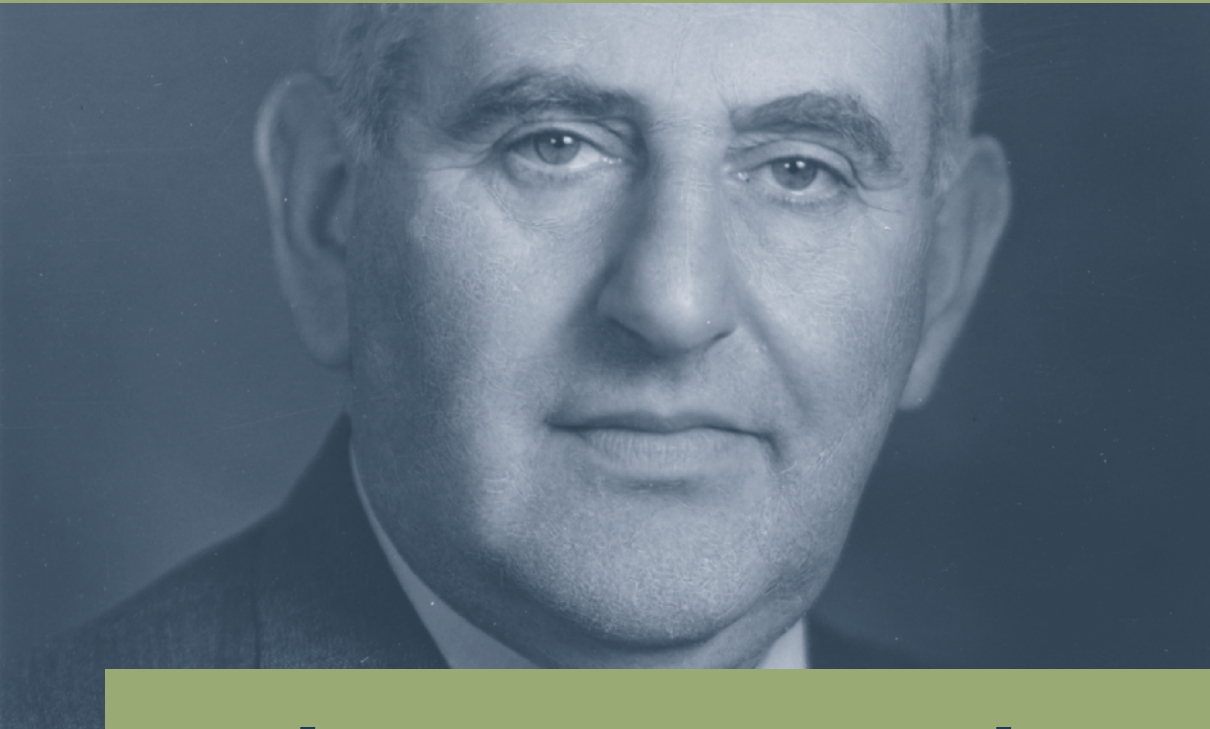


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Arthur E. Haas—The Hidden Pioneer of Quantum Mechanics

A Biography

MICHAEL WIESCHER

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Michael Wiescher

Arthur E. Haas—The Hidden Pioneer of Quantum Mechanics

A Biography

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Michael Wiescher 
Department of Physics
University of Notre Dame
Notre Dame, IN, USA

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*To our sorrow much has vanished that was
well
And the most beautiful shows the shortest
spell.*

Heimito von Doderer (1896–1966)

Foreword

With his biography of the Austro-American physicist Arthur Erich Haas (1884–1941), Michael Wiescher presents an undiscovered piece of scientific history that begins in the period around 1900, Fin de Siècle Vienna, and continues to the 1930s and 1940s when Haas was appointed professor of physics at the Catholic University of Notre Dame in the USA, a position he held until his early death.

The German-American physicist Wiescher works and teaches at Notre Dame as Freimann Professor of Physics in the field of experimental astrophysics and is one of the outstanding experts in this branch of research. With his numerous works on the history of the natural sciences, Wiescher's professional interests go beyond his narrow field of expertise and his publications on the history of physics predestine him to be Arthur Haas' biographer. A special constellation of disciplines is conducive to this task: Wiescher, an experimental astrophysicist, works in the position of Haas' professional successor at the University of Notre Dame. Further, Haas organized the first conference dedicated to physical cosmology at Notre Dame in 1938, which can be considered the birth of this then still more-than-exotic discipline.

But it is not only Wiescher's professional closeness to Haas that predestines the author for this extensive biography. Wiescher is in the fortunate—indeed, for any historian of science, enviable—position of being able to draw on extensive, hitherto inaccessible archival material, which Haas' descendants have generously granted him access to, including photographic material that lends the book a special liveliness of presentation.

These personal documents, especially Haas' extensive correspondence with his family, enable Wiescher to give a dense account of Haas' life, which was marked by turbulence. In addition, Wiescher draws a panorama of Austrian cultural and its social and political life from the disintegration of the Danube Monarchy to the 1930s, the period of Haas' professional, scientific and public activity as an academic teacher, author and lecturer, first in Austria and Germany and then in the USA. Born into an assimilated Jewish family of industrialists, academics and lawyers, Haas belonged to the bourgeoisie of the last years of the Danube Monarchy. Privileged by wealth, this younger generation broke away from the primarily economic activities of their fathers' generation to turn to scientific interests.

The arc of this biography ranges from Haas' childhood in Brno (now Brno, Czech Republic), to his years of teaching and travelling at German and Austrian universities, to his—it must be said—timely move to the United States in 1935. The year 1935 was already marked by the flight of many academics from Germany, from 1933 onward after Hitler's seizure of power, and this emigration soon also extended to Austria in the aftermath of the country's annexation by the German Reich in 1938. Wiescher's work is thus also an eminent contribution to exile and emigration research in the history of science.

To this day, physicists and historians of science associate the name Haas with the search for a physically based explanation of the quantization of the energy of thermal radiation postulated by Max Planck in 1900. In publications of 1910—three years before Niels Bohr's work on the later so-called Bohr atomic model—Haas succeeded in combining the radiation theory formulated by Planck with the model of atomic structure that was common at the time. Haas' outstanding physical achievement and historical merit consists in the conceptual connection of “real” atoms (the hydrogen atom) with Planck's abstract quanta, which leads to the first “quantized” understanding of atoms and thus to the estimation of atomic quantities.

Wiescher's work now provides an overall view of Haas' life and work that goes far beyond previous knowledge of Haas as a pioneer of quantum physics and reveals previously unknown sides of his work. Particularly revealing is Wiescher's detailed account of Haas's professional and private cross-connections to many protagonists of scientific and cultural life in the 1920s and 1930s. Here, Wiescher provides the reader with extensive biographical notes on the people in Haas' life, opening up many sources that are often difficult to access. Historians of science will appreciate this with gratitude.

It can probably be described as a trick of history that many natural scientists, who had to flee Germany and Austria before the persecution measures of the National Socialists, were able to achieve outstanding scientific achievements in the positive acculturation conditions of Anglo-Saxon countries, in England and the USA. These include—as one of many—the Vienna-born physicist and 1998 Nobel Prize winner for Chemistry, Walter Kohn, who was able to flee Vienna on a Kindertransport, as were the children of Arthur Haas' brother, Otto Haas. Like Walter Kohn, Arthur Haas can rightly be named as one of those for whom the expression “Hitler's gift” applies.¹

With his monographic work on the life and work of Arthur Erich Haas, Wiescher has closed a hitherto hidden gap in the history of physics in the twentieth century. Only with the presentation of this comprehensive volume has it become possible to enter the included information so accurately into the consciousness of all those who have learned to understand the history of the natural sciences within its complex

¹ Jean Medawar & David Pyke, *Hitler's Gift : The True Story of the Scientists Expelled by the Nazi Regime* (New York: Arcade Publishing, 2001).

historical contexts. Our view of the history of scientific life on both sides of the Atlantic has been enriched through many facets with the presentation of this book.

April 2021

Wolfgang L. Reiter
University of Vienna
Vienna, Austria

Preface

When I came to the University of Notre Dame more than thirty years ago, as a young assistant professor to develop my research programme in nuclear astrophysics, I was told that fifty years earlier an Arthur Haas from Vienna had come to the university with similar intentions of establishing a new research programme in the field of cosmology. Despite the enormous differences in time and motivation, I regarded ours as the comparable fates of two emigrants seeking to establish their research and roots in a foreign country. Years later, partly due to my interest in the history of science, I followed up on this idea and began to explore what brought Arthur Haas to the USA and how his life developed here—interestingly enough, on the same street where I had my house.

What fascinated me about Haas, besides these quasi-personal associations, was his view regarding the close connection between the microcosm and the macrocosm—between the world of atoms and the world of stars and galaxies, respectively—which he believed followed corresponding principles. My own research focuses on the origin of the elements, in the interior of stars and the chemical evolution of the universe, reflecting a similar perspective in science.

Typically, biographies of this nature concentrate on scientific successes and on the successful and, therefore, focus on widely known names and personalities in science. However, given the large number of well-known researchers, there are an even larger number of scientists who have not or who have only partially succeeded in making a breakthrough. These scientists have done important work as contributors and idea bearers in the network of the scientific community. Arthur Haas is among these for whom social and political circumstances prevented the longed-for achievement of scientific success and recognition. And yet, he has nevertheless contributed to the development of new ideas from atomic physics to cosmology and, more importantly, has made an essential contribution to the popularization and dissemination of these ideas. Therefore, it seems important to revisit the career and destiny of Arthur E. Haas within the network of the scientific community and in light of the political developments of the early twentieth century.

My early research on Haas first led to my publication in the journal *Physics in Perspective*, in which I essentially follow the development of Haas' scientific thinking. The support of the family has motivated me to continue in my efforts to

create a more complete biography of the life of Arthur Haas, including a background of the political and social developments in Austria during his time. Therefore, the first section of the book covers the period up to the end of the Habsburg Dual Monarchy. For this section, I follow Haas' unpublished autobiographical notes written in 1937. I supplement these and explain his situation, providing background information on the historical context as well as on the physics question that he discusses in these notes. In the second section, I follow Haas' life in post-World War I Austria. This includes the first five years of his career as he navigates through the times of inflation, his wedding in September 1924, and his acceptance of first employment at the Vienna Academy of Science.

The third section concentrates on Arthur Haas' years with the academy and his desperate attempts to find an academic position in Vienna or abroad. The section describes the resistance that he encountered, from right-wing conservative forces at the university, to his employment and his attempts to pursue both a science career and a career as a science communicator. These events are portrayed within the context of his personal life in Vienna and the support that he received from his young German wife, Emma Beatrice née Huber. The section also follows the political developments in Austria and how these finally forced Haas to leave Austria and immigrate to the United States. The fourth section follows the development and successes of his renewed scientific career in the USA over the short period between his arrival and the time of his death, including his enormous efforts to help Jewish and other persecuted colleagues in Austria to obtain the necessary papers for emigration.

Much of the background information, I have added as footnotes. These details about colleagues and acquaintances whom Haas mentions in his autobiographical notes, in his letters and in other written papers do not contribute significantly to the continuation of the story but do serve to illuminate Haas' world. Much of this information has been taken from Wikipedia or other lexical documents and does not contain any evaluation or interpretation on my part. As far as possible, I have complemented this with additional new information and results from my own research on this topic. Translation of original German texts and letters into English was primarily done by the author, unless otherwise referenced.

Notre Dame, USA

Michael Wiescher

Acknowledgements

Numerous people have contributed to this work. I have received enormous support from the descendants of Arthur Haas and especially from his granddaughter Patricia Haas-Cleveland and her sisters Theresa and Susan, who gave me free access to the family archives. The Haas family has provided me with personal correspondence generated over forty years of Arthur Haas' life, a collection that fills two filing cabinets and gives fascinating insight into the changes in Austrian life that developed over the first decades of the twentieth century.

These letters also give an overview of both the possibilities and the opposition that Jewish scientists experienced during that period in Austria's history; Haas was not the only scientist to navigate the numerous issues confronting a Jew while, at the same time, remaining dedicated to a scientific life. Klaus Taschwer from Vienna helped me to understand the coordinated resistance against talented young Jewish colleagues by the mostly conservative world of professors. I received much help from Stefan Sienell, archivist of the Austrian Academy of Sciences in Vienna, who sent me the Academy's numerous documents on Haas from 1917 to 1937 and was a great resource in understanding the role of Arthur Haas in the Vienna Academy. In addition, I received support and motivation from other Austrian sources, in particular from Prof. Dr. Walter Kutschera of the University of Vienna, Dr. Peter Schuster, the unfortunately, recently deceased director of the Austrian Museum for History of Physics in Pöllau, and Undersecretary and Honorary Professor Dr. Wolfgang Reiter, a leading specialist in questions of Austrian science before and during the Third Reich. Pavel Šišma, Professor of Mathematics at Masaryk University in Brno helped me with information on the history of the German Technical College in Brno, and Joanna Behrman of Johns Hopkins University, now the American Physical Society helped me with background information on Wilson College and other American women's institutions in the 1920 and 1930s. I also received advice and support for historical-philosophical considerations from Professors Friedrich Stadler of the University of Vienna and Leopold Stubenberg formerly of the University of Notre Dame. I would also like to thank Professor Ani Aprahamian for helpful discussions and insight on the internal configuration of heavy atomic nuclei, a topic Arthur Haas was working on towards the end of his life. Joe Smith from the Notre Dame Archives was extremely helpful in providing me material on Arthur Haas and his time at the

university. Particularly helpful in that aspect were also Fr. Thomas Blantz, C.S.C. for his 2020 published *The University of Notre Dame—A History* and his interest and comments. I also want to thank Dr. Christopher S. Temple, who provided me with a copy on his yet unpublished Ph.D. thesis on *Fostering Elite Science at an American Catholic University*, an in depth analysis of the period when Arthur Haas joined the faculty. I express my gratitude to the Coomes family for providing me unpublished and personal material on Prof. Ed Coomes at Notre Dame. Finally I would also like to thank Brigitte Roos for her help in transcribing many of the letters for Chap. 2. Special thanks, however, to Elizabeth Jo who painstakingly struggled through the manuscript to improve my English, untangle long sentences and correct the comma position. Last but not least, I want to thank Bob Bernhard as the director of the Office of Research at the University of Notre Dame for his support for this work.

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About the Author

Michael Wiescher is Freimann Professor and Director of the Institute for Structure and Nuclear Astrophysics at the University of Notre Dame, and he is currently also Adjunct Professor at Michigan State University, Visiting Professor at the University of Surrey in the UK and at the Goethe University Frankfurt in Germany.

Wiescher studied history and physics in Münster and received his doctorate in 1980 on a topic in nuclear astrophysics. In the following years until 1986, he was a postdoctoral fellow at Ohio State University, at the Institute for Nuclear Chemistry in Mainz, and at the Kellogg Radiation Laboratory at CalTech. In 1986, he joined the faculty of the physics department at the University of Notre Dame. As the director of the Nuclear Science Laboratory and the Joint Institute for Nuclear Astrophysics, Wiescher developed a worldwide research programme in nuclear astrophysics with research projects in the USA, Brazil, Europe, South Africa and Japan.

Wiescher has also developed a programme in archaeometry, in the analysis of art historical and archaeological materials using atomic and nuclear physics methodology, and is involved in various topics in the history of science.

Michael Wiescher is Fellow of the American Physical Society and the American Association for the Advancement of Science and Elected Scientific Member of the *Academiae Europaeae*. In 2003, he was awarded the Hans Bethe Prize of the DNP & DAP of the American Physical Society and 2018 Laboratory Astrophysics Prize of the American Astronomical Society for his research. He received the Alexander von Humboldt Foundation Research Award in 2007 and the Heraeus Award at the University of Frankfurt in 2017.

Part I
Youth and Career in the Habsburg Empire
1884–1919

Chapter 1

Introduction



Arthur Erich Haas (1884–1941) provided new insights and developed new approaches during the initial period of quantum theory. In the early years of his physics career, he added significantly to the discussions about deeper meaning within the context of atomic physics. Haas devoted many years to the question of cosmology, both from a philosophical as well as a physical perspective. He rejected the idea of an infinite universe but, like many of his peers, he was attracted by the similarities between the atom and the planetary systems, looking for a deeper meaning and correlation in the fundamental constants of nature. Toward the end of his life, Haas developed a new methodology for explaining the internal structure of the atomic nucleus, an approach which today is reflected in the cluster model and is widely used to describe many features in nuclear structure, nuclear decay, and nuclear reactions. His contributions are largely forgotten today, only mentioned in works on the history of science and then only marginally as an example of an early scientific approach to quantum mechanicsⁱ or cosmology.ⁱⁱ Haas' approaches were recognized at the time but often not fully appreciated, thoughts and ideas having been, perhaps, too early for their reception.

Haas came from the bourgeoisie of the Fin de Siècle of the Austrian-Hungarian Monarchy. He always considered himself an integral part of this society and it is, therefore, important to understand its historical, political and social background and developments. Of equal importance is seeing how young Haas developed within the framework of this, his social environment which drastically changed over his lifetime. As a member of the Strakosch sugar dynasty,ⁱⁱⁱ he initially lived a bohemian life in which his academic studies were merely an expression of his intellectual interests. He chose to study physics and was the last student of Ludwig Boltzmann (1844–1906) who had shaped the development of physics for half a century. Haas was witness to and effected by his time, by the Great War and the dissolution of the multi-national Habsburg Monarchy together with the collapse of bourgeois society. The resulting political, economic, and social developments shaped his life, moving him from his status as a coveted member of society to a Jewish outsider. As a Jewish representative

of a vanishing liberal world, he fell victim to the blame and hatred generated by an increasingly radicalized petty-bourgeois society.

Arthur Haas' further fate fell victim to Austria's development, from its defeat in 1918 through the establishment and failure of parliamentary democracy and the emergence of authoritarian conservatism, often described as clerical fascism. His fate and his work also reflect the dynamic development of modern science, which was emerging from Austria and revolutionizing the world. Franz-Serafin Exner (1849–1926) and Stefan Meyer (1872–1949), the founders of the Radium Institute in Vienna, were Haas' teachers. Among his fellow students were Erwin Schrödinger (1887–1961), a leading representative of quantum physics and founder of wave mechanics, and Lise Meitner (1878–1968), a representative of the new science of atomic nuclei that provided the revolutionary explanation for nuclear fission.

Studies and thinking were shaped by Haas' observations and impressions; he observed his contemporaries and colleagues and he described them not without arrogance. This arrogance, coupled with great scientific intellect and financial independence, shaped his early life before the war and caused his vacillation between bohemian and scientific desires. Then although his first scientific thoughts and insights on cosmology and the new science of atomic physics were fully formulated, the work mostly remained unrecognized. He was, for example, the first to apply the new concept of quantum theory to explain the spectral observation of light, a work that was largely mocked but then taken up and continued by others.

When war and subsequent inflation deprived Haas of his fortune, he sought, perhaps too late, a serious scientific career in Vienna. But it was by then a changed, dark Vienna where the bourgeoisie existed only in fragments and anti-Jewish resentment in the Catholic state prevented his scientific career. Economic hardship became a new factor. He had thoughts of emigration but a position in the scientific administration of the Vienna Academy of Sciences and his wedding with the young charismatic Emma Beatrice Huber prevented him from taking this step. From the scientist, he developed into the voice of science. He made the latest findings, which his colleagues were in the process of uncovering and developing, accessible to the public. In this way, Haas became the "Carl Sagan" of his time, known as a science communicator and popularizer of leading scientific developments. As such he became internationally known through lectures and lecture tours as well as through his books; the latter being translated into many languages.

The increasing difficulties in the last years before the Anschluss,¹ with unrest and growing fear in Austria, drove him to America. Haas emigrated with the help of Albert Einstein and subsequent events in Austria validated the necessity of this step. With immigration to America, he was transformed from victim to helper, working tirelessly to help and support members of his family as well as other Jewish scientists to escape. He organized visas, housing, and jobs as the necessary first steps for those

¹ Anschluss refers to the annexation of Austria into Nazi Germany on March 12, 1938. The idea of an Anschluss began after the unification of Germany excluded Austria and German-Austrians from the Prussian-dominated German Empire in 1871. After the end of the Habsburg Empire, reunification with Germany became an important goal for parts of the Austrian population but was opposed by the conservative Christian-oriented part of society.

beginning new lives in the United States. His fate reflects the fate of many, not only Jewish scientists, who had to leave Europe to build a new life and a new career in a new unfamiliar environment.

Arthur Erich Haas was a witness and a victim of his society and his time; the beginning of the twentieth century was a time characterized by scientific and social revolution and upheaval. He studied with the leading minds of physics and witnessed the great moments of physics—the development of the theory of relativity, the birth of atomic physics, and the formulation of quantum mechanics—during his studies in Göttingen and Vienna. In this, he played a small but authoritative role that is reflected in his books and letters. But, he was also witness to political and scientific decline in German-speaking countries. This is reflected in his observations and comments about the nationalist-conservative movement and its representatives, from the time of his student days in Göttingen to his eventual emigration. As an Austrian Jew who was a representative of the Vienna Academy of Sciences, Haas was responsible, even after 1933, for direct contact between German-speaking scientific associations and the academies. As such, he observed the exodus of science from Germany. The consequences of this drain, which began with the dismissal of all Jewish scientists from German universities, are reflected in this small anecdote: Bernhard Rust, the new Minister of Science, asked the famous mathematician David Hilbert, sitting next to him at an official luncheon, how the institute for mathematics was doing after the “removal of Jews and Jew friends,” and Hilbert replied: “The institute?—that does not exist anymore!”.

Haas left fragments of an autobiography that he had started writing during his early days in America. However, while occupied with building a new scientific career, helping his fellow victims to escape from Nazi terror, and with his early death, he was prevented from completing this work. Although there are isolated reports on his scientific accomplishments^{iv} and on his role in scientific development, there is no complete account of his complex life in complex times. It will now be attempted here to create a picture of his life and time on the basis of his autobiography, his scientific publications, his books, and his countless letters and written documents, which he brought from Europe to America and which slumbered for decades in family archives. Biographical footnotes refer to various persons—friends, acquaintances, teachers, classmates, and colleagues—who reflect the close social and scientific network in which Haas lived, shaping his early life and studies as well as the connections that he tried to maintain in his later life.

His records describe the environment of a wealthy upper-middle-class family in the last decades of Austria-Hungary. They offer insights into domestic luxury with several servants, who are often mentioned only casually, the daily celebrations and amusements offered by the capital of Vienna, and the extensive summer resorts in the surrounding countryside or on distant coasts. However, the text also provides insight into the dark side, into and inexplicable resistance that this rich and well-connected son faced in his quest for academic success and fame. This resistance can probably, in retrospect, be traced back to his Jewish origins, perhaps to his wealth, and possibly also to the aforementioned social and intellectual arrogance with which he confronted

his teachers. However, the latter may have only been reflected in his personal notes while being less obvious in the undoubtedly polished manners of young Haas.

The rejection and malicious criticism that he received for his groundbreaking work may have been due not only to the short-sightedness of his contemporary physicists but also to the socio-emotional, probably even anti-Jewish attitude with which these fellow scholars confronted Haas. This may be speculation but further developments at the universities—during the years of the young Republic of Austria, reinforced in the clerical state of the Federal Chancellors Engelbert Dollfuß (1892–1934) and Kurt Schuschnigg (1897–1977)—demonstrate a growing hostility toward young Jewish scientists. Arthur Haas was perhaps an early target of these emerging developments.

Before we come to the tale of the young Haas let me provide a brief account of his origins and family, which are closely linked to the Strakosch sugar dynasty in Austria. His autobiographical account shows close ties to, and mutual support within, the Haas and Strakosch families. This expressed itself in frequent mutual visits and close business networking. Networking is also reflected in the history of and connections between the Haas family and Moravian Jewry, ties that can be traced back to important rabbinical families and Jewish thinkers of the Middle Ages. Although he himself did not identify with active Judaism in the *Fin de Siècle* of Vienna, Haas was proud of these origins, of the rabbinical and intellectual background of his family that he refers to in the introduction to his autobiographical notes. These are, however, only hints, specific remarks in which the personal pride in his origins is reflected; these origins need to be considered in more detail in order to understand the world of thought from which Haas emerged as the man who is described here.

Therefore in the first part of this biography, I will annotate the autobiographical and very subjective notes of the young Arthur Haas with more objective historical information about his family, his environment and his time. I do this in order to better understand and explain the development of and influences on his world of thought. His origins were the basis for his self-confidence and the arrogance with which Haas viewed and confronted his environment. The *Fin de Siècle* of the Habsburg Dual Monarchy, though doomed to extinction, formed the intellectual basis for the world of thought of the twentieth century. This also formed Haas' world of thought and he wanted to be part of it, to contribute actively to it. While he was not afraid to represent this claim openly and sometimes aggressively, his desires led to negative reactions especially when he questioned authority and was openly or even covertly critical.

Notes

- i. Armin Hermann, *The Genesis of Quantum Theory (1899–1913)*, (Cambridge: MIT Press, 1971), 87–10.
- ii. Helge Kragh, *Matter and Spirit in the Universe: Scientific and Religious Preludes to Modern Cosmology* (London: Imperial College Press, 2004).
- iii. Werner Kohl and Susanna Steiger-Moser, eds., *Die österreichische Zuckerindustrie und ihre Geschichte(n) 1750–2013* (Wien: Böhlau Verlag, 2014).
- iv. Armin Hermann, *The Genesis of Quantum Theory (1899–1913)*, 87–10.

Chapter 2

Origins and Childhood



In his autobiographical remarks, Arthur Haas mentions with just a few words his origins and family but they had shaped him much more extensively and more deeply than he acknowledges. While his comments avoid deep connections to the Jewish spiritual and cultural world, he does mention the intellectual leaders in his ancestral line and does not fail to point out, with hidden pride, the historical significance of his birthplace.

On the Great Square now Freedom Square of the Moravian capital of Brünn, rises a five-story Renaissance building crowned by a Mother of God statue, which in many art histories is described as an architectural masterpiece. The city of Brünn had given it to a citizen Raduit de Souches, originally from France, to thank him for his help in successfully defending Brünn against the besieging Swedes in the Thirty Years' War. On April 30, 1884, I was born as the son of the "Moravian-Silesian provincial lawyer" Dr. jur. Gustav Haas in an apartment of this building, just before the last fifteen years of the 19th century began.

The fact that the city of Brünn resisted the Swedes was, in itself, a world sensation at the time. Olmütz (today Olomouc) capitulated to the Swedes after four days, Iglau (today Jihlava) within a day, and Znaim (today Znojmo) surrendered without any defense of its own. News of Brünn's stance spread to Italy, Germany and France. The defenders of the city—everyone, including citizens, masters, journeymen and even students—were richly rewarded and promoted. And so also was Raduit de Souches who, nevertheless, still had to pay 60,000 guilders for his house in the Great Square shown in Fig. 2.1, a house that included a garden and the adjacent city gate. The house remained in the possession of the de Souches family for almost ninety years. Around 1884 the house belonged to the colonial-goods dealer Franz Komarek and the Haas family was renting a floor.

The story of my family, which in former times was called Auerbach, dates back to the Middle Ages. In a document from the year 1497, an early, demonstrable ancestor is identified who had close connections with the court of the then ruling bishop of Regensburg.¹ The family later moved to Vienna. One of my ancestors [the father-in-law of an ancestor in the male

¹ Bishop from 1492–1507, Rupert II was son of Count Palatine Friedrich von Sponheim. The bishop expelled the Jews from Regensburg but made an exception for the rich court Jew, Moshe



Fig. 2.1 The Great Square in Brünn. The house where Haas was born is the fourth towering Renaissance building on the right side of the street. Today the gable of the house has disappeared. A history of the building can be found on the website of the descendants of the former German-speaking inhabitants of the city of Brünn (today Brno), accessed January 31, 2021, <http://www.brünn.org/www/bruna/de/haus-des-vergessenen-fremden.php>

line] was Dr. Leo Lucerna, who died on April 26, 1635 and whose grave is still preserved in Vienna; he was, as his epitaph says, doctor of three faculties. My family left Vienna in the second half of the 17th century and from then on, my ancestors lived in different Moravian cities. My very great-great-grandfather² enjoyed the special friendship of the then Moravian governor, a Count Zierotin.³

Arthur Haas was proud of his origins and of his contributions to physics, and he did not shy away from underlining these assertions with references to the scholastic achievements of his ancestors. In his writing, young Haas traced his genealogy far into the Middle Ages (Fig. 2.2), to the Jewish rabbinical dynasties of the Auerbachs, Lurias, and Lucernas who were each famed for their important Talmudic and Kabbalist thinkers. Moses Auerbach (~1462–1540) was in Regensburg and is considered one of the progenitors of the family. He moved with his wife Mushkat, from the

von Auerbach: Auerbach was allowed to stay in the city. He refused, however, and followed his brothers in faith.

² This is probably Emanuel Haas (1791–1850) who will be discussed later in more detail.

³ Franz Josef von Zierotin (1772–1845), Councilor of the Moravian Gubernium. From 1817, he was administrator of the family property in Blauda, Chromčë, Meseritsch, Prussia and Brno; he was also a scholar and acquired a large library. From 1828, Zierotin was a member of the board of the Economic Association of Moravia and Silesia, and later director of the Moravian Insurance Company. In 1835 he became a privy councilor and during the coronation celebrations for Bohemian King Ferdinand I in 1836, Zierotin was knighted by St. Wenceslas and awarded the Leopold Order.

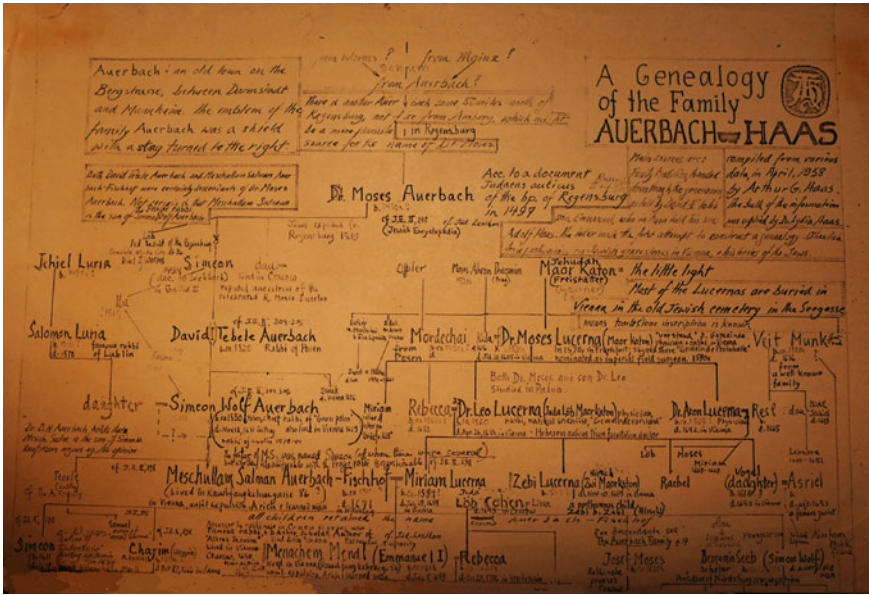


Fig. 2.2 The family tree of the Auerbach family as developed by Arthur Haas and drawn by his oldest son, the historian Arthur Gustav Haas in 1958. This shows the first five generations after Moses Auerbach from Regensburg. The origin of the family is traced back to the small town of Auerbach on the right bank of the Rhine south of Darmstadt

Lazara-Isserlee family, to Cracow after the expulsion of the Jews from Regensburg.ⁱ The eldest son Israel was appointed to important rabbinical posts in Posen (today Poznan) and Cracow, while the second born, Simon Wolf Auerbach founded a branch of the family in Frankfurt. The youngest son David Tebele Auerbach (1512–1575) became rabbi in Vienna and is considered the progenitor of the Viennese branch of the Auerbach family.ⁱⁱ He was married to Krondel Luria, the daughter of the Rabbi of Lublin, Shlomo Luria (~1510–1573). Shlomo Luria traced his origins through the Spira and Treves familiesⁱⁱⁱ to the well-known Rabbi Rashi-Rabbi Shlomo Itzhak (1040–1105), who in turn claims his origins from the family of David, which refers to Noah as the original progenitor.^{iv}

The couple had several sons. The eldest, Simeon Wolf Auerbach served as rabbi in Polish and Bohemian cities, lastly in Prague in 1631. David Tebele Auerbach’s second son Meshulam Salman Fischhoff Auerbach (~1565–1677) married Miriam Lucerna (1584–1654), the daughter of Dr. Leo Lucerna (1560–1635) who had studied medicine in Padua, as Jews were not allowed to attend German-speaking universities at the time. Despite the economic difficulties during this period of the Thirty Years’ War, it was a golden age for the rapidly growing Jewish community in Vienna (Fig. 2.3). The community was under the special protection of Emperor Ferdinand II who assigned them their own district, today’s Leopoldstadt, as a residential area providing protection against the less benevolent citizenry.^v Meshulam



Fig. 2.3 Assembly of traditional Jews in a painting of the late nineteenth century in Vienna

Salman Fischhoff Auerbach and Miriam Lucerna had four sons, who in turn held important municipal functions as well as rabbinical functions in Moravia, such as in Eibenschütz and Nikolsburg. Yet even in relocation, the family stayed connected and maintained its relationship with fellow believers in Vienna.

Emperor Ferdinand II's successor, Emperor Leopold I, ordered the expulsion of the Jews from Vienna in 1670 at the instigation of his Spanish wife who blamed the Jewish population for her miscarriage. Leopold took this action despite the high tax revenues that Vienna and the imperial court had received from the Jewish community. As an official pretext, the Emperor and his councils accused the Jews of having collaborated with the Protestants, the Hungarian insurgents, and the Turks during the Thirty Years' War.

When the Jews were expelled from the city, some moved westward but most settled in areas near the border in Moravia. This was only possible, however, in places where the local nobility regarded the Jews and their trade as a welcome source of tax revenue, while many other Moravian towns did their best to slow down the influx of displaced Jews. Therefore, some large groups moved further to Poland, Galicia and Russia where influential Jewish communities had been forming for years.^{vi}

The expulsion affected Meshulam Salman Fischhoff Auerbach and his family, the remaining sons and grandsons. He moved to Nikolsburg in South Moravia where the then largest Jewish community existed. Nikolsburg belonged to the dominion of

the Princes of Dietrichstein, who welcomed the Jews in exchange for high taxes and other duties. Prince Walter Franz Xaver von Dietrichstein (1664–1738) is said to have taken in eighty families in Nikolsburg alone, which developed rapidly thereafter. Of course, the Jews had to make extremely high payments for this reception. Meshulam Salman Fischhoff Auerbach died there in 1677 but his son Benjamin Wolf Auerbach (1625–1705) remained and became the elder of the Jewish community of Nikolsburg. His descendants appear in later records under the name Fischhof but the connection of the Auerbach family with the Haas family remains obscure.⁴

Arthur Haas ignores these details and only noted that the family had lived in several Moravian towns. In fact, there were countless smaller Jewish communities in Moravia, of which Nikolsburg was one of the largest. However, little is found in the records^{vii}; Arthur Haas himself was not quite sure about the exact generational sequence because, as late as 1937, he was still trying to create one, as he wrote to his brother Otto:

However, the two or three intermediate generations [which lead from the Auerbach family to Haas] are missing, but maybe you can find them.⁵

This never happened; only a few months later, Germany invaded Austria and the search for ancestral connections was no longer relevant. Only when Arthur's eldest son Arthur Gustav took up this endeavor was a genealogy finally compiled of the Auerbach-Haas family, seen in Fig. 2.4.⁶

Menachem Mendel Fischhof Auerbach, the brother of Benjamin Wolf Auerbach, is mentioned in 1660 as a rabbi of the Jewish community in Raussnitz,^{viii} however, he did not stay there but accepted a rabbinical position in Krotoschin in Poznan, Poland, where he died in 1689. In addition, only one member of the Haas family is mentioned, Jakob Haas as owner of a Jewish house in Kanitz.^{ix} However, the mention of Count Zierotin in Arthur Haas' records points to the town of Meseritsch (today Velké Meziříčí) in the Wallachia region of eastern Moravia (Fig. 2.5). In the nearby market town of Krasno, which at that time was still an independent village, the Jew Marek Haas had acquired, in 1745 the rights to a distillery from the Zierotin dominion, for 1100 florins a year. This distillery remained in family ownership for generations.^x

The name of the Jewish Haas family goes back to the cloth merchant Salomon ben Meier, who is mentioned in 1530 as the owner of the “Haus zum Hasen” in Frankfurt's Judengasse (Jewish Ghetto).^{xi} His descendants lived in the Judengasse for centuries, often adopting the names of their respective houses according to given custom.⁷ The Haas family had businesses in Amsterdam and Mainz, resulting in the

⁴ In 1782, 1783 the Jews in Austria were forced to leave—often because of their resistance to adopting fixed family names—and this makes it difficult to track families in the Moravian Diaspora.

⁵ AEH to Otto Haas (South Bend, March 24, 1937).

⁶ Unfortunately, these family charts do not include proper documentation and bibliographical information. Arthur G. Haas, “Haas Family Tree,” (unpublished manuscript, 1958).

⁷ Salomon ben Meier Haas is therefore also considered the progenitor of the Grotwohl, Schuch, Kann, Stern, and Beer families who were named after their respective houses in Frankfurt's Judengasse. A detailed list of the Frankfurt families in the Judengasse can be found in the list of graves in

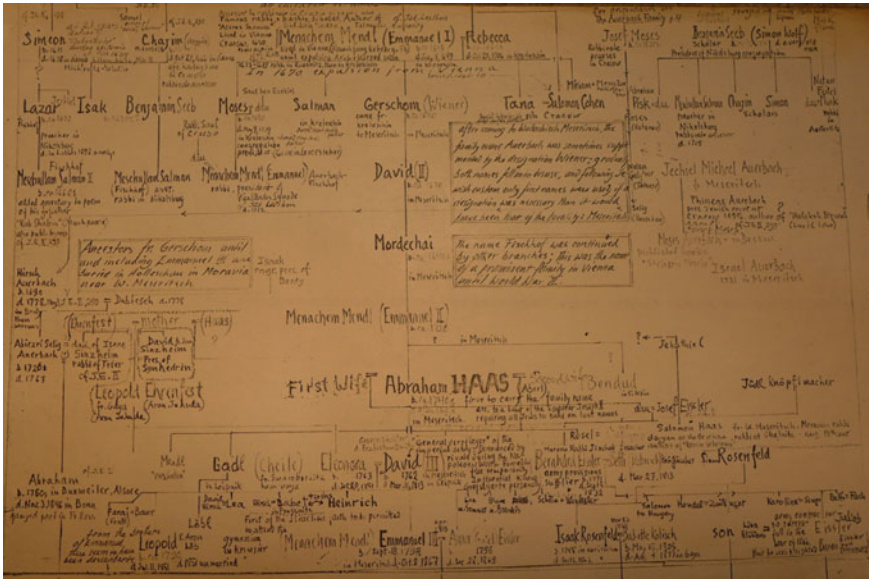


Fig. 2.4 The different branches of the Auerbach-Fischhof genealogy according to the notes of Arthur Gustav Haas created in 1958, including the first appearance of the name Haas in the family succession as descendants of Menachem Mendel Fischhof Auerbach



Fig. 2.5 Typical Jewish quarter in a South Moravian town in the nineteenth century

development of a Dutch branch of the Haas family as well as a southwest German branch.

How and when Marek or Markus Haas came to be in Moravia is not known.⁸ Imperial and local decrees restricted the influx of non-native Jews to Moravia in the eighteenth century. It was probably the lucrative business of making potash, an important local product for filtering the popular local Slivovitz schnapps, that attracted Marek Haas. Producing potash was a flourishing business in Moravia and, together with the distilling of schnapps, mainly run by Jews. They were, however, required to pay large sums of money to the lessees, such as the Counts of Zierotin. However, since Jewish tenants ran the businesses of the local Counts of Zierotin, the latter helped in circumventing local restrictions. Presumably Marek Haas became a part of this enterprise, for which he must have had to invest a considerable initial capital.

The Edict of Tolerance issued by Emperor Joseph II in 1780 improved the situation of Jews (and Protestants) in the Habsburg territories, which had been expanded just ten years earlier, by the third Polish partition, to include Galicia with its Jewish population. The subsequent lifting of travel and trade restrictions led to a huge upsurge in economic activity. The Edict of Tolerance thus laid an essential foundation for the modernization and industrialization of the Austrian-Bohemian-Hungarian lands at the turn of the nineteenth century.

While it took some time in coming, the Haas family was well prepared for this change. Their local distilling business provided resources for immediate investment in these new business opportunities.

The son of Marek Haas, Mendele Abraham Haas (1746–1810), paid 2200 guilders annually to Count Zierotin in 1781 and for the lease of a trading room, he paid another 250 guilders. These prices indicate how lucrative the distillery was and demonstrate how lease of the distillery was a very profitable undertaking for the owners of the manor, relative to other sources of income. In comparison, the lease of a paper mill brought in only 250 guilders annually and the lease of a glass factory brought in 220 guilders annually.

But the Jewish tenants also seem to have earned well. Abraham's son, David Haas (1770–1830) was a rich man; despite the enormous rent and tax payments, he could afford to buy a distillery in Meseritsch, in addition to the distillery in Krasno. The seller was Bernard Eissler, who is mentioned as the owner of a distillery in Meseritsch at the beginning of the nineteenth century. The reason for the sale was probably a

the Jewish cemetery. See Shmul Ettlinger, *Ele Toldot 1241–1824*, which can be viewed in Frankfurt at the Institute for City History.

⁸ In the eighteenth century, the name Haas first appeared in Bohemia and Moravia and, in the nineteenth century, spread to neighboring Galicia. In neighboring Holleschau (today Holešov) several Jewish births are registered under the name Haas, the oldest of which is Selig Haas (1740–1809) who may have been a son of Marek, born in Holleschau and who formed a separate branch of the family there.



Fig. 2.6 The descendants of Emanuel Haas in Meseritsch according to the notes of Arthur Gustav Haas in 1958

marriage contract, since Eissler's daughter Anna married David Haas' son Emanuel Haas (1791–1850)⁹ in 1821.

Emanuel Haas was, as his great-grandson had accurately observed, a rich man. He owned not only two distilleries but also leased a tavern in the town hall and ran a stall at the cattle market. From Emanuel's marriage with Anna, the sons Moritz (*1825), Adolf (1823–1906) and David (1822–1875) were born in Meseritsch (Fig. 2.6). Moritz Haas continued his father's business in Meseritsch. Adolf Haas, however, first moved to Olmütz with his young wife Josephine Wagner, from where he moved with his family to Vienna.

The third brother, the eldest son David Haas studied medicine in Vienna and finished his studies in 1844. The following year, in 1845, he married the young Clementine Rosenfeld (*1824) from the small Moravian town of Koritschan (Fig. 2.7). She was the daughter of Isak Rosenfeld (*1795) and granddaughter of Simon Rosenfeld (~1755–1831), a family that had lived in the town since the early seventeenth century.

My father's father, Dr. David Haas had obtained doctorates in medicine and surgery at the University of Vienna and he worked as a doctor, first in Venice, then in Brünn and finally in the Moravian town of Gaya, where he died in 1875. As the third of his eight children, my father was born on October 15, 1850 in Brünn. My father had four brothers and three sisters. An older brother Ludwig, to his father's grief, became a merchant since his eyes did not allow him to study. Of the three younger brothers, Arnold was a pharmacist, and two others, Max and Fritz, became lawyers like my father. My father graduated from the First German Gymnasium in Brünn and then obtained a doctorate in law from the University of Vienna. Since my grandfather did not have a generous income because of his large number of children, my father had to rely on himself during his university studies. As a doctor, he entered a very prestigious law firm in Brünn, as an apprentice lawyer; it was the office of a Doctor Heschel, who had taken it over from the Baron von Giskra who instead became a leading liberal statesman in Austria in the mid-nineteenth century. After several years of work as a clerk, my father then took over the law office of Dr. Heschel, shortly before his marriage (on December 17, 1882), and was very successful from the very beginning.

David Haas had taken advantage of the relaxed admission regulations for Jews that occurred in 1780 at Austrian universities.¹⁰ He studied medicine in Vienna and

⁹ The early Haas family is well established on the genealogical websites, which can be easily followed into all family branches, e.g., <https://www.geni.com/people/Emanuel-Haas/6000000023910361466?through=6000000038116898940>.

¹⁰ It was not until the revolutionary year of 1848, with the abolition of the ghettos, that the complete civic equality of Jews was legally established.



Fig. 2.7 Dr. David Haas as a well-established doctor in Gaya around 1870 and his wife Clementine, usually called Tini, who was born Rosenfeld. The traditional representation of the family in these oil paintings underlines their successful rise to the Austrian bourgeoisie

then, after completing his studies, he worked from 1845 as a doctor in Venice for two short years. He then returned to Brünn where his first son Ludwig Haas (1847–1891) was born in 1847. David Haas remained there as a doctor for the next ten years and three more children were born: Adolfine Haas (1849–1901)¹¹ was followed three years later by Gustav Haas and Arnold Haas (1852–1915).

Around 1855, David Haas moved with his family from Brünn to the small Moravian town of Gaya (now Kyjov) in South Moravia. The reasons for the move are not known but he established a new medical practice there. He had considered immigration to America at the time, as his notes for the year 1857 show. These notes detail a carefully worked schedule of steamship routes from Bremen to New York, including a detailed cost analysis. He may not have made the trip because of the associated expense and because besides another son, Max Haas (1855–1895), three additional children were born in Gaya, Selma Haas (*1858),¹² Hedwig Haas (1860–1906),¹³ and the youngest son Friedrich Haas (1862–1937).

The social rise of grandfather and father was a typical phenomenon in the Austro-Hungarian-Bohemian multi-ethnic state after the lifting of all social restrictions and the full legal equality that Jews shared with other citizens following the revolution of 1848. Prince Metternich and the restorative policy of the previous thirty-five years had been swept away; a new era seemed to be dawning. In the Haas family, sufficient

¹¹ Adolfine Haas later married Josef Rosenfeld (1836–1920) from Koritschan in Moravia.

¹² Selma Haas later became the wife of Dr. Bernhard Fried in Gaya.

¹³ Hedwig Haas married the headmaster Leopold Blüh (~1850–1899) who came from Bielitz in the neighboring Austrian part of Silesia (today Bielsko-Biala in Poland). The marriage remained childless.