, and Integration	28
The Child Personality in Psychiatric Practice	34
Personal Correspondence with Adolf Meyer in 1942	38
4 AUTISM: LEO KANNER'S 1943 DEFINITION	41
Zelig's Epigraph: The View From Radical Behaviorism	45
From Particular to General: Eleven Case Histories	47
Illustrating a Syndrome: Discussion and Comment	50
5 CONCLUSION	55
BIBLIOGRAPHY	58
APPENDIX	
A EXAMPLE OF ADOLF MEYER'S LIFE CHART	62
B DIAGRAM OF PSYCHOBIOLOGY'S PLACE IN THE SCIENCES	64

CHAPTER 1

INTRODUCTION

In 1943, Dr. Leo Kanner was guest editor for the journal *Nervous Child*. There he published his landmark account of eleven children with a peculiar condition, which to date had been unreported, autism. Kanner first observed these children, born in the 1930s, at the Harriet Lane Home for Invalid Children at the Johns Hopkins Hospital in Baltimore, Maryland. Child Psychiatry was a relatively new specialty, and Kanner one of its pioneers. His report marks what many historians regard as the first definition of autism, a condition that is both mysterious and at the same time well defined. That is, while its etiology is uncertain, its features are characteristically unmistakable.

Increasingly, autism has played a greater role in the politics surrounding the renegotiation of psychiatric diagnostic criteria as even more, as many as 1 in 68, American children have been recognized with what is now known as Autism Spectrum Disorder.¹

Over the last few decades, the prevalence rate of autism and related neurodevelopmental disorders has increased dramatically. In 1975, it was estimated that 1 in 5,000 children had autism, by 1985 that estimate had doubled to 1 in 2,500, and by 1995 children were 5 times more likely (1 in 500) to have autism than a decade prior. This trend has continued through the first decade of the 21st century as the CDC has continued to actively monitor autism's prevalence in the United States through its Autism and Developmental Disabilities Monitoring Network. The increase in prevalence has led

¹ John Baio, "Prevalence of Autism Spectrum Disorder Among Children Aged 8 years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2010," *MMWR* 63 (2014), 1.

many to worry and question the reality associated with diagnostic categories in psychiatry while still others, parents especially, deal with that reality every day in their homes. The reality of the condition is unquestionable, yet prevalence rates have increased amidst a background of shifting definitions of what it is like to be autistic and increased recognition of the condition among practitioners.

Recently the literature surrounding the history of autism and its controversial origin has expanded remarkably as well. Adam Feinstein's *A History of Autism: Conversations with the Pioneers* presents a mostly well-crafted story of autism's discovery.² Feinstein, the father of an autistic child, highlights theories of causes and treatments from the 1930s on. The struggle of the parent becomes clear as he wrestles with difficult questions of where autism comes from and what have been options for treatment or therapy, both questions that Kanner left wide open. The struggle with uncertainty and frustration expressed through a parent's love is highlighted in the thesis of Chloe Silverman's *Understanding Autism: Parents, Doctors, and the History of a Disorder*.³ Silverman focused on the role that parent groups played, as they demanded better care for their children. The list of recent literature goes on with titles like *The Autism Matrix: The Social Origins of the Autism Epidemic*; *Unstrange Minds: Remapping the World of Autism*; and *The Age of Autism: Mercury, Medicine, and a Man-*

² Adam Feinstein, *A History of Autism: Conversations with the Pioneers* (West Sussex, UK: Wiley-Blackwell, 2010).

³ Chloe Silverman, *Understanding Autism: Parents, Doctors, and the History of a Disorder* (Princeton, NJ: Princeton University Press, 2013), 34.

Made Epidemic.⁴ None of these historical accounts, however, deals explicitly with the theoretical context of the scientific and medical practices in which autism's discovery was embedded.

Leo Kanner kept two portraits hanging over his desk: Johann Wolfgang von Goethe, an 18th century polymath and literary figure, and Adolf Meyer.⁵ These two photographs hanging above his desk demonstrates the high esteem to which he held both men. Goethe was a late 18th century literary and scientific antecedent to evolutionary thinking. Kanner often quoted Goethe: "The history of science *is* science itself, the history of the individual *is* the individual".⁶ Meyer was Leo Kanner's mentor and the inaugural psychiatrist-in-chief at the Henry Phipps Psychiatry Clinic at the Johns Hopkins Hospital in Baltimore, Maryland. There, Kanner became the first director of the department of Child Psychiatry. Both Meyer and Goethe used the history of the individual to guide biography-focused theories of change, theories that biologist Ernst Haeckel, psychologist G. Stanley Hall, and others drew upon in the late 19th century.

In this thesis my aim is to show how an appreciation for Meyerian psychiatry alters the way one ought to think about and interpret Leo Kanner's first description of autism in 1943. Since Kanner's defining 1943 article has been embroiled in controversy,

⁴ See Gil Eyal, Brendan Hart, Emine Onculer, et al., *The Autism Matrix: The Social Origins of the Autism Epidemic* (Cambridge, UK: Polity Press, 2010); Roy Richard Grinker, *Unstrange Minds: Remapping the World of Autism* (New York: Basic Books, 2008); and Dan Olmsted and Mark Blaxill, *The Age of Autism: Mercury, Medicine, and a Man-Made Epidemic* (New York: St. Martin's Press, 2010).

⁵ Adam Feinstein, *A History of Autism*, 36.

⁶ *Ibid.*

it makes sense to seat discussion about autism and its checkered history in its proper theoretical context. Thus, I aimed to address a specific research question throughout: *How did Adolf Meyer's psychobiology shape Leo Kanner's first definition of autism in his 1943 "Autistic Disturbances of Affective Contact"?*

The story of autism's discovery fits in the context of a declining focus on the natural sciences in American Psychiatry. In Edward Shorter's *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* he associates a man who was once known as the Dean of Psychiatry in America, Adolf Meyer, with the decline of what he calls the "first biological psychiatry".⁷ Shorter contends, "Meyer's soaring reputation brought the advance of the first biological psychiatry in the United States to an end".⁸ For better or worse, this shifting theoretical context in American psychiatry associated with Meyer is central to Leo Kanner's story and that of autism's discovery. Adolf Meyer's framework, psychobiology, shaped the way Leo Kanner organized and reported facts about the eleven children in "Autistic Disturbances of Affective Contact". Kanner's orientation as a psychobiologist illuminates the theoretical context of his first description of autism in 1943 and provides background to Kanner's landmark article amidst shifting theories of childhood mental disorders and the place of the natural sciences in defining them.

This case represents an overlooked chapter in the intellectual history of the space where evolution, development, and childhood psychiatry overlap. How the Darwinian

⁷ Edward Shorter, *A History of Psychiatry: From the Era of the Asylum to the Age of Prozac* (New York: John Wiley & Sons, Inc., 1997), 109–112.

⁸ *Ibid.*, 112.

Revolution's ideas were tied to psychology and the mental development of children is covered briefly in Frank Sulloway's *Freud: Biologist of the Mind*.⁹ While evolutionary views were present in both Freud and Adolf Meyer's epistemology, Meyer transformed the view of man's place in nature. He challenged a dualist worldview that regarded knowledge about body and mind as separate. While Freud was certainly part of the expansion of this worldview, Meyer's role in the American context instead highlighted the unity of organismal function.

In 1930, Meyer appointed Kanner as director of the Child Psychiatry department at the Harriet Lane Home for Invalid Children, which was adjacent and connected to his own Henry Phipps Psychiatric Clinic. My aim is to show the importance of Meyer's theoretical orientation, psychobiology, to the development of Kanner's clinical and research program from 1930 through 1943. Promotion of epistemological pluralism, the view that there may be several valuable ways of knowing, and the rejection of dogmatism, a system of knowledge which regards certain ways of knowing as unquestionably true, were common features of Leo Kanner's written work advocating for psychobiology through the 1930s. It is this framework explicitly that provides the theoretical context with which to seat Kanner's discovery of autism in 1943.

Kanner drew upon a diverse array of biographical-historical evidence to illustrate the features that initially characterized the rare disturbance affecting these first eleven children. Despite having access to such an array of evidence, Kanner used his words to

⁹ Frank Sulloway, *Freud: Biologist of the Mind* (New York: Basic Books, Inc., 1979), 238–276.

illustrate a pattern of behavior and language-use rather than speculating about which influences were causal.

Historical accounts of Kanner's position on autism's etiology vary. For example, Chloe Silverman wrote, "Kanner largely abstained from presenting any explicit theory about the causes of autism in his careful description".¹⁰ On the other hand, Adam Feinstein wrote, "Kanner did not, however, believe that the parents were the sole cause of autism. He saw the probable origin of the disorder as the consequence of the interaction of a biologically based, genetic predisposition for autism, coupled with the unfavorable social conditions provided by the parents".¹¹ Coming to some conclusion about Leo Kanner's choice of evidence and interpretation of his observations and other patient history data requires one to engage with a similar theoretical frame of reference.

In this thesis, I look at psychobiology by asking three supplementary questions. First, "*what are the roots of Meyer's psychobiology?*" is discussed in "The Biology of Adolf Meyer's Psychobiology". Adolf Meyer's psychobiology was primarily rooted in 19th century evolutionary theory, influenced in the American setting by philosophical pragmatism and a renewed childhood gaze in psychology. Pragmatism and the study of childhood also came together in an early 20th century public health effort known as the Mental Hygiene Movement. Next, "*how did Leo Kanner conceptualize psychobiology?*" is discussed in "The Lost Key: Leo Kanner's Psychobiology". Leo Kanner became familiar with psychobiology through Adolf Meyer, and in the 1930s he became a forceful

¹⁰ Chloe Silverman, *Understanding Autism*, 34.

¹¹ Adam Feinstein, *A History of Autism*, 59.

advocate for it. In this chapter I uncover the ways that Kanner wrote about and understood psychobiology, explicitly making the theory his own. Finally, “*how did a psychobiological frame affect defining autism for Leo Kanner?*” is discussed in “Autism: Leo Kanner’s 1943 Definition”. In this chapter I connect theory to evidence, demonstrating that Kanner’s “Autistic Disturbances of Affective Contact” was dynamic and varied in the kinds of evidence described. This descriptive attitude made Kanner’s first definition of autism plainly agnostic about etiology.

CHAPTER 2

THE BIOLOGY OF ADOLF MEYER'S PSYCHOBIOLOGY

The aim of this chapter is to examine the origins of the practical and theoretical underpinnings of Adolf Meyer's school of psychiatry, known as psychobiology. Leo Kanner's work in the 1930s and 1940s, through Meyer's psychobiology, became a reflection of theory from American philosophy, psychology, and public health efforts. I first discuss the ideas that influenced Adolf Meyer in the formation of his psychobiology framework. I demonstrate that psychobiology was grounded in late 19th century American pragmatist and evolutionary thinking. To show the origins of Meyer's psychobiology, I focus on three influences: G. Stanley Hall and the Child Study Movement; John Dewey and the American pragmatist school in Chicago; and finally, Adolf Meyer's role in forming the National Committee on Mental Hygiene and the correlated opening of the Henry Phipps Psychiatric Clinic.

Adolf Meyer finished his medical training in Zurich, Switzerland, in 1892 and thereafter traveled to the United States to work at the Illinois Eastern Hospital for the Insane in Kankakee, Illinois. From his early days as a neuropathologist, he was impressed by the rampant disorganization and lack of a coherent system for studying mental illness at the hospital. While in Kankakee, he began reforming care by organizing the work of practitioners so that there was consistency in language and diagnosis between clinical observers.

Meyer's early experiences in the United States influenced him in ways that shaped his theoretical framework for psychiatry, which he developed and promoted over the following 50 years. American pragmatists John Dewey and William James directly

influenced him, with some indirect influence from Charles Sanders Pierce. Charles Darwin's evolutionary conception of man and that of late 19th century experimental embryologist Wilhelm Roux were also influential to Meyer, and therefore he held a dynamic and integrated view of mind and body as developed, adaptive, and conceptually inseparable. "Meyer believed that the constituent elements of human existence are actively interrelated, from the lowest biochemical level to the highest cognitive level".¹² Meyer's psychobiology was an integrated conceptualization of the mind and brain. Further, it provided a theoretical context in which the functioning, interactive, and dynamic brain and mind were influenced by biological, psychological, and social factors. This made distinctions between nature and nurture (innate and learned) complete nonsense. Meyer's view that psychiatric explanation could be complex, involving dynamic interaction between multiple kinds of evidence, flew in the face of theories of his day, which were often exclusive about the kinds of evidence which could serve as valid explanations.

The Child Study movement of the late 19th century placed the human child central to its scientific program. G. Stanley Hall and other experimental psychologists began to take human development seriously and used theories from the natural sciences, specifically embryology, to understand how humans continued to develop after they are born. This movement, which shifted the clinical gaze toward the child, was also central to a dominant social program, modeled after public health and sanitation efforts, which

¹² Bonnie Strickland, ed., "Meyer, Adolf." In *The Gale Encyclopedia of Psychology*. (Detroit: Gale, 2001): 426–427.

aimed to promote mental health and prevent mental disorder—the Mental Hygiene Movement.

Clifford Beers, who established the Connecticut Society for Mental Hygiene before expanding the program nationally, published *A Mind That Found Itself* in 1908. This was a crucial time for reform in the medical professions, and his book influenced one wealthy donor, Henry Phipps, to contribute to the construction of a new psychiatry clinic at the Johns Hopkins Hospital in Baltimore. Stewart Paton, who had been a fish neuroembryologist at Naples Aquarium in Italy, recommended to William Osler that Adolf Meyer take up the position as psychiatrist-in-chief at the Henry Phipps Psychiatric Clinic. Meyer was to be the first new department head since the Big Four physicians at the Johns Hopkins Hospital had joined together in John Singer Sargent's famous painting in 1905.¹³ Through the efforts of Meyer and William James, Beers was able to extend his efforts from the state level, the Connecticut Society for Mental Hygiene, to the national level, forming the National Committee for Mental Hygiene in 1909.

The confluence of Child Study, American Pragmatism, and the Mental Hygiene movement came together in American philosophy, psychology, and social institutions at a time when Adolf Meyer was solidifying his eclectic methodology for the study of man in psychiatry, known as psychobiology. Each of these influences, while important to Meyer, also set the stage for Leo Kanner's Child Psychiatry in the 1930s.

¹³ This painting of the four founding physicians at Johns Hopkins, pathologist William Henry Welch, surgeon William Stewart Halsted, internist William Osler, and gynecologist Howard Kelly represented four medical specialties deemed important for the founding of the Johns Hopkins Medical School. Adolf Meyer was the fifth big department head, of psychiatry, and indicates the increased importance psychiatry held around the beginning of the 20th century.

Leo Kanner's mentor and psychiatrist-in-chief at the Johns Hopkins Hospital influenced his practical work by providing a system for thinking about the total function of man, which he called psychobiology (or less commonly known as ergasiology, from the Greek words for working and doing), which integrated biological, psychological, and social influences into dynamic causal explanations of mental disorder. Meyer's influence on American Psychiatry was radically different from often-dogmatic approaches common in the early 20th century. Meyer was perhaps ahead for his time given a more contemporary trend toward what is known as George Engel's biopsychosocial model of mental disorder (Engel cites Meyer as the origin of this model).¹⁴ Meyer's epistemological pluralism about sources of causal explanation allowed his system to work well and even incorporate other approaches, such as psychoanalytical or neuroanatomical approaches, into its framework.

Adolf Meyer forcefully propounded his own system of psychobiology in American psychiatry in the first half of the twentieth century, as he took on the role of psychiatrist-in-chief at the Henry Phipps Psychiatric Clinic from 1912 when the clinic at the Johns Hopkins Hospital first opened until his retirement in 1941. Psychobiology was the framework by which Leo Kanner observed and described the first eleven children with autism from 1938 to 1942.

¹⁴ See Adolf Meyer, *Psychobiology: A Science of Man*. Edited by Eunice Winters and Anna Mae Bowers (Springfield, Ill: Charles C. Thomas, 1957); Also, Edwin R. Wallace, "Adolf Meyer's Psychobiology in Historical Context, and Its Relationship to George Engel's Biopsychosocial Model," *Philosophy, Psychiatry, & Psychology* 14 (2008): 347–53.

Representing Kanner as a psychobiologist revises how his work ought to be interpreted. Some interpretations of his 1943 report regard Kanner as a promoter of radical psychodynamics. However, the major implication of a psychobiologically-inclined Kanner is that descriptions of his observations are "facts" to be interpreted, in a broad sense, rather than Kanner's own speculation about etiological significance. Psychobiology brought with it a renewed sense of legitimacy with its particular emphasis on observation and description.

Adolf Meyer's psychobiology was the result of a 19th century evolutionary understanding of how the human organism interacts with an environment.¹⁵ It was partly a product of the Chicago functional school of psychology, one that rejected mind-body dualist explanations and accepted various kinds of explanation under the guise of pluralism. It was pragmatic, in the sense that the three major American pragmatist philosophers of Meyer's day were influential in its formation, and reflected in its language. It borrowed from G. Stanley Hall's reintroduction of Ernst Haeckel's biogenetic law as Meyer incorporated the life history or life chart into psychiatric practice (See Appendix A). From the life charts, the practitioner documented life events, to the effect of the psychiatrist's determination of reaction patterns. Reaction patterns, or linkages between events in a patient's life history and a type of adverse behavioral response, became indicators of maladjustment of a person to his changing environment. In effect, it was not neuroanatomical or physiological study, nor was it psychoanalytic;

¹⁵ Lewis Willmuth, "A retrospective evaluation Darwin comes to American psychiatry: evolutionary biology and Adolf Meyer," *Journal of Social and Biological Structures* 9 (1986): 279–87.

psychobiology was a holist theoretical system, and as Meyer claimed, it was the study of personality. Yet, its pluralistic stance with regard to explanations allowed the psychobiologist to operate amicably with other ways of knowing about psychiatric disorder.

The child study movement, started by G. Stanley Hall, began as a result of his preoccupation with Ernst Haeckel's biogenetic law. The idea that “ontogeny recapitulates phylogeny” for Hall extrapolated and morphed into a dangerous idea: ontogenesis recapitulates phylogenesis—or rather, as Hall put it, the formation of an individual summarizes the formation of the human race. Hall’s ideas about the recapitulation of races became a dangerous interpretation when coupled with evolutionary theory and lent itself to social Darwinism, racial hygiene, and eugenics.

While the idea in its entirety served a problematic end, the shift in research and clinical gaze toward the child as a locus for prevention of mental illness and promotion of health, as means to that end, also took shape from the 1880s through the beginning of the Mental Hygiene Movement in 1909. It is worth mentioning that members of the Mental Hygiene Movement were also involved with eugenics in America, as the positive program of prevention of disease and promotion of health was reflected in the values of both. Meyer was a powerful member of eugenics societies in the 1920s and 1930s. Kanner took a forceful stance against those eugenicists who advocated for euthanasia of mental defectives, and was an outspoken advocate for those with learning disabilities during the 1930s and the Second World War.

The strong influence of American functionalism on Meyer is apparent in his psychobiology when compared to the work of William James and John Dewey. As Frank

Sulloway put it, “the functionalist program (led by William James, John Dewey, J. R. Angell, and G. Stanley Hall) sought to make psychology the study of the organism’s adaptations to its environment”.¹⁶ The functionalist program was radically different from the psychoanalytic program, for instance, as Freud substantially limited the kinds of evidence relevant to the study of mind. In functionalism and in Meyer’s psychobiology, child development and evolution became intertwined in the thinking of American psychiatrists.

Finally, the National Committee on Mental Hygiene reflected Adolf Meyer’s resolve to reform care for America’s mentally ill. While Dorothea Dix had limited success in transforming the Massachusetts asylum at Worcester in the mid-19th century, it was Clifford Beers working with William James and Adolf Meyer who turned a call for reform, articulated in his 1909 book *A Mind that Found Itself*, into a national movement to treat mental illness as a public health concern. The National Committee on Mental Hygiene was both a way for Meyer to exert professional influence, and a way to extend Hall’s child study movement into one with applied, practical ends.

In the sections below, I return to Child Study, American Pragmatism, and Mental Hygiene to demonstrate how each informed Adolf Meyer’s science of man, psychobiology.

¹⁶ Frank Sulloway, *Freud*, 290.

THE CHILD STUDY MOVEMENT

In the mid-19th century, G. Stanley Hall became one of the major drivers in the study of the child mind. He began the child study movement late in the 19th century, connecting the importance of child study to other scholarship in his book titled *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion, and Education*.

After studying with Wilhelm Wundt at the University of Leipzig then later with William James at Harvard University, Hall applied Ernst Haeckel's biogenetic law to conceptualize the developing mind. Haeckel's "Biogenetic Law" stated that ontogeny recapitulates phylogeny. In other words, the ways that a species came to be is captured and summarized in the ways that individuals of the species developed into a being. To Hall, in order to understand the development the human race and human psychology, one first needed to understand the developing mind of the child. In *Adolescence*, he restated Haeckel's biogenetic law in terms of psychology: the development of the individual recapitulates the development of the race.

Also central to Hall's *Adolescence* was that children undergo a period of storm and stress. While this statement has largely been credited to Hall because of his explicit use in regard to adolescent children, *Sturm und Drang* (Storm and Stress) was connected more broadly with German Romantic literature, to which Goethe was associated in the late 18th century. Hall's importance is his role in the establishment and promulgation of the human child as an object of scientific research in late 19th century experimental psychology, including the practical implications for consideration of the child beyond his discipline.

Soon after Hall graduated from Harvard University with a degree in philosophy, the first from Harvard studying with William James, he quickly established a psychology laboratory at Johns Hopkins University in 1882. Differentiating himself from his mentor in Leipzig, Hall became interested in studying the child mind and quickly led the field of psychology into this area. G. Stanley Hall's psychology combined with American pragmatist philosophy at Hopkins. Both he and Charles S. Peirce, founder of American Pragmatism, saw child psychology and pragmatism come together in the thinking of the young philosopher John Dewey, then a graduate student at Johns Hopkins. While Hall's time at Hopkins was short lived, only four years in his role as chair in psychology, his research there established him as an eminent American psychologist, second only to William James.

G. Stanley Hall was a man of average height but of otherwise great stature—bearded, balding, yet unequivocally bold. Sigmund Freud solidified Hall's prominence as an intellectual and scholar of the mind in 1909 when Hall invited Freud and Carl Jung, among others, to Clark University. Later remembering Hall in his autobiography, Freud wrote, "there was a touch of the 'king-maker' about him, a pleasure in setting up authorities and in then deposing them".¹⁷

The Clark University meeting marked what many consider the first formal academic acceptance of Sigmund Freud's psychoanalytic theories in America. It was quite nearly a who's-who of psychology and psychiatry at the time with the exception of

¹⁷ Saul Rosenzweig. *Freud, Jung, and Hall The King-Maker: The Historic Expedition to America (1909) with G. Stanley Hall as Host and William James as Guest*. (St. Louis: Rana House Press, 1992): 13.

many from the University of Chicago.¹⁸ In photos taken from the event G. Stanley Hall took center stage, flanked by William James, Carl Jung, Sigmund Freud, and Adolf Meyer, among others.

Hall had ambitions to take the theoretical assumptions of his child psychology even further. His hope was to exceed his intellectual predecessors by engaging in a biological philosophy of greater reach than those before him. He came to believe in a genetic psychology that would explain a variety of social phenomena, evidenced by his work on *Adolescence* and the broad reach of its subtitle. These ambitions never came to fruition, and later in life he took to studying the elderly mind, noting a deteriorating experience he termed senescence. Hall never did for the study of the mind what Ernst Haeckel or Charles Darwin did for biology, but his influence filtered through the later work of Mental Hygienists like Clifford Beers and Meyer, and his professional connections to psychiatry, extended far beyond what he could predict.

In 1894 while in Kankakee, Illinois, Meyer joined the Illinois Association for Child-Study and worked there with William Krohn, a former pupil of G. Stanley Hall. Meyer wrote the opening article for the Illinois Association's journal that the "roots of a person's good qualities as well as evil anomalies could be found in 'the period of plasticity,' with its early surroundings and lasting impressions".¹⁹ Here in his early writing, Meyer expresses his thoughts about growth and environmental influences that

18

¹⁹ Adolf Meyer, *The Commonsense Psychiatry of Dr. Adolf Meyer: Fifty-Two Selected Papers; Edited, With Biographical Narrative*. Edited by Alfred Lief. (New York: McGraw-Hill Book Company, Inc., 1948): 51.

become causally integrated into the highly plastic child mind. Unique to the progression of psychiatry in America, philosophical pragmatism influenced explanations of mental disorder in terms of environment, evolution, and adaptation within functionalism.

THE PRAGMATIST, FUNCTIONAL INFLUENCE ON MEYER

In 1882, the American Philosopher John Dewey began his graduate studies at Johns Hopkins. There he studied logic with Charles Sanders Peirce and psychology with Granville Stanley Hall. Hall, having just returned from Germany after studying under Wilhelm Wundt, was convinced that experimental psychology had a promising future also in the United States. When he was appointed chair of psychology in 1882, Hall set up an experimental psychology lab and courses related to physiological and experimental psychology. It was there that Dewey began experiments that were focused on attention.²⁰

William James, while at Harvard, closely corresponded with Peirce and Hall. Each of these early American Pragmatists became important influences as Meyer developed his psychobiology. On a conceptual level, psychobiology is similar to the functionalism as described in Dewey's Reflex Arc concept, yet as practically applied to psychiatry.²¹ Chris Green has noted the similarity of functionalism and behaviorism, together with functionalism's influence on Meyer. Green wrote, "The influential clinical approach that Meyer ultimately developed was suffused with functionalist thinking,

²⁰ George Dykhuizen, "John Dewey at Johns Hopkins (1882–1884)." *Journal of the History of Ideas* 22 (1961): 103–16.

²¹ John Dewey, "The Reflex Arc Concept in Psychology," *Psychological Review* 3 (1896): 357–370.

particularly the idea that mental problems often arise from poor adaptation to the social environment and from the development of ineffective habits”.²²

Dewey was born in Burlington, Vermont on 20 October 1859, just seven years before Meyer. Both Meyer and Dewey claim that the work of Charles Darwin had a formative influence during their youth. Through philosophical pragmatism, however, Dewey recognized and incorporated important epistemological changes he deemed required by Darwinian thought.²³ These changes included doing away with antiquated notions of absolute causes rooted in theology and searching out objects of knowledge "in the mutual interactions of changing things".²⁴

Meyer, after training in neuropathology in Switzerland, arrived in the United States in 1892 and began working full time as a pathologist in Kankakee, the Illinois Eastern Hospital for the Insane. While there, 50 miles outside of Chicago, Meyer befriended John Dewey. The two became lifelong friends, and Dewey's functionalist psychology is reflected in Meyer's own psychobiology. It wasn't until Meyer's work in New York that the two, together with their wives, scheduled regular weekly dinners together, but nonetheless, Dewey's functionalism is apparent in Meyer's philosophy.²⁵

²² Christopher Green, "Darwinian Theory, Functionalism, and the First American Psychological Revolution," *American Psychologist* 64 (2009): 81.

²³ John Dewey and William James. "The Influence of Darwinism on Philosophy (1909)." In *James and Dewey on Belief and Experience*. Edited by J. Capps and D. Capps. (Chicago University of Illinois Press, 2005): 179–88.

²⁴ *Ibid.*, 182.

²⁵ Christopher Green, "Darwinian Theory, Functionalism, and the American Psychological Revolution," *American Psychologist* 64 (2009): 75–83.

For instance, Dewey's psychology, by adopting evolutionary assumptions provided "an integrated way of understanding the relation between organism, environment, cognition and behavior".²⁶ In a similar way, Meyer claims the "integrated mental life" and rejection of "psychophysical dualism" as central tenets of his psychobiology.

THE NATIONAL COMMITTEE ON MENTAL HYGIENE

While integrating child study and Dewey's functionalism, Meyer took advantage of the opportunity to reform care for America's mentally ill. Nowhere is his reform-mindedness more prevalent than in his association with Clifford Beers and that National Committee on Mental Hygiene, which began in 1908.

Between Kankakee and the asylum in Worcester, Massachusetts, Meyer established himself as a reformer, and as early as 1915 began emphasizing detailed life-charts (See Appendix A) to improve care. Meyer's life-chart was used to record the "facts which determined and constituted" behavior as "organized commonsense" and "experiments of nature".²⁷ Tireless patient history evidence thus became a central feature of Meyer's psychiatry. It also became clear through these life charts that events shaping personality often found their way back to early childhood, and childhood psychiatry became a practical extension of efforts to prevent mental illness in adulthood.

²⁶ Eric Bredo. "Evolution, Psychology, and John Dewey's Critique of the Reflex Arc Concept." *The Elementary School Journal* (1998): 447.

²⁷ Adolf Meyer, *Psychobiology*, 452.

G. Stanley Hall's Child Study movement of the late 19th century, thus, became integral to Meyer's preventative orientation. Meyer helped begin the Mental Hygiene Movement with William James and Clifford Beers in 1908, as Meyer thought that the earlier in one's life that the psychiatrist could intervene the better chance he has at preventing mental illness. Beers, who wrote *A Mind That Found Itself*, an account of his experiences in turn of the century American asylums, became a catalyst for both the construction of a new psychiatric clinic at Hopkins, and the beginning of the mental hygiene movement. This movement attempted to mirror sanitation and public health successes of the early 20th century, by advocating child guidance and early intervention to prevent mental illness.²⁸

The Henry Phipps Psychiatric Clinic and its close neighbor, the Harriet Lane Home for Invalid Children, opened their doors just months apart between November and April in 1912 and 1913 respectively. Within the Phipps clinic a psychobiology laboratory opened in 1916, where the behaviorist John Watson and from 1920 onward, after Watson's departure, Curt Richter conducted scientific study related to the interaction of organism and environment. In 1917, Meyer and Watson coauthored a paper with one of the more succinct descriptions of Meyer's psychobiology, described as "the study of the total behavior of the individual and its integration as it hangs together as part of a life history of a personality in distinction from the life history of a single organ".²⁹

²⁸ Theresa Richardson. 1989. *The century of the child: The mental hygiene movement and social policy in the United States and Canada*. (SUNY Press, 1989), 10–15.

²⁹ Meyer, *Commonsense Psychiatry*, 492.

PSYCHOBIOLOGY: A SCIENCE OF MAN

Adolf Meyer wrote that one should “think in terms of a science of man”.³⁰ Rather than physiology, which studied simply the functions of parts of the human organism, psychobiology was to be the study of the total functioning organism. To further delineate Meyer’s epistemological concerns, it is worth outlining who he described as influential in shaping his science of man.

Meyer summarizes psychobiology in the following paragraph by pointing to his own perception of its formative influences:

I might sum it up in this way: Following up the stimulus from Gowers, and my earlier impressions from Forel and Von Monakow and the Déjerines, put me in a mood or capacity to assimilate a special structural, and at the same time also a functional, orientation with a place also for the psychobiological data or ergasias, structural under the Von Gudden and Forel influence, and the impression of Roux's Entwicklungsmechanik, but definitely with an open-minded interest in Hughlings Jackson's concerns and their application.³¹

William Gowers was known for several innovations, the least of which was his shorthand for recording case records. Meyer was fascinated with the diligence of his ability to capture such detail and avoid missing anything. Gowers was an early advocate of the use of statistics in clinical medicine, based on his own case records. His textbook on the anatomy of the spinal cord was so clear and accurate that Meyer sought to duplicate such detail for the brain.

³⁰ Ibid., 537.

³¹ Ibid., 34.

It is not entirely clear what early influences Meyer was speaking of when he referred to Forel, Von Monakow, or the Déjerines (Jules and Augusta). Each was associated with neurology and psychiatry in ways that sought neuropathological explanations for behavioral anomalies. This focus on neuropathology definitely rings true of Meyer's earlier work, as Susan Lamb demonstrated in her 2010 dissertation that Adolf Meyer in his early years at Johns Hopkins was a "pathologist of the mind".³²

When Meyer claims that psychobiology was oriented to both function and structure, he was occupying a conciliatory position between structuralist and functionalist explanations. Meyer had already corresponded extensively with Edward Titchener through the 1910s. In these letters, Titchener and Meyer disagreed with one another on a very fundamental level about how the mind works in the body, and therefore about how abnormality presents itself.³³ For Titchener, a structuralist, the physical and mental events occur in parallel (known as psychophysical dualism) and the two worlds of mind and body were to be kept conceptually separate. For Meyer, a functionalist, psychobiology rejected psychophysical dualism in favor of mind-body interactionism. Interactionism in this case fed into Meyer's eclectic psychiatry by allowing the incorporation of multiple lines of evidence, like those described above, which could lend to explanation. Thus,

³² Susan Lamb, *Pathologist of the Mind: Adolf Meyer, Psychobiology and the Phipps Psychiatric Clinic at the Johns Hopkins Hospital, 1908–1917*. (doctoral dissertation, Johns Hopkins University, 2010).

³³ Adolf Meyer and Edward B. Titchener, *The Correspondence between Adolf Meyer and Edward Bradford Titchener*. Edited by Rand B. Evans and Ruth Leys. (Baltimore: The Johns Hopkins University Press, 1990): page.

Meyer and his psychobiology occupied an important middle ground between radical behaviorism and radical structuralism.

Meyer's reference to Wilhelm Roux's *Entwicklungsmechanik* research program in embryology and John Hughlings Jackson in almost the same breath is an important turn of phrase. Meyer was referring to developmental mechanics when he referred to Roux and to the value laden evolutionary conception of mental disorder introduced by Jackson, namely dissolution. Meyer held an integrated view of evolutionary and developmental dynamics, which is reflected when he discusses his early influences. The term dissolution was meant to express the notion that higher brain centers could somehow inhibit the function of lower ones.

Meyer provided this summary in a May 1933 speech before the Royal Medico-Psychological Association while at the Maudsley Hospital in London. Meyer became an important influence on British psychiatry in the 1930s.³⁴ It is worth noting that Elwyn James Anthony, Kenneth Cameron, John and Lorna Wing, and Michael Rutter did much of the founding work on autism in the United Kingdom at the Maudsley Hospital in the 1950s and 1960s.³⁵ While he was certainly trying to appease his audience, the description is telling. Here Meyer wraps influences from his early studies in Britain and France with his knowledge of experimental physiology, psychology, embryology, and neurology.

³⁴ David Pilgrim, "The biopsychosocial model in Anglo-American psychiatry: Past, present and future?", *Journal of Mental Health* 11 (2002): 586–587.

³⁵ Bonnie Evans, "The Foundations of Autism: The Law Concerning Psychotic, Schizophrenic, and Autistic Children in 1950s and 1960s Britain," *Bulletin of the History of Medicine* 88 (2014): 253–286.

Also, he includes anatomy, pathology, development, and evolution as integrated parts of his psychobiology.

In the next chapter, I offer a close examination of Leo Kanner's primary publications through the 1930s to demonstrate that he became an ardent defender of the psychobiological clinical and research program. Kanner does a better job than Meyer in many ways when illuminating what the research and clinical goals of psychobiology were about, and how it distinguished itself from other methodologies in psychiatry and psychology.

CHAPTER 3

THE LOST KEY: LEO KANNER'S PSYCHOBIOLOGY

In the previous chapter, I described three intellectual sources for Adolf Meyer's psychobiology and described some of its tenets. With this as background, I now elaborate on the claim that Leo Kanner was intellectually indebted to Meyerian psychobiology, a system of thought that differed from other approaches to mental disorder developed around the turn of the century. For instance, psychoanalysis or neuroscientific approaches, developed in the latter half of the 19th century, differed from psychobiology in that they privileged single sources of causal information, the first, for instance, emphasized the primacy of psychological causes and the second neuroanatomical.

When Spafford Ackerly composed a series of oral history interviews in 1972 about the early history of child psychiatry in the United States, Leo Kanner remarked:

I had my offices in the pediatrics clinic, and you see, if you know, you were at Hopkins, you know the psychiatric clinic is close to the pediatrics clinic, at that time it was. Now they've built palaces. But there was a door between the two. That door was always locked, and when the psychiatric interns wanted to go for dinner, they had to have a key and lock it and unlock it so that, for heaven's sake, the insane and the children shouldn't have any contact with each other. It was terrible. So after I had been there for about two years, spontaneously the door became unlocked. Well, for one thing the interns rotated with my clinic, and someone made the suggestion that if I ever write a history of my work there, I should entitle it, *The Lost Key*.³⁶

The Lost Key is actually an apt phrase to summarize Kanner's work at the Harriet Lane Home. In one sense, psychobiological psychiatry was the key to understanding Kanner's work as a practicing child psychiatrist, as it opened doors both between medical

³⁶ Interview of Leo Kanner by Spafford Ackerly and Gary May. Ackerly Oral History Project: Child Guidance Movement Pioneers. May 15, 1972. University of Louisville, Kornhauser Health Sciences Library. Louisville, Kentucky.

specialties and to new forms of evidence. Ellen Key, a Swedish sociologist, wrote *The Century of the Child* in 1900 predicting the importance of the child in society and discourse in the 20th century.³⁷ Kanner's reference to *The Lost Key* interpreted in both ways makes sense: first, the integration of the psychobiological child mind into emerging social and institutional configurations in early 20th century biomedicine through the medium of child psychiatry; and second, Kanner's emphasis on the prominence of the child in the early 20th century, especially in the American context.

By 1943, Kanner had become to Adolf Meyer what Thomas H. Huxley was to Charles Darwin—his bulldog. Though Meyer's psychobiology was not as controversial as Darwin's natural selection theory per se, Kanner's polemics were prone to demonizing dogmatism while at the same time being amenable to incorporation of ideas and theories from the dogmas he wrote against. Some have described psychobiology as eclectic, or “a model that views any theory or method as potentially correct, but no theory or method as definitively incorrect”.³⁸ This eclecticism sometimes caused Meyer to recruit and prop up theories like focal infection, transorbital lobotomies, or insulin shock therapy that were later seen as problematic. In these cases Meyer found promise in their novelty.

In this chapter I examine Kanner's writing about psychobiology through the 1930s to demonstrate the unique importance he placed on psychobiological theory in

³⁷ Ellen Key, *The century of the child* (New York: G. P. Putnam's Sons, 1909), 1–2. Kanner also cites her in the first paragraph of Leo Kanner, “Approaches: Retrospect and Prospect,” *Journal of Autism and Childhood Schizophrenia* 1 (1971): 453–9, this suggested alternative meaning is not altogether outlandish.

³⁸ S. Nassir Ghaemi, “Adolf Meyer: Psychiatric Anarchist,” *Philosophy, Psychiatry, & Psychology* 14 (2007), 341.

practice. His 1933 article “The Significance of a Pluralistic Attitude in the Study of Human Behavior” illustrated how mental integration, personality, and individuality were central tenets of Meyer’s psychobiology in theory and practice. Kanner’s inclusion of the developing child in his 1934 article “Work With Psychobiological Children’s Personality Difficulties” and his 1935 textbook *Child Psychiatry* show how child psychiatry became a crucial object of investigation for psychobiology and the mental hygiene movement. Finally, a 25 October 1942 letter from Leo Kanner to Adolf Meyer reveals Kanner’s self-professed devotion to a psychobiological frame of reference.

INDIVIDUALITY, PERSONALITY, AND INTEGRATION

In 1933, Leo Kanner published “The Significance of a Pluralistic Attitude in the Study of Human Behavior”. The subtitle of the article “Introduction to Some of the Leading Principles of Dr. Adolf Meyer’s Objective Psychobiology” made it clear that Kanner was promulgating Adolf Meyer’s psychobiology. However, beyond the telling subtitle, Kanner’s polemical style clearly elaborates the principles of a psychobiologist while at the same time distancing itself from other early 20th century schools of psychiatry, which he felt were too quick to jump to conclusions.

Meyer’s psychobiology attempts a unifying, or conciliatory, position counter to the expansion of scientific specialization rampant in psychology around the turn of the century. Kanner reflects on this first principle of consilience, noting “...all branches of scientific inquiry into the mentally integrated behavior of man... are fundamentally concerned with... activities of the human individual receiving impressions from, and

projecting himself upon, his environment”.³⁹ While the branches of inquiry Kanner mentions represent a significant and diverse set of specialization, he draws them together to note that pragmatically, these fields of inquiry aim for the same ends, that is understanding the personality development of man.

If pluralism was significant in the study of human behavior to a psychobiologist, the enemy to such a stance is theoretical dogmatism. Specifically, Kanner was opposed to dogmatism that held single views or approaches to be definitively right in their causal explanations. Kanner wrote that recent endeavors in psychology “...created the undoubtedly ingenious and catching religion of psycho-analysis with its Trinity of Superego, Ego, and Id”.⁴⁰ He echoed these concerns about other approaches: “it is this unyielding and rigid adherence to the one or other ‘only’ method of approach,” and “opinion, often repeated, is mistaken for fact,” and regarding the various psychiatric schools “...all have faith in their respective dogmata”.⁴¹

While his anti-dogmatism can be regarded as anti-theoretical, in a general sense, Kanner explains that psychobiology isn’t strictly against all theories. “This does not mean that theories are of no value or undesirable. The natural sciences cannot get along without them”.⁴² He concedes further, “the naturalist builds up his theories and hypotheses upon concrete, objective, undeniable facts...” but warns, “the apostles of our psychological

³⁹ Leo Kanner, “The significance of a pluralistic attitude in the study of human behavior,” *The Journal of Abnormal and Social Psychology* 28 (1933): 30.

⁴⁰ *Ibid.*, 31.

⁴¹ *Ibid.*

⁴² *Ibid.*

cults enter the arena with a theory already formed or in the process of formation and force the facts to comply with their expectations.”⁴³ Kanner’s stance, while against theoretical dogmatism, was more of a critique of rampant speculative ideologies that were, in his view, too quick to jump to conclusions about causation.

For Kanner, psychobiology stood for the total function of a human being together with organ function and behavioral habits. “Objective psychobiology...deals with living, breathing, digesting, propagating, waking or sleeping, loving or hating, wishing or fearing, happy or unhappy individuals and studies the pertinent facts and accompanying factors without trying to obscure matters by the injection of ready-made preconceptions and preoccupations”.⁴⁴ Echoing earlier sentiments from Meyer about whole versus part-function, Kanner wrote, “...the psychobiologist occupies himself with the total function of the human organism as a whole, his ‘behavior’, implicit as well as overt. He does not assume nor postulate, but finds in every-day [sic] experience that ‘mind’, as is indicated in the old etymologic relation between mind and man, is an integrated activity of the human being, in which the central nervous system and, to a certain extent, the products of internal secretion play a predominant but not exclusive part”.⁴⁵

Finally, Kanner ties total function, behavior study back to personality, “‘Mind’ becomes a function or, better even, a set of functions of a personality which is to be

⁴³ Ibid.

⁴⁴ Ibid., 33.

⁴⁵ Ibid., 33–34.

studied and dealt with in its integrated entirety”.⁴⁶ Further, “it cannot be denied that each and every individual presents a unique, unduplicated experiment of nature, to which common speech refers as his ‘personality’”.⁴⁷

He later ties these conceptual tenets to the Meyerian methodology of the life-chart. By adopting biographical accounts of patients, psychobiologists incorporated an array of sensory observational data as well as historical-biographical data. Which “facts” were deemed most relevant was not altogether clear. What was clear was that the psychiatrist was to be as thorough and detailed as possible when assessing patient history. This exhaustive account was to include biological, psychological, and social influences collected from friends, family, police, landlords, social workers, medical workers, teachers, and so on.

Thus the broad-reaching motives of psychobiology expressed through Kanner were entwined with the social agenda so closely associated with Adolf Meyer. Psychobiology and child psychiatry were both so closely linked with improving mental health and prevention of mental disorder—the Mental Hygiene Movement—that Kanner often expressed the broader disciplinary goals of binding psychiatry to legal and social services.

Psychiatric study of personality for Kanner was inextricably linked to Adolf Meyer’s life-chart (See Appendix A). By having a rough sketch of the individual’s history in terms of biological, psychological, and social development, the psychobiologist

⁴⁶ Ibid., 35.

⁴⁷ Ibid.

was able to trace *ergasias* (Meyer's word for the sum of mental, behavioral, and physiological functions or reactions) to potential causal influences within a patient's life history.

The exhaustive reach of the psychobiological research program sought to describe the factors that influenced personality. Conceptually, it blurred borders between society and nature in ways that made statements about man as somehow outside of the natural world obsolete. As Kanner wrote, a psychobiologist "...does away with the useless and futile alternative...of either 'heredity' or 'environment' being solely responsible for behavior deviations".⁴⁸

Distinguishing psychobiology from psychoanalysis, Kanner wrote:

It becomes evident that the methods used by the psychobiologist must be as multiple and varied and plastic as are the facts with which he deals. Without having to subscribe unconditionally to any "school", he gratefully acknowledges any factual contributions from any source. He gladly welcomes the data furnished by experimental psychology but, while occupying himself with trees, he does not wish to lose sight of the forest of the total personality.⁴⁹

This is far different than the boundaries Sigmund Freud set on valid evidence available to psychoanalysis. Freud wrote, "psycho-analysis must keep itself free from any hypothesis that is alien to it, whether of an anatomical, chemical or physiological kind, and must operate entirely with purely psychological auxiliary ideas".⁵⁰ Kanner makes some final comments in this 1933 article about the position of psychobiology in the

⁴⁸ *Ibid.*, 38.

⁴⁹ *Ibid.*, 39.

⁵⁰ Frank Sulloway, *Freud*, 19.

sciences. He wrote, “Objective, critical, plastic, relativistic and pluralistic psychobiology on the monistic basis of mental integration becomes an indispensable portion of biology, or the investigation into the manifestations of live organisms”.⁵¹ This reflects the larger program of psychobiology outlined by Adolf Meyer in *Psychobiology: A Science of Man*, where psychobiology occupies a position between individuation and sociology (See Appendix B).⁵²

The behavior of man, as a researchable unit, therefore was the aim of psychobiology. Not only was it informed by the natural sciences, it was to take up a position in science between the individual and society. Psychobiology, as Meyer and Kanner often wrote, was to study the total function of the human being, much like physiologists studied the function of a single organ.

For Kanner, this functional position relative to facts informed his practice in ways that instead led him to be descriptive rather than presumptive about causal influences. Kanner “...resisted intimidation by common wisdom or dogma” and “his approach was based on observation and description of the child and the context of the child’s family and environment. His insistent message was to ‘describe’”.⁵³ Edwards Park pediatrician-in-chief at the Harriet Lane Home at Hopkins worked closely with Kanner over the years, and recognized the descriptiveness and humaneness of Kanner’s theoretical orientation.

⁵¹ Ibid., 41.

⁵² Adolf Myer, *Psychobiology*.

⁵³ Edwards Park et al., *The Harriet Lane Home*, 184.

THE CHILD PERSONALITY IN PSYCHIATRIC PRACTICE

In 1934, Leo Kanner published “Work With Psychobiological Children’s Personality Difficulties.” In it, Kanner reflects on discussion at the 1930 Section of Psychology and Psychiatry in Pediatrics of the White House Conference on Child Health and Protection. In much the same way as he did in his earlier paper on the significance of a pluralistic attitude, Kanner pleads his case against theoretical dogmatism.

Kanner begins by laying out the schools of psychiatry: focal infection, endocrinology, neurology, behaviorism, psychoanalysis, and Alfred Adler’s individual psychology.⁵⁴ Each of these schools was etiology focused. For instance, endocrinology presumed secretion of hormones at fault for abnormal psychology. On the other hand, focal infection theory presumed bacterial infection of specific organs was at fault, and in the 1920s Henry Cotton surgically removed the teeth, tonsils, testicles and other organs of the insane to cure them. While Adolf Meyer became an advocate for such alternative treatments, Kanner recognized the risk of undermining professional legitimacy in a psychiatry that was wrought with obscure jargon and techniques. Instead, Kanner saw psychobiology as freedom from indulgence in ready-made answers to questions of etiology, particularly those built on the basis of overarching hypotheses about the source of all psychological disorder. Instead, psychobiology for Kanner did not come with criteria or suppositions but instead drew upon direct observation of biographical details and a patient’s complaint about what was bothering him or her.⁵⁵ In this instance, Kanner

⁵⁴ Leo Kanner, “Work With Psychobiological Children’s Personality Difficulties,” *The American Journal of Orthopsychiatry* XX (1934): 405.

⁵⁵ *Ibid.*

makes his epistemological quarrel with psychiatry's emerging schools clear.

Psychobiology, instead of coming to the patient with various ideas about influences on human consciousness, comes away from the patient with observations of history, behavior, and other details which could then be formulated into a substantial account of the patient and a full understanding of the nature of his or her complaint.

After some considerable effort deposing dogmatic schools of psychiatry, Kanner introduced his practical methodology. First, he would ask about the nature of the complaint that brought the child into his clinic. Next, Kanner would directly observe and get to know the child. Understanding what the child's behavior was like was crucial to Kanner, as both he and Meyer loathed the tendency of internists to treat internal organs, at the expense of listening to the patient.

For Kanner, the child personality became inextricably linked to the child's biography. "On the basis of concrete examples, one will have to determine how, in the course of the patient's existence, love, hate, fear, anger, jealousy, disappointment, etc., have found expression and become potent in the formation of his character and especially in the evolution of the specific complaint or complaints under consideration".⁵⁶ The life-chart therefore becomes an important tool for crafting a narrative that lays facts bare as the psychiatrist finds them.

Kanner notes that psychobiological psychiatry deals with the social relations between people. He wrote "man is not only a biological, but also a highly differentiated

⁵⁶ Ibid.

sociobiological unit”.⁵⁷ By noting that psychobiology is a genetic-dynamic science, Kanner attempts to do away with what he understood as artificial distinctions between nature and societies of mankind. Of course biology was important in shaping the mind of man, and so was his environment and upbringing.

In his work leading up to 1943, Kanner should in no way be regarded as atheoretical about causes of mental disorder in children. On the contrary, as he noted in his 1933 article, theory occupies a necessary position in the natural sciences. His chief complaint about schools of psychiatry was that each devoted itself to one exclusive source of causal explanation to the exclusion of others. In short, for Kanner “*what*” questions and answers (or as he might have written “*facts*”) about the context of a mental disorder should inform answers to “*how*” or “*why*,” and increasingly in psychiatry this was not the case.

In 1935, Kanner published his textbook *Child Psychiatry*. In it, Adolf Meyer wrote a complimentary preface that grounds Kanner’s work as explicitly psychobiologically-oriented in the context of mental hygiene. Since the book is rather exhaustive and dry, I excerpt examples that illustrate how a psychobiological perspective is evident throughout the text.

Meyer wrote, “the nineteenth century laid the foundations for pediatrics and also for the naturalization of psychology, and the twentieth century is making the health and growth of the child one of the most active and fruitful fields of progress”.⁵⁸ In the dense

⁵⁷ Ibid., 410.

⁵⁸ Leo Kanner, *Child Psychiatry* (Springfield, Ill.: Charles C. Thomas, 1972): xv–xvi.

prose typical of Meyer, he describes Kanner as having “a respect for the objective facts open to study and to practical work and a determination to maintain a balanced perspective and a mind open to the growing accumulation of experience and methods are the leading principles of the collaboration undertaken”.⁵⁹ He also sees Kanner’s textbook explicitly as “a psychobiologically-oriented psychiatry” paying attention to “facts and factors” and “special organs and functions in the total picture”.⁶⁰

Beyond Adolf Meyer’s explicit praise as the work of a psychobiologically oriented psychiatrist, *Child Psychiatry* situates itself historically in its first chapter. Kanner claims Meyer’s advent of dynamic psychiatry as important to the development of child psychiatry. Understanding and dealing with mental disorder that originates in children became a major goal of the social program for mental hygienists. Kanner wrote, “biography, if pursued consistently, leads always back to the time when each patient was a child. Thus, around the turn of the century, psychiatric interest was for the first time directed toward childhood”.⁶¹ He also credits public health and sanitation efforts in the early twentieth century as providing an example of success to psychiatry. Kanner wrote, “the great advance made in bacteriology and hygiene caused the public to become prevention-conscious.... Some people wondered whether mental health and wholesomeness of behavior might not be equally accessible to prophylactic efforts”.⁶²

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Ibid., 9.

⁶² Ibid., 10.

From these statements, it is easy to see how building up child psychiatry, guidance clinics, educational, and legal institutions became central to the agenda of mental hygienists. A broad reaching theoretical lens like that of psychobiology reinforced the agenda of the mental hygiene movement, and likewise the movement was equally supportive of the social and institutional framework that promoted its aims.

PERSONAL CORRESPONDENCE WITH ADOLF MEYER IN 1942

On the 25th of October 1942, Leo Kanner wrote a typed personal letter to Adolf Meyer on official departmental letterhead. By this time Adolf Meyer had already retired from his post as psychiatrist-in-chief of the Henry Phipps Psychiatric Clinic. The letter sought career advice from Meyer, because in Kanner's words, his professional standing "has been stationary for many years and offers no prospect of any kind of advancement possibility".⁶³

The letter, was revealing of the kind of professional and personal relationship Meyer and Kanner kept. Kanner began the letter by recalling that Meyer once spoke of a Scottish friend who, whenever people sought advice, "wanted help with the problems of others rather than their own".⁶⁴ Kanner recounts that his relationship with Meyer to this point had been similar, but that the time has come when he needed to seek guidance for

⁶³ Leo Kanner, Leo Kanner to Adolf Meyer, October 25, 1942. The Adolf Meyer Collection. The Alan Mason Chesney Medical Archives of The Johns Hopkins Medical Institutions.

⁶⁴ Ibid.

himself. His writing comes across as ashamed and bashful, and he even goes so far as to be dismissive of his own problems as “tantamount to borrowing trouble”.⁶⁵

Kanner’s colleagues had seemed to been moving up and out around him, as he remained stuck. Kanner wrote, “So long as I was with you, the whole problem has somehow never arisen. The fact of my association with you outweighed any question of other personal ambitions”.⁶⁶ By this time in his late 40s, he found himself closely associated with child psychiatry at Johns Hopkins, but this made him seem unavailable for employment elsewhere and without any prospect of advancement while he remained in Baltimore. This led Kanner to conclude, “. . .I can see no way out of an impasse which seems to have nailed me down permanently in an immutable situation of rank and income”.⁶⁷

It was then that Kanner described his dedication to Meyer and his theoretical and practical system, psychobiology. Kanner wrote, “I have since 1928 (when I came to Baltimore) consistently striven after the one goal of making psychobiology my own, so much my own that I might be able to formulate and teach it adequately and to apply it in practical work. I believe I can say that I have approached this goal as nearly as my capacities allow”.⁶⁸ It is clear from Kanner’s published work through the 1930s that in these sentences he was not simply appealing to Meyer’s ego, but genuine.

⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Ibid.

Kanner then wrote, “I have daydreamed of a central institute for the study of the psychobiology and psychopathology of childhood. I believe that I have gained sufficient experience and maturity to organize such an institute, which would give connectedness and direction to the study of developing man”.⁶⁹ Kanner seemed bewildered and stranded as he sought advice from Meyer. After watching those around him seek greener pastures and find them, Kanner simply wanted to know how he should move forward in his career.

Less than a year after Kanner sent this letter to Meyer, he prepared his article for publication in the newly formed journal *Nervous Child*. In the next chapter, I highlight Leo Kanner’s first definition of autism as the work of psychobiologically oriented psychiatrist. This theoretical orientation was consequential to his critical first definition of autism in 1943 because of the evidence choices Kanner had to make. Kanner distanced himself from psychiatric dogmas and his approach allowed him to systematically describe the psychobiological “facts” of each case. His approach gave no primacy or privilege to particular causes, whether from biological, psychological, or social influences. This perspective oddly enabled his first description to lend itself to appropriation by other schools of causal explanation by virtue of psychobiology’s devotion to pluralism. The language and structure of Kanner’s evidence in “Autistic Disturbances of Affective Contact” makes his theoretical orientation both apparent and unmistakable.

⁶⁹ Ibid.

CHAPTER 4

AUTISM: LEO KANNER'S 1943 DEFINITION

Leo Kanner was the first to define autism as a distinct disorder in 1943 when he published “Autistic Disturbances of Affective Contact.” The article was a report of eleven child patients that he observed from 1938 to 1942. In this chapter, my aim is to connect psychobiology as interpreted through Kanner to his descriptions. The varied kinds of evidence that Kanner draws upon are indicative of a pluralist, and he made great efforts to avoid speculation about what those facts meant.

Eugen Bleuler first characterized the concept of autism in 1911 as a symptom of schizophrenia. He defined it as the “detachment from reality, together with the relative and absolute predominance of the inner life”.⁷⁰ Bleuler maintained that autism was “an expansion of Freud’s concept of ‘autoeroticism’ and a refinement of Pierre Janet’s *perte de la fonction du réel*”.⁷¹ Jean Piaget later developed and refined autism, describing autistic thought “as the first stage in the development of normal intelligence”.⁷² Both Kanner and Hans Asperger, who in 1944 published a similar study of autistic psychopathy, were familiar with Bleuler’s usage and developments in child psychology around the term.

This article was also important for reasons other than its significance in defining autism. First, Kanner diverged from a Meyerial philosophy by providing a formulaic

⁷⁰ Eugen Bleuler, *Dementia Praecox or the Group of Schizophrenias*, trans. Joseph Zinkin (New York: International Universities Press, 1950), 63.

⁷¹ Bonnie Evans, *The Foundations of Autism*, 263.

⁷² *Ibid.*, 264.

description of a childhood mental disorder. Though Kanner was a psychobiologist in many principled ways, in this article and in his 1935 *Child Psychiatry* he brought a systematist's sensibility to an otherwise muddled approach. Still, he did not bring psychoanalytic jargon, nor did he overemphasize the role that particular organs or hormones played, as a focal infection theorist or endocrinologist might have. In the 1972-revised edition of *Child Psychiatry*, Kanner separated childhood disorder into physical, psychosomatic, and behavioral types—in other words, disorders of biological, psychological, or social origin.

Adolf Meyer was opposed to psychiatric nosology as it constrained the psychiatrist to come to each patient with presumptions about the category of mental illness into which each patient fell, rather than permitting observation with an open mind. This open-minded respect for *facts* as encountered is what led Meyer to oppose the Kraepelinian program of categorizing psychiatric disorder by its progression. It is Meyer's opposition to categorical thinking that characterized a tension in 20th century American Psychiatry, according to Edward Shorter. This dialectic in simple terms was between the Kraepelinian, or medical, model and the Meyerian, later known as the biopsychosocial model.⁷³ The Kraepelinian model describes the categorization of mental illness in a way that assisted clinicians in the easy recognition of mental illness by its features. The Meyerian model, on the other hand, encouraged psychiatrists to dig deeper to discover the biological, psychological, or social factors to which a patient was reacting.

⁷³ Edward Shorter, *A History of Psychiatry*, 110–112.

The article, as Kanner wrote it, defined autism as a disorder relative to a child's biological, psychological, and social conditions. Biological observations took on mostly a genealogical notion of behavioral heritability, but also included difficulties at birth, physical abnormalities or lesions, and abnormal appetite. Psychological observations dealt with the processing of sensory experiences from the outside, and the understanding and use of language by the child. Social observations described each child's ambivalence to people, fascination with objects, and ultimately included an unfavorable description of parents. At first, Kanner wrote that few of the fathers and mothers were "warmhearted", then later he referred to "emotional refrigerators" (rhetoric which he toned down in the 1960s), and this language was invariably picked up in parlance as "refrigerator mothers" by parents and professionals alike.⁷⁴

In the 1950s and 1960s, for example, many psychiatrists emphasized the "refrigerator mother" theory of autism. Bruno Bettelheim in his 1967 book *The Empty Fortress*, equated mothers of the autistic with Nazi prison camp guards.⁷⁵ Other psychoanalysts at the time were also quick to emphasize the importance of the parent-child dyad, specifically the importance of mother love.⁷⁶ On the other hand, an early rejection of the theory came from a parent-advocate and psychologist named Bernard

⁷⁴ See Leo Kanner, "Autistic Disturbances of Affective Contact," *Nervous Child* 2 (1943): 250; Leo Kanner, "Problems of Nosology and Psychodynamics of Early Infantile Autism," *American Journal of Orthopsychiatry* 19 (1949): 423; Leo Kanner, "Infantile Autism and the Schizophrenias," *Behavioral Science* 10 (1965): 419–420.

⁷⁵ Bruno Bettelheim, *The Empty Fortress: Infantile Autism and the Birth of the Self* (New York: The Free Press, 1967).

⁷⁶ Marga Vicedo, *The Nature & Nurture of Love: From Imprinting to Attachment in Cold War America* (Chicago, Ill: The University of Chicago Press, 2013), 15–42.

Rimland, who published *Infantile Autism: The Syndrome and Its Implication for a Neural Theory of Behavior* in 1964.⁷⁷

For Kanner, emotional refrigeration was equated with the mechanization of childcare, to which he was ardently opposed. For instance, in 1940 Kanner wrote an article in the *New York Times* titled “The Good Mother”, which described the qualities of a good mother but spared the topic of good mothering.⁷⁸ In 1941, he published a popular parenting book titled *In Defense of Mothers* where his basic advice to mothers throughout was to distrust professionals who think they know better than you, and to trust “Nature’s spontaneous gift to motherhood”.⁷⁹ The subtitle of this polemic was “How to Bring Up Children in Spite of the More Zealous Psychologists,” which was reminiscent of Kanner’s writing throughout the 1930s. What came across as the blaming of parents was instead his harsh criticism of psychology and psychiatry for intervening in the affairs of family life. Unfortunately, later psychiatrists and psychologists took his comments in ways that made such a criticism warranted.

While this first defining article is important for historical, and as I’ve noted, epistemic reasons in the history of psychiatry, it is worth turning attention now to the language and evidence used within to highlight Leo Kanner’s description and interpretation of evidence.

⁷⁷ Bernard Rimland, *Infantile Autism: The Syndrome and Its Implication for a Neural Theory of Behavior* (Englewood Cliffs, NJ: Prentice-Hall, 1964).

⁷⁸ Leo Kanner, “The Good Mother,” *New York Times*, May 12, 1940.

⁷⁹ Leo Kanner, *In Defense of Mothers: How to Bring Up Children in Spite of the More Zealous Psychologists* (Springfield, Ill: Charles C. Thomas, 1941), 3.

ZELIGS' EPIGRAPH: THE VIEW FROM RADICAL BEHAVIORISM

Kanner began the article with an epigraph from Rose Zeligs' 1942 *Glimpses into Child Life*: "To understand and measure emotional qualities is very difficult. Psychologists and educators have been struggling with that problem for years but we are still unable to measure emotional and personality traits with the exactness with which we can measure intelligence".⁸⁰ It is not clear, at first glance, why Kanner included this quote from Zeligs. Aside from its intended meaning, the difficulty of understanding and measuring emotional traits, Kanner may have been reaching further.

Zeligs, an educator who worked closely with young children, was considering the implications of the theory that racism was an innate reaction to difference. One of Zeligs' colleagues, Bruno Lasker, published *Race Attitudes in Children* in 1929, rejecting instinct theory in favor of radical behaviorism. Lasker, influenced by John B. Watson's *Behaviorism*, applied his ideas mechanistically to reject the instinct theory about racism.⁸¹ According to Lasker, rather than an innate reaction to difference, racism was a learned behavior that was heavily influenced by a child's social environment. Radical behaviorism challenged the alternative belief that reactions in children were innately determined, or instinctual, and Rose Zeligs' 1942 work was a reflection of an educator struggling with the choice between innate and learned explanations.

Kanner's final paragraph of the conclusion contained a view that contradicts the radical behaviorist view like the one might take from Zeligs' epigraph:

⁸⁰ Ibid., 217.

⁸¹ Diana Selig, *Americans All: The Cultural Gifts Movement*. (Cambridge: Harvard University Press, 2008), 26–38.

We must, then, assume that these children have come into the world with innate inability to form the usual, biologically provided affective contact with people, just as other children come into the world with innate physical or intellectual handicaps [*sic*]. If this assumption is correct, a further study of our children may help to furnish concrete criteria regarding the still diffuse notions about the constitutional components of emotional reactivity. For here we seem to have pure-culture examples of *inborn autistic disturbances of affective contact*.⁸²

On this point, that autism was innate, Kanner returned later when defending himself against the claim that he intended to blame parents. His defense of mothers, skepticism toward zealous psychologists, and epistemological pluralism made it possible for him to hold a non-deterministic, dynamic interpretation of the primary features of autism. These first portrayals of autistic children came across as descriptive and causally agnostic. Thus the inclusion of the epigraph was likely a nod to the difficulty associated with making such judgments about what we can know and how we come to know it.

After the epigraph, Kanner began by noting the peculiarities of the eleven children “whose condition differs so markedly and uniquely from anything reported”.⁸³ Limitations on space required Kanner to omit photographs and give “condensed presentation of the case material”.⁸⁴ As none of the children were older than eleven in 1943, he suggested that a follow-up study should be conducted later on these same children, which Kanner eventually did in 1971.⁸⁵ What followed was a strikingly detailed

⁸² Kanner, *Autistic Disturbances*, 250.

⁸³ *Ibid.*, 217.

⁸⁴ *Ibid.*

⁸⁵ Leo Kanner, "Follow-up study of eleven autistic children originally reported in 1943," *Journal of autism and childhood schizophrenia* 1 (1971): 119–145.

unfolding of each case, detail that stemmed from biographical case history and was resilient, in the sense that future practitioners looked to his descriptions and noticed the same general features in their child patients.

FROM PARTICULAR TO GENERAL: ELEVEN CASE HISTORIES

In this article, Kanner characterizes eleven cases, 3 girls and 8 boys, as the clinical representations of a new psychiatric entity. His rationale for choice of evidence to represent, how to represent that evidence, and the emphasis for different kinds of evidence, must have played a pivotal role. When assembling the historical-biographical accounts from his own clinical accounts as well as the extensive reports provided by the parents, Kanner was forced to make choices about the evidence that formed a recognizable pattern of behavior. He presents each case individually at first to exemplify the idiosyncrasy of each child's behavior, to which he returns in the *discussion* section where he weaves the particular stories into a more general account of the autistic.

Donald T., a five-year-old boy, was the first case Kanner featured of the eleven autistic children. He came to the clinic in October 1938, but before his arrival the father had sent Kanner a thirty-three page typewritten history of Donald's background. The son of a lawyer, Donald was a noteworthy case because of his incredible capacity to remember. He could sing songs accurately, knew the names of a number of houses in his hometown, could recite short poems, and "even learned the Twenty-third Psalm and

twenty-five questions and answers of the Presbyterian Catechism”.⁸⁶ Donald’s impressive rote memory was typical of the other ten cases as well.

The ten other cases were Frederick W., Richard M., Paul G., Barbara K., Virginia S., Herbert B., Alfred L., Charles N., John F., and Elaine C. In each case, Kanner resolved to describe the child’s behavior in exacting detail. The detail and idiosyncrasies that Kanner highlighted were a feature that enabled future psychiatrists to evoke a picture of a child who had the potential for great intelligence but was somehow tormented by his or her environment. He used intelligence testing like the Grace Arthur performance scale, a non-verbal intelligence and ability test, the Seguin form board, an intelligence test used to assess visual discrimination and hand-eye coordination, and the Binet test, a standard intelligence quotient (IQ) test as tools to measure the capabilities of the children. Most of the autistic children tested not simply with above average IQ scores, but with mildly gifted scores. Kanner went so far as noting intelligent physiognomy, or that the child looked intelligent. The children typically avoided people and were fascinated by small inert objects. When the child’s play was somehow intervened upon from an outsider, he or she would become angry and throw a fit.

For Kanner, peculiar language use was an important observation. For example, when Donald wanted to get down after taking a nap, he would repeat his mother’s words exactly. In fact, for most of the children they would repeat exactly what was said to them, associating the words used with whatever act was first associated with that word. For instance, in Donald’s case, when he said “yes” it was an indication that he wanted to be

⁸⁶ Ibid.

placed on his father's shoulder. Many of the children used the second person, you, when referring to themselves. For instance, when Paul wanted candy he would say, "you want candy".⁸⁷

Family life, weight and appetite at birth, and any unusual physical lesions were all important observations for Kanner as well. He noted the demeanor of parents, describing their career, personalities, and habits. He noted whether parents were divorced. He even noted their preoccupations with their child's condition. Of Donald's father, Kanner wrote, "When he walks down the street, he is so absorbed in thinking that he sees nothing and nobody and cannot remember anything about the walk".⁸⁸ Left unspoken was the implication that there might be something hereditary about autistic behaviors.

Kanner rounded out his clinical picture with observations that the children became fixated on small inert objects while completely ignoring people, combined with the child's insistence that patterns in environment remain consistent. In Donald's case, he "developed a mania for spinning blocks and pans and other round objects", and "when interfered with, he had temper tantrums".⁸⁹ Kanner recalled, "Most of his actions were repetitions carried out in exactly the same way in which they had been performed originally".⁹⁰ For Kanner, it was necessary to draw upon each of the eleven idiosyncratic accounts first to develop a general clinical picture of the condition abstracted from each

⁸⁷ Ibid., 228.

⁸⁸ Ibid., 218–219.

⁸⁹ Ibid.

⁹⁰ Ibid.

particular case. In the *discussion* section of the article, Kanner highlighted these general features in the abstract referring back to features from a specific case to exemplify the abstract.

ILLUSTRATING A SYNDROME: DISCUSSION AND COMMENT

Kanner established similarities in the behavior between the eleven children in the *discussion* section. He remained descriptive of the underlying pattern of behaviors. For instance, when he described a “type of *literalness*” as a feature of autism, he followed with direct evidence which illustrated or supported the certainty of his assertion—in this case Kanner wrote, “Alfred, when asked, ‘What is this picture about?’ replied: ‘People are moving *about*’”.⁹¹ Idiosyncrasies of the individual cases here were woven into a pattern of recognizable behaviors by virtue of their relative co-occurrence. In this way, Kanner assembled a generic clinical picture that was evocative of a kind of child his colleagues would likely encounter.

The fundamental disorder, above all else, was the child’s “inability to relate themselves in the ordinary way to people and situations from the beginning of life”.⁹² Thus, autism essentially became a social disorder, wherein the child has difficulty relating to others. Kanner stressed that the condition is present from the beginning of life while at the same time he documented each child’s reactions to stresses within the environment. The condition differed from childhood schizophrenia largely because of its

⁹¹ Ibid., 244.

⁹² Ibid., 241–248.

occurrence before the age of three, which is the major reason Kanner stressed the early onset of autism.

Autism, and the aloneness Kanner associated with it, was a zealous response on behalf of the child to whatever interferes with the child's stable environment. He wrote that there is, "from the start an extreme autistic aloneness that, whenever possible...shuts out anything that comes to the child from the outside".⁹³ Kanner interpreted the significance of abnormal metabolism in the child's early reactions as one of the first examples of intrusion. Later reactions took other forms but were each a dynamic response of the child to a changing environment. For instance, he wrote, "food is an early intrusion," and "loud noises and moving objects, which are therefore reacted to with horror".⁹⁴ Kanner summarized this feature of autism, stating that, "the child's behavior is governed by an anxiously obsessive desire for the maintenance of sameness that nobody but the child himself may disrupt".⁹⁵ Maintenance of sameness, or constancy, of the environment remained one of the most stable and recognizable features of autism amidst changing definitions in later diagnostic manuals like the DSM (Diagnostic and Statistical Manual of Mental Disorders) and the ICD (International Classification of Diseases). One of the early indicators that physicians and parents notice is that autistic children fail "to assume at any time an anticipatory posture preparatory to being picked up".⁹⁶ This

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Ibid.

⁹⁶ Ibid.

abnormal behavioral response was recognized in each of the first eleven cases and remains another early sign that a child may have autism.

The peculiar development and use of language was common to most of the eleven children. Eight of the eleven were able to speak and use language in some form at a normal age. The children often had excellent rote memory, coupled with an inability to use language in any other way. Most children expressed a form of echolalia, where they would repeat a phrase spoken in the exact way it was originally uttered. Often this was coupled with inappropriate use of personal pronouns, using “you” or “he/she” in reference to him or herself. Often the children would express *delayed* echolalia, where a word or phrase would be associated with co-occurrence of some act—recall in Donald’s case that “yes” meant to lift him onto his father’s shoulder.

The final coincidence in the initial set of eleven was that they all came from families with very intelligent parents. The cohort of father’s consisted of four psychiatrists, one lawyer, one chemist, one plant pathologist, one professor of forestry, a copywriter, an engineer, and a successful business man. Nine of eleven mothers were college graduates, and of the two that were not, one was a secretary for a pathology laboratory and the other ran a theater booking office.

In the comment section, Kanner recognized the many similarities that this condition seems to have with childhood schizophrenia. In fact, several of the children in the first set of eleven were at one time diagnosed with schizophrenia, and for decades after 1943 autism was considered one of the schizophrenias. However, Kanner was explicit that autistic children have shown their symptoms from the beginning of life. The

children are able to maintain good relations with objects that do not interfere with their aloneness, but continue to have difficulty in their relations with other people.

Kanner's descriptions of parental influence in the *comment* section became a source of anguish and controversy him, as well as child psychiatry and parents of the autistic. His first definition of autism was embroiled in controversy, as parents became causally implicated through what he described as a noteworthy pattern of similarities. Parent blame has also been cause for parents to reject the authority of child psychiatry and medicine more generally and to seek alternative judgment elsewhere. The following paragraphs seem to implicate parents as both strongly intellectual and yet emotionally cold:

It is not easy to evaluate the fact that all of our patients have come of highly intelligent parents. This much is certain, that there is a great deal of obsessiveness in the family background. The very detailed diaries and reports and the frequent remembrance, after several years, that the children had learned to recite twenty-five questions and answers of the Presbyterian Catechism, to sing thirty-seven nursery songs, or to discriminate between eighteen symphonies, furnish a telling illustration of parental obsessiveness.

One other fact stands out prominently. In the whole group, there are very few really warmhearted fathers and mothers. For the most part, the parents, grandparents, and collaterals are persons strongly preoccupied with abstractions of a scientific, literary, or artistic nature, and limited in genuine interest in people. Even some of the happiest marriages are rather cold and formal affairs. Three of the marriages were dismal failures. The question arises whether or to what extent this fact has contributed to the conditions of the children. The children's aloneness from the beginning of life makes it difficult to attribute the whole picture exclusively to the type of early parental relations with our patients.⁹⁷

⁹⁷ Ibid.

Here, Kanner was simply noting an observation about the similarity of parent demeanor common to all eleven cases, which was likely an effect of both caring for an autistic child and the tone of professional conversation. To make further judgments about the origin of the child's behavior would be to go beyond the facts. In this instance Kanner backed off at the end of the paragraph, noting that the condition should not be exclusively ascribed to the parent-child relationship. As research in the behavioral sciences with monkeys began to demonstrate the importance of attachment at the beginning of an organism's life, Kanner began to reaffirm the importance of the mother-child relationship especially.⁹⁸

Kanner's exposition takes on the form of the life-chart from which he drew his evidence, describing in intricate detail the idiosyncrasies that encompass the autistic child, and similarities in family life, parenting styles, and habits. Connecting each individual story in order to create a common-pattern involved a theory-laden creativity. The range of causal influences from which Kanner could draw was vast. Yet, as others have noted, he abstained from presenting causal theories. As I have noted, psychobiology has shaped such agnostic descriptions and his notes on parental warmth (at least in 1943) seem to be demonizing the mechanization of childcare, as informed by professionals, rather than the caretakers themselves.

⁹⁸ Marga Vicedo, *The Nature & Nurture of Love*, 146–179.

CHAPTER 5

CONCLUSION

Leo Kanner incorporated a psychobiological frame through which the strange behaviors of children and their peculiarities were broken down, weighted and sorted.⁹⁹ He also had to excise and supplement important concepts, particularly from maternal attachment theory and Bleuler's concept of autism. Then he reshaped those concepts, according to his pluralist point of view, into a diagnostically significant disorder of early childhood. Understanding the relative nature of scientific facts depends on the particular weighting of values and norms as the lens through which the world is seen and thereby described. This lens, for Kanner, exemplified a particular way of pulling together evidence and constituted a representation of disorder that serves as an example of the contingent nature of facts in the context of shifting scientific theories.

Psychobiology continued to infuse Kanner's practice through the end of his career. In Leo Kanner's keynote address to the 1969 National Society of Autistic Children in Washington, DC he said:

Please beware of the sort of people who dictatorially tell you 'this is what it is because I say so.' We still have to be very cautious and to seek information with justifiable curiosity, trying any number of avenues for amelioration and trying any number of theories about the possible causation. And herewith, I especially acquit you people as parents. I have been misquoted many times. From the very first publication until the last, I spoke of this condition in no uncertain terms as 'innate.' But because I described some of the characteristics of the parents as persons, I was misquoted often as having said that 'it is all the parents' fault.' Those of you parents who have come to see me with your children know that this

⁹⁹ See Nelson Goodman, *Ways of Worldmaking* (Indianapolis, IN: Hackett Publishing Company, 1978), 7–18. Kanner's construction is theory-laden in the same way that Goodman describes.

isn't what I said. As a matter of fact, I have tried to relieve parental anxiety when they had been made anxious because of such speculation.¹⁰⁰

Others have often quoted lines (3) “And herewith, I especially acquit you people as parents” and (4) “I have been misquoted many times” as examples of Kanner’s startling contradiction on the role of parents in etiology.¹⁰¹ As I have shown, this confusion disregards the theoretical context in which Kanner was immersed. Instead, the first two lines demonstrate Kanner’s anti-dogmatic, pluralistic, and psychobiological stance that he continued to express even through 1969.

I have shown that psychobiology drew on evolutionary theory from the natural sciences coupled with American pragmatism. Adolf Meyer drew heavily of John Dewey’s organic conceptualization of truth as something humans engage in, notably the relations between organism and environment. This is evident in Meyer’s choice of the term “ergasiology” as synonymous with psychobiology. The two photos hanging over Leo Kanner’s desk, Adolf Meyer and the German poet Johann Wolfgang von Goethe, are an expression of a once unrecognized connection. Adolf Meyer’s psychobiology provided the framework by which Kanner practiced child psychiatry. Meyer’s biographical psychiatry, psychobiology, and Goethe’s “The history of the individual *is* the individual”, both served as a constant reminder to Kanner about the importance of a detailed patient history. In the same way, both were remnants of a historical-biographical method, which stemmed from the natural sciences through the psychology of G. Stanley

¹⁰⁰ Leo Kanner in his keynote address to the first annual meeting of the National Society for Autistic Children, Washington, DC, July 1969.

¹⁰¹ Ibid.

Hall and embryological theories of Ernst Haeckel. Life history charts, and psychobiology represent Meyer's effort to take seriously the growth and plasticity of the child during early formative years as a site of therapeutic potential, and to bring professional psychiatry into that therapeutic space. Kanner's child psychiatric service, and autism, was a reflection of those efforts.

Leo Kanner's promulgation of Adolf Meyer's psychobiology through the 1930s illuminates a cautious man who was skeptical of his own discipline's assumptions. Psychobiology, as a holist enterprise, sought to claim professional purview over the space between early development of individual personality (individuality) and society. It also offered a humanist alternative where psychiatrists were taught to approach patients with open eyes and an open mind rather than diagnostic formulations, theories about causes, or ready-made solutions.

"Autistic Disturbances of Affective Contact" represents the assembly of evidence connecting a pattern of observable behavior. For Kanner, this was a creative process, informed by theories of what evidence is relevant. Defining the clinical relevance of evidence that has biological, psychological, and social qualities is what set psychobiology apart.

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APPENDIX A

EXAMPLE OF ADOLF MEYER'S LIFE CHART

**HEREDITY: PATERNAL UNCLE ALCOHOLIC. MATERNAL GRANDFATHER
INSANE. ONE BROTHER HAD TWO DEPRESSIONS.**

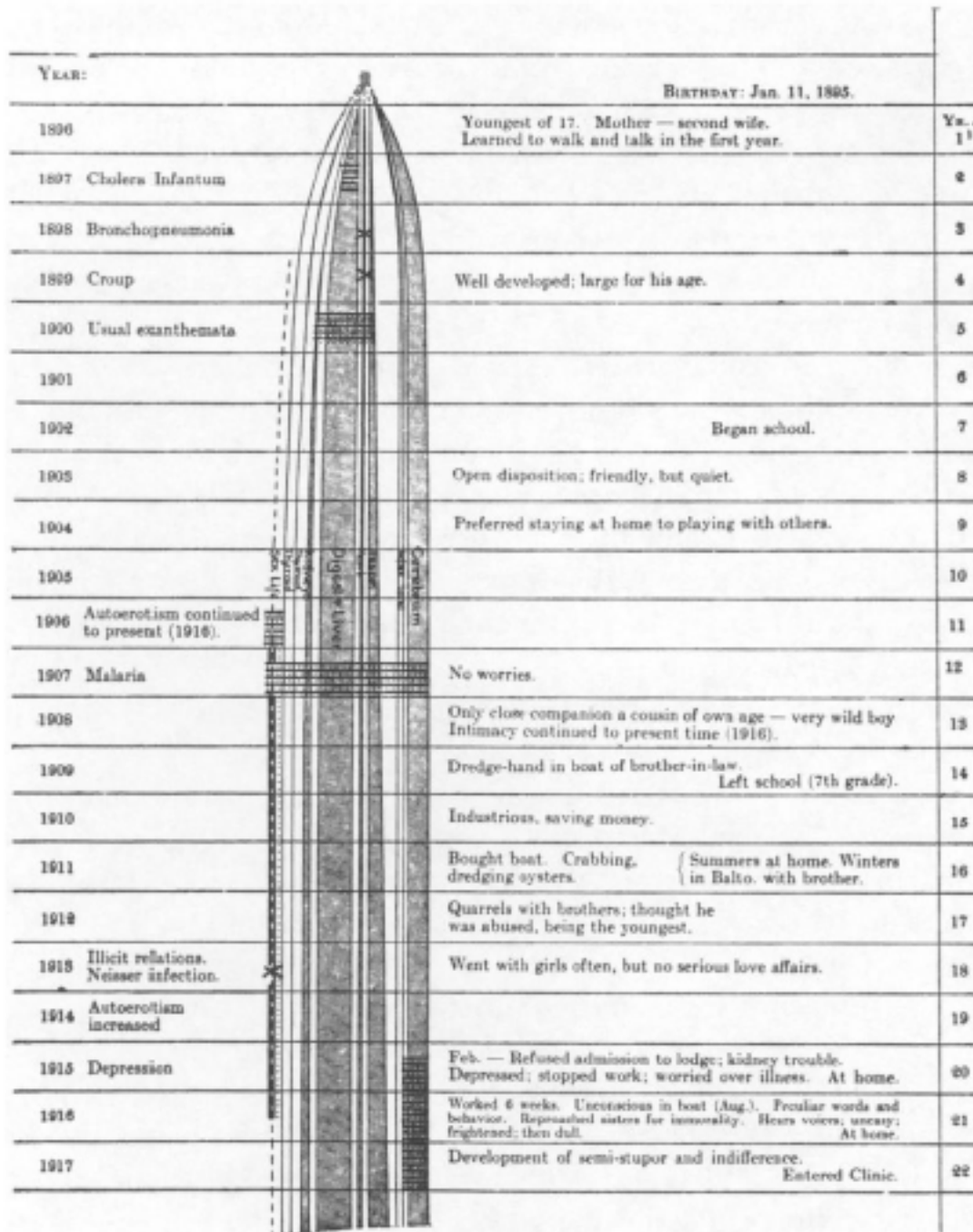


Figure 1. Meyer's Life Chart, "Case of Schizophrenia." From Adolf Meyer, "The Life Chart and the Obligation of Specifying Positive Data in Psychopathological Diagnosis" (1919), *The Collected Papers of Adolf Meyer* (Baltimore, 1950-52).

APPENDIX B

DIAGRAM OF PSYCHOBIOLOGY'S PLACE IN THE SCIENCES

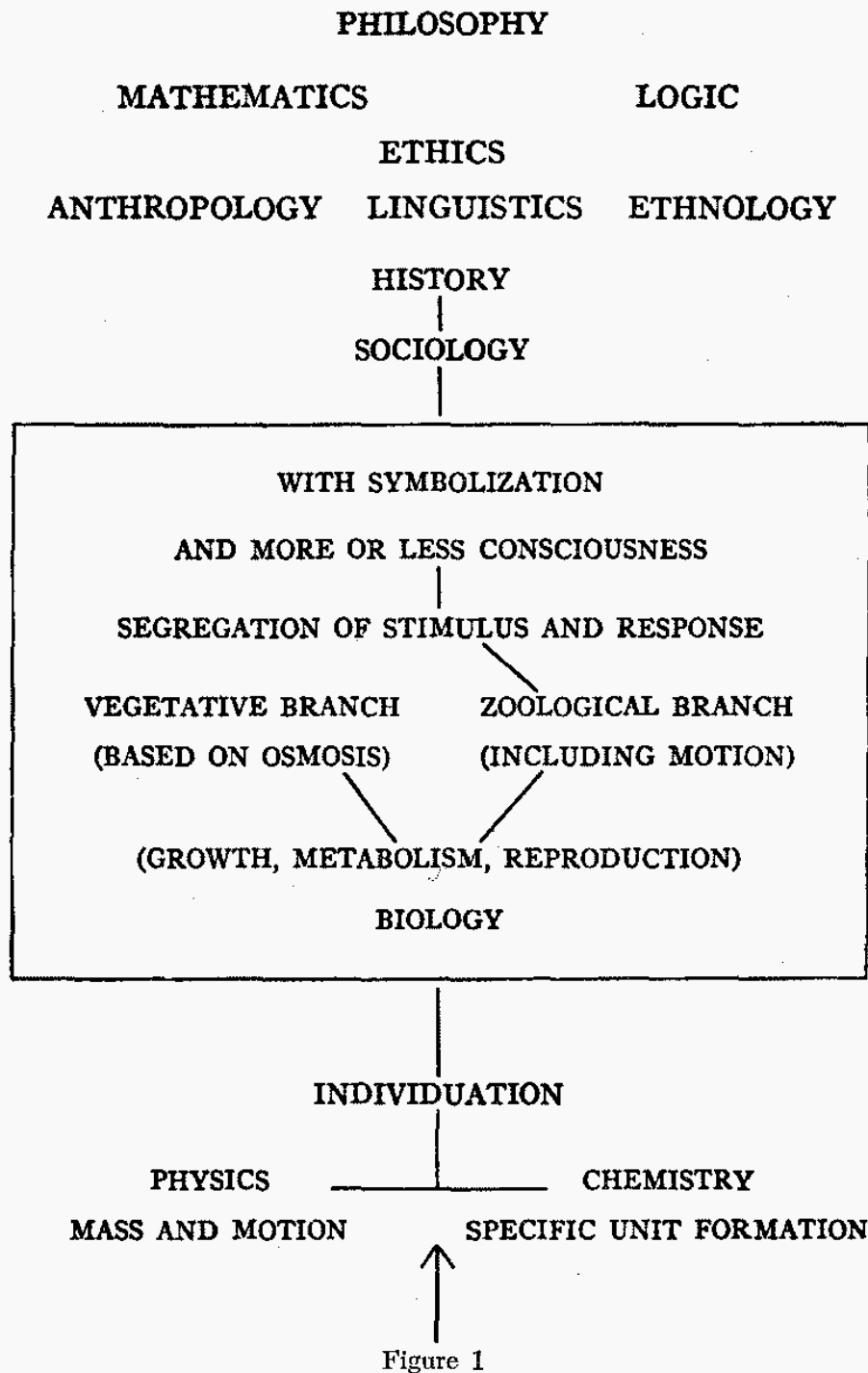


Figure 2. Meyer's diagram depicting the place of Psychobiology in the sciences. From Adolf Meyer. *Psychobiology: A Science of Man*, edited by Eunice Winters and Anna Mae Bowers. Charles C. Thomas, 1957.