

## The Irony of History Tale of Two Germans



### Fritz Haber

In 1909, Fritz Haber, a German chemist, invented a method of extracting nitrogen from the air to create fertilizer. He was awarded the Nobel Prize for Chemistry in 1918 for this discovery. However, his work also has a much darker side.

### Pre-War

Fritz Haber was born in Breslau, Germany to Jewish parents on December 9, 1868. From 1886 until 1891 he studied at the University of Heidelberg.

During his time at the University of Karlsruhe from 1894 to 1911, he and Carl Bosch developed the Haber-Bosch process, which is the catalytic formation of ammonia from hydrogen and atmospheric nitrogen under conditions of high temperature and high pressure. In 1918, he received the Nobel Prize in Chemistry for this work.

Nitrogen makes up over 78 percent of our atmosphere and is the basis of fertilizers. Prior to the 20th century, nitrogen to make fertilizers had been taken from either minerals or other materials. However, there was not enough nitrogen available from these sources to satisfy the increasing demand from farms and factories. Haber thought of tapping the virtually endless supply of nitrogen in the air. His idea was to capture it as a gas by combining it with hydrogen to form ammonia.

The Haber-Bosch process underlies the method of production in almost every fertilizer factory in the world today. It is estimated that almost 2 billion of the earth's population would not be able to survive today without it.

### World War I

During World War I, Germany was cut off from its mineral supplies of nitrogen, making this discovery extremely important to its war effort. Carl Bosch, another German chemist, refined Haber's process to make it easier to manage on an industrial scale. The Haber-Bosch process was used by Germany to manufacture both fertilizers and explosives.

Assign # \_\_\_\_\_ Name \_\_\_\_\_ Due Date \_\_\_\_\_ Pts \_\_\_\_\_

Haber played a major role in the development of chemical warfare in World War I. Part of this work included the development of gas masks with absorbent filters. In addition to leading the teams developing chlorine gas and other deadly gases for use in trench warfare, Haber was on hand personally to aid in its release.

His wife opposed his work on poison gas and committed suicide with his service weapon in their garden, possibly in response to his having personally overseen the first successful use of chlorine gas at the Second Battle of Ypres on April 22, 1915. She shot herself on May 15, and died in the morning. Later on the same day, Haber left for the Eastern Front to oversee gas release against the Russians.

Haber was a patriotic German who was proud of his service during World War I, for which he was decorated. He was even given the rank of Captain by the Kaiser, rare for a scientist too old to enlist in military service.

Haber defended gas warfare against accusations that it was inhumane, saying that death was death, by whatever means it was inflicted. During the 1920s, the cyanide gas formulation Zyklon B, which was used as an insecticide, especially as a fumigant in grain stores, and also later, after he left the program, in the Nazi extermination camps.

During the war, scientists working at his institute developed an insecticide, hydrogen cyanide, to be used in flour mills and granaries. However, the gas was dangerous due to its lack of an odor. In 1919, Zyklon A, with a warning odor was created. In 1924, a safer version known as Zyklon B was developed. Twenty years later, this gas was reformulated to remove the odor to be used in the Nazi gas chambers. Haber's invention had evolved from insecticide to genocide. There is even speculation that some of Haber's relatives were exterminated in such a way.

### **Post-War**

In an effort to become more acceptable to a society increasingly hostile toward Jews, Haber converted to Christianity. Despite his newly acquired faith he was forced to leave Germany in 1933 because of Nazi persecution of persons of Jewish ethnicity. His Nobel Prize winning work in chemistry, and subsequent contributions to Germany's war efforts in the form of chemical fertilizers, explosives and poison munitions, were not enough to prevent vilification of his heritage by the Nazi regime. On January 29 1934, at the age of 65, Fritz Haber died of heart failure in Basel, Switzerland.

Fritz Haber is perhaps the ultimate symbol of the paradox of science, its ability to create and destroy. His work has eliminated the threat of mass starvation, as well as led to the extermination of millions.



## Armin T Wegner

Doctor in Law, writer, poet, and deeply moved by the tragedy of the Armenian people to which he had been eyewitness in Ottoman Turkey, Wegner dedicated a great part of his existence to the fight for human rights, and his literary and poetic output to the search for the truth about himself and his fellow men.

### Pre-War

Armin Theophil Wegner was born in Wuppertal (Westfalia) on 16 October 1886. Armin's father, Gustav Wegner, came from a family of rigid Prussian traditions. His mother, Marie Wegner, became involved in the feminist and pacifist movements of the end of the century.

In his autobiographical writings, Wegner recalled three episodes that left a mark on his life: his father's reading to him an account of the 1895 Armenian massacres in Turkey; his friendship with a Jewish school friend who, like him, felt different from the others; his throwing himself heroically into the Rhine to save a drowning girl. In his early years, the basic elements of his ethical code took form: the drive to independence in rebellion against paternal authoritarianism, social involvement as the discovery of others, and his civic courage.

### World War I

At the outbreak of the First World War, Wegner enrolled as a voluntary nurse in Poland during the winter of 1914-1915, and was decorated with the Iron Cross. In April 1915, following the military alliance of Germany and Turkey, he was sent to the Middle East as member of the German Sanitary Corps. Between July and August, he used his leave to investigate the rumors about the Armenian massacres that had reached him from several sources.

Eluding the strict orders of the Turkish and German authorities, Armin Wegner collected notes, annotations, documents, letters and took hundreds of photographs in the Armenian deportation camps. With the help of foreign consulates and embassies of other countries, he was able to send some of this material to Germany and the United States.

His clandestine mail routes were discovered, and Wegner was arrested by the Germans at the request of the Turkish Command. A letter to his mother of May 1916, describing the atrocities of the massacres, was intercepted, and he was put to serve in the cholera wards: "Armin T. Wegner must be utilized in such a way so as to do away with any desire of his to wander around Baghdad".

Having fallen seriously ill, he left Baghdad for Constantinople in November 1916. Hidden in his belt were his photographic plates and those of other German officers with images of the Armenian genocide to which he had been a powerless witness. In December of the same year he was recalled to Germany.

### **Post-War**

On 11 April 1933, immediately after the Nazi raid against the Jews, Wegner wrote an open letter to Adolf Hitler. It contained a clear protest against the inhuman and anti-Semitic behavior of the Regime. For this courageous act, but especially because he had been labeled "fanatic pacifist" and German "left-wing sympathizer", he was arrested by the Gestapo, beaten and imprisoned. Transferred to three different concentration camps, Oranienburg, Börgermoor and Lichtenberg, he was finally released in the spring of 1934 after five months detention.

Between 1936 and 1937 he moved to Italy. For security reasons on the occasion of Hitler's visit to Italy, Wegner was arrested with other refugee intellectuals, though for only a few weeks. The day after Italy entered the war, Wegner was arrested, but due to his German citizenship the order of arrest was withdrawn.

Wegner was to write later about this period, "Germany took every thing from me, my home, success, freedom, work, friends, family, home and all that was dear to me. In the end, Germany took away even my wife. Yet this is the country I continue to love in spite of everything!"

In spite of his cosmopolitan spirit, so deep were his German roots that he never fully succeeded in adapting to the life of exile. He returned to Germany for the first time in 1952, but felt estranged in his native country which made a definite return impossible.

The remainder of his life was divided between his literary activity and giving evidence at various international centers in Europe and the United States. In the poem "Der alte Mann" (The old man) he wrote: "My conscience calls me to bear witness. I am the voice of the exiled who scream in the desert".

Armin Wegner died in Rome at the age of ninety-two on 17 May 1978. At Stromboli, on the ceiling of his study in the tower, the following words are carved: "We have been assigned a task, but not allowed to complete it".

Assign # \_\_\_\_\_ Name \_\_\_\_\_ Due Date \_\_\_\_\_ Pts \_\_\_\_\_

- Using the above reading, write a three paragraph essay describing what you believe the phrase “Irony of History” is referring to.
- Think about what each man accomplished in his life as well as their lasting impact.
- This is an opinion piece, so there is no one correct answer. However, you must defend your position with proper writing skills as well as evidence from the reading.
- You need an introduction, body, and conclusion.