



# Alfred A. Strauss (1897–1957)

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Heidelberg neurologist Alfred A. Strauss (Fig. 1) was one of 4 exiled neuroscientists [1, 2] from there during National Socialism. Strauss’s career straddled the fine line of neurology and psychiatry, typical of the first half of the twentieth century, and he was forced to emigrate three times after Hitler’s takeover, eventually ending up in the American Midwest for the remainder of his career.

Strauss, born in Karlsruhe (Baden) Germany, served on the frontline in World War I (WWI). He began his medical studies in 1918 in Heidelberg, passing his state exam in 1922, and became a voluntary assistant in the Psychiatric Clinic. He also was an assistant at the Neurological Institute of Frankfurt am Main in 1924, and later in Ludwigshafen and again at Heidelberg, before becoming a specialist for Nervous and Mental Diseases at Mannheim in 1926. In 1930, he became chief of Heidelberg’s Neurologic-Psychiatric Polyclinic, and medical director of Municipal Youth Welfare there. He was habilitated at Heidelberg University in 1932 with his thesis “How to recognize and treat the severest forms of mental deficiency” [3]. Beside the clinical work, Strauss “devoted himself to research on the brains of idiots” in the histopathology lab of other later exiled colleague Gabriel Steiner [2, 3]. Strauss had 11 publications by 1933 on various neuropsychiatric topics besides his thesis, ranging from tabes dorsalis and muscle atrophy to motor investigations in progressive paralysis, motor amnesic aphasia, tonic neck reflexes, malaria in war participants, neuropsychiatric drug treatments, and a histopathological chapter about neurological disturbances in schizophrenia. He also wrote a

book “On the importance of cinematography in Neurology and Psychiatry” [3].

Since Jewish frontline WWI fighters were temporarily exempt from the Nazi “Law for the Restoration of the Professional Civil Service” [2], in April 1933, Strauss was allowed to maintain his position at Heidelberg. But in September 1933, he left Germany for a lecturing position on pedagogical therapy in the Neurologic/Psychiatric Faculty at Barcelona University, also lecturing on youth welfare and childhood psychopathology (he was not granted a medical license). While working in Spain, he was tasked by the Catalonian Government with creating a public pedagogical therapy advisory board and co-founded a private child guidance clinic. He also published on modern theories in cerebral localization and pedagogical therapeutics. But with the Spanish Civil War and seizure of the child guidance clinic by the anarchists, Strauss refused to collaborate and fled to Switzerland in 1936 [3]. He tried to secure a position in Britain, but the only one he could obtain was a 3-month part-time translating/abstracting position in Colchester. Because of Strauss’s Spanish-speaking abilities and publications, Britain’s Academic Assistance Council advocated for a permanent position in South/Central America for him, stating in letters to him that neurology was a very tough specialty in which to place exiled scholars, and even inquiring if he was willing to switch careers [3].

But Strauss persevered and obtained a position as a “guest research psychiatrist” in 1937 at the Wayne County Training School in Northville, Michigan (near Detroit), taking the Colchester position for a temporary British work permit while awaiting his American visa [3, 4]. He arrived in New York in October 1937 and listed his race as “Hebrew” on his US declaration of intent for naturalization [4]. The superintendent at Wayne, neuropsychiatrist Robert Haskell, had obtained the position there for Strauss and later attested his 1943 naturalization petition [4, 5].

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**Fig. 1** Alfred A. Strauss (1897–1957). Naturalization file on Alfred A. Strauss, National Archives Great Lakes Branch, Chicago, Illinois. Public Domain

After a 2-year forced academic hiatus, Strauss finally began to publish papers again in 1938–1939. With collaborators at Wayne such as fellow Jewish German refugee neuropsychologist Heinz Werner (1890–1964), Strauss rapidly published 9 papers on topics ranging from arithmetic disabilities and finger agnosia, as well as methods on functional analysis, in mentally handicapped children to typology of mental deficiency and its varied implications, rate of mental growth among “higher grade moron and borderline children,” and a new behavior rating scale in these children [3, 5]. In fact, Strauss and Werner are believed to have laid the groundwork for the modern field of learning disabilities with their pioneering collaborations and 17 co-authored publications [5]. For instance, in their 1938 paper [6], drawing parallels to Gerstmann syndrome, they described a correlation between finger agnosia and acalculia in a “prototype” intellectually disabled child with a “diffuse supracortical process,” then used that observation to conduct a study on 40 boys with or without mathematical challenges at Wayne. In a commentary on the

paper, it was stated that this paper may have been the first to describe the relationship between specific mathematical disability and “deficiency...in the finger schema...among certain mentally handicapped individuals” [6].

The “Strauss syndrome” was coined in 1957 regarding Strauss’s description of a particularly characteristic presentation in “brain-injured” children. These children had perceptual, learning, thinking, and personality disturbances, with hyperactivity, distractibility, rigid stereotyped behavior, perseveration, motor disinhibition, and simultagnosia [5, 7]. Strauss had recognized that the educational techniques at Wayne resulted in intelligence quotient improvement in “endogenous” mental deficiency but worsening in “exogenous” (i.e., brain-injured) children, and devised a different educational scheme to train them [8]. Indeed, Strauss’s pioneering work changed the mentality in neuropsychiatry that learning disabled children were educable. His over 70 articles and books also included electroencephalographic studies in children with mental diseases, and later works on aphasia in children. He became the director of Child Care at Wayne from 1943 to 1946 after he was naturalized as a US citizen and obtained his medical license. He also lectured at Wayne State University and Milwaukee Teachers College, and founded the Cove School in Racine, Wisconsin and co-founded the Cove School in Evanston, Illinois [5].

Strauss’s trajectory was affected by the unconstitutional citizenship requirement for medical licensure in Michigan, one of 27 US states as of 1940 to require this, in contrast to other more liberal states, such as Illinois, that only required a declaration of intent and an American internship [9, 10]. His appointment as research neuropsychiatrist facilitated his survival from the tribulations of Nazi Europe, and his career flourished, even more rapidly than other refugee neuroscientists [1, 10].

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