The Story of My Life
GA 28

Chapter II

The decision as to whether I should be sent to the *Gymnasium* or the Realschule was arrived at by my father, on the basis of his intention to give me the right preparation for a "position" on the railway. This purpose of his finally took definite form in the decision that I should be a railway civil engineer. Hence his choice was the *Realschule*.

Next, however, the question remained to be settled as to whether in passing from the village school of Neudörfl to one of the schools in the neighbouring Wiener-Neustadt, I should be prepared for admission to such a school. So I was taken to the town hall for an examination.

These plans which were thus being carried through for my own future did not excite in me any deep interest. At that age these questions concerning my "position," and whether the choice should fall on town school, *Realschule*, or *Gymnasium* were to me matters of indifference. Through what I observed around me and felt within me, I was conscious of undefined but burning questions about life and the world and the soul, and my wish was to learn something in order to be able to answer these questions of mine. I cared very little through what sort of school this should be brought about.

The examination at the town school I passed very creditably. All the drawings I had made for the assistant teacher had been brought along; and these made such an impression upon the teachers who examined me that on this account my very defective knowledge was overlooked. I came out of the examination with a "brilliant" record. There was great rejoicing on the part of my parents, the assistant teacher, the priest, and many of the notabilities of Neudörfl. People were happy over the result of my examination because to many of them it was a proof that "the Neudörfl school can teach a thing or two!"

For my father there came out of all this the thought that I should not spend a preliminary year in the town school – seeing that I was already so far along – but should enter the Realschule at once. So a few days later I was taken to that school for another examination. In this case matters did not turn out so well; nevertheless, I was admitted. This was in October 1872.

I had now to go every day from Neudörfl to Wiener Neustadt. In the morning I could go by train; but I had to come back in the afternoon on foot, since there was no train at the right time. Neudörfl was in Hungary, Wiener Neustadt in Lower Austria. So every day I went from "Transleitanien" to "Cisleitanien." (These were the official designations for the Hungarian and the Austrian districts.)

During the noon recess I remained in Wiener-Neustadt. It so happened that a certain woman had come to know me during one of her stops at the Neudörfl station, and had learned that I was coming to Wiener-Neustadt to school. My parents had spoken to her of their concern as to how I was to pass the noon recess during my attendance at the Wiener-Neustadt school. She told them she would be glad to have me take lunch at her home without charge, and would welcome me there whenever I needed to come.

In summer the walk from Wiener-Neustadt to Neudörfl was very beautiful; in winter it was often exceedingly hard. To get from the outskirts of the town to the village one had to walk for half an hour across fields which were not cleared of snow. There I often had to "wade" through the snow, and I would arrive at home a veritable "snow man."

The town life I could not share inwardly as I could the life of the country. I would fall into a brown study over the problem of what might be happening in and between those houses closed tight one against the other. Only before the booksellers' shops of Wiener-Neustadt did I often linger for a long time.

What went on in the school also, and what I had to do there, proceeded at first without awakening any lively interest in my mind. In the first two classes I had great difficulty in "keeping up." Only in the second half-year was the work easier in these two classes. Only then had I become a "good scholar". I was conscious of one overwhelming need. I craved men whom I could take as human models to follow. The teachers of the first two classes were not such men. In this school life something now occurred which impressed me deeply. The principal of the school, in one of the annual reports which had to be issued at the close of each school year, published a lecture entitled *Die Anziehungskraft betrachtet als eine Wirkung der Bezuegung*.[1] As a child of eleven years I could at first understand almost nothing of the content of this paper; for it began at once with higher mathematics. Yet from some of the sentences I got hold of a certain meaning. There formed itself in my mind a bridge between what I had learned from the priest concerning the creation of the world and these sentences in the paper. The paper referred also to a book which the principal had written, *Die allgemeine Bewegung der Materie als Grundursache aller Naturerscheinungen*.[2] I saved my money until I was able to buy that

book. It now became my aim to learn as quickly as possible everything that might lead me to an understanding of the paper and the book.

The thing was like this. The principal held that the conception of forces acting at a distance from the bodies exerting these forces was an unproved “mystical” hypothesis. He wished to explain the “attraction” between the heavenly bodies as well as that between molecules and atoms without reference to such “forces.” He said that between any two bodies there are many small bodies in motion. These, moving back and forth, thrust the larger bodies. Likewise these larger bodies are thrust from every direction on the sides turned away from each other. The thrusts on the sides turned away from each other are much more numerous than those in the spaces between the two bodies. It is for this reason that they approach each other. “Attraction” is not any special force, but only an “effect of motion.” I came across two sentences stated positively in the first pages of the volume: “1. There exist space and in space motion continuing for a long period of time. 2. Space and time are continuous, homogeneous masses; but matter consists of separate particles (atoms).” Out of the motions occurring in the manner described between the small and great parts of matter, the professor would derive all physical and chemical occurrences in nature.

I had nothing within me which inclined me in any way whatever to accept such a view; but I had the feeling that it would be a very important matter for me when I could understand what was in this manner expressed. And I did everything I could in order to reach that point. Whenever I could get hold of books of mathematics and physics, I seized the opportunity. It was a slow process. I set myself to read the paper over and over again; each time there was some improvement.

Now something else happened. In the third class I had a teacher who really fulfilled the “ideal” I had before my mind. He was a man whom I could emulate. He taught computation, geometry, and physics. His teaching was wonderfully systematic and thorough-going. He built everything so clearly out of its elements that it was in the highest degree beneficial to one's thinking to follow him.

A lecture accompanying the second annual school report was delivered by him. It had to do with the law of probabilities and calculations in life insurance. I buried myself in this paper also, although of this likewise I could not understand very much. But I soon came to grasp the idea of the law of probabilities. A more important result, however, for me was that the exactness with which my favourite teacher handled his materials gave me a model for my own thinking in mathematics. This now brought about a wonderfully beautiful relationship between

this teacher and me. I was very happy to have this man through all the classes of the *Realschule* as teacher of mathematics and physics.

Through what I learned from him I drew nearer and nearer to the riddle that had arisen for me through the paper by the principal.

With still another teacher I came only after a long time into a more intimate spiritual relationship. This was the one who taught constructive geometry in the lower classes and descriptive geometry in the upper. He taught even in the second class. But only during his course in the third class did I come to an appreciation of the kind of man he was. He was an enthusiastic constructor. His teaching also was a model of clearness and order. The drawing of circles, lines, and triangles became to me, through his influence, a favourite occupation. Behind all that I was taking into myself from the principal, the teacher of mathematics and physics, and the teacher of geometrical design, there arose in me in a boyish way of thinking the problem of what goes on in nature. My feeling was: I must go to nature in order to win a standing place in the spiritual world, which was there before me, consciously perceived.

I said to myself: “One can take the right attitude toward the experience of the spiritual world by one's own soul only when one's process of thinking has reached such a form that it can attain to the reality of being which is in natural phenomena.” With such feelings did I pass through life during the third and fourth years of the *Realschule*. Everything that I learned I so directed as to bring myself nearer to the goal I have indicated.

Then one day I passed a bookshop. In the show window I saw an advertisement of Kant's *Kritik der reinen Vernunft*.[3] I did everything that I could to acquire this book as quickly as possible.

As Kant then entered the circle of my thinking, I knew nothing whatever of his place in the spiritual history of mankind. What anyone whatever had thought about him, in approval or in disapproval, was to me entirely unknown. My boundless interest in the *Critique of Pure Reason* had arisen entirely out of my own spiritual life. In my boyish way I was striving to understand what human reason might be able to achieve toward a real insight into the being of things.

The reading of Kant met with every sort of obstacle in the circumstances of my external life. Because of the long distance I had to traverse between school and home, I lost every day at least three hours. In the evenings I did not get home until six o'clock. Then there was an end-

less quantity of school assignments to master. On Sundays I devoted myself almost entirely to geometrical designing. It was my ideal to attain the greatest precision in carrying out geometrical constructions, and the most immaculate neatness in hatching and the laying on of colours.

So I had scarcely any time left for reading the *Critique of Pure Reason*. I found the following way out. Our history course was handled in such a manner that the teacher appeared to be lecturing but was in reality reading from a book. Then from time to time we had to learn from our books what he had given us in this fashion. I thought to myself that I must take care of this reading of what was in my book while at home. From the teacher's “lecture” I got nothing at all. From listening to what he read I could not retain the least thing. I now took apart the single sections of the little Kant volume, placed these inside the history book, which I there kept before me during the history lesson, and read Kant while the history was being “taught” down to us from the professor's seat. This was, of course, from the point of view of school discipline, a serious fault; yet it disturbed nobody and it subtracted so little from what I should otherwise have acquired that the grade I was given on my history lesson at that very time was “excellent.”

During vacations the reading of Kant went forward briskly Many a page I read more than twenty times in succession. I wanted to reach a decision as to the relation sustained by human thought to the creative work of nature.

The feeling I had in regard to these strivings of thought was influenced here from three sides. In the first place, I wished so to build up thought within myself that every thought should be completely subject to survey, that no vague feeling should incline the thought in any direction whatever. In the second place, I wished to establish within myself a harmony between such thinking and the teachings of religion. For this also at that time had the very strongest hold upon me.

In just this field we had truly excellent text-books. From these books I took with the utmost devotion the symbol and dogma, the description of the church service, the history of the church. These teachings were to me a vital matter. But my relation to them was determined by the fact that to me the spiritual world counted among the objects of human perception. The very reason why these teachings penetrated so deeply into my mind was that in them I realized how the human spirit can find its way consciously into the supersensible. I am perfectly sure that I did not lose my reverence for the spiritual in the slightest degree through this relationship of the spiritual to perception.

On the other side I was tremendously occupied over the question of the scope of human capacity for thought. It seemed to me that thinking could be developed to a faculty which would actually lay hold upon the things and events of the world. A “stuff” which remains outside of the thinking, which we can merely “think toward,” seemed to me an unendurable conception. Whatever is in things, this must be also inside of human thought, I said to myself again and again. Against this conviction, however, there always opposed itself what I read in Kant. But I scarcely observed this conflict. For I desired more than anything else to attain through the *Critique of Pure Reason* to a firm standing ground in order to get the mastery of my own thinking. Wherever and whenever I took my holiday walks, I had in any case to set before myself this question, and once more clear it up: How does one pass from simple, clear-cut perceptions to concepts in regard to natural phenomena? I held then quite uncritically to Kant; but no advance did I make by means of him.

Through all this I was not drawn away from whatever pertains to the actual doing of practical things and the development of human skill. It so happened that one of the employees who took turns with my father in his work understood book-binding. I learned bookbinding from him, and was able to bind my own school books in the holidays between the fourth and fifth classes of the Realschule. And I learned stenography also at this time during the vacation without a teacher.

Nevertheless, I took the course in stenography which was given from the fifth class on.

Occasions for practical work were plentiful. My parents were assigned near the station a little orchard of fruit trees and a small patch for potatoes. Gathering cherries, taking care of the orchard, preparing the potatoes for planting, cultivating the soil, digging the potatoes – all this work fell to my sister and brother and me. Buying the family groceries in the village, of this I would not let anyone deprive me at those times when the school left me free.

When I was about fifteen years old I was permitted to come into more intimate relationship with the doctor at Wiener Neustadt whom I have already mentioned. I had conceived of a great liking for him because of the way in which he talked to me during his visits to Neudörfl. So I often slipped past his home, which was on the ground floor of a building at the corner of two very narrow streets in Wiener-Neustadt. One day he was at the window. He called me into his room I stood before what seemed to me then a great library He talked again about literature; then took down Lessing's *Minna von Barnhelm* from the collection of books, and said I must read that and afterwards come back to him. In this way he gave me one book after another to read and invite me from time to time to come to see him. Every time that I had an opportunity to go back, I had to tell him my impression of what I had read. In this way he became really

my teacher in poetic literature. For up to that time both at my home and also at school, all this – except for some “extracts” – had been quite outside of my life. In the atmosphere of this lovable doctor, sensitive to everything beautiful, I learned especially to know Lessing.

Another event deeply influenced my life. The mathematics books which Lübsen had prepared for home study became known to me. I was then able to teach myself analytical geometry, trigonometry, and even differential and integral calculus long before I learned these in school. This enabled me to return to the reading of those books on *The General Motion of Matter as the Fundamental Cause of All the Phenomenon of Nature*. For now I could understand them better through my understanding of mathematics. Meanwhile, we had come to the course in physics following that in chemistry, and this brought me a new set of riddles concerning human knowledge to add to the older ones. The teacher of chemistry was a distinguished man. He taught almost entirely by means of experiments. He spoke little. He let natural processes speak for themselves. He was one of our favourite teachers. There was something noteworthy in him which distinguished him in the eyes of his pupils from the other teachers. One felt that he stood in a closer relationship to his science than did the others. The others we addressed with the title “Professor”; he, although he was just as much a professor, was called “Doctor.” He was the brother of the thoughtful Tyrolese poet Hermann von Gilm. He had an eye which held one's attention firmly. One felt that this man was accustomed to looking intently at the phenomena of nature and then retaining what he had perceived.

His teaching puzzled me a little. The feeling for facts which marked him could not always hold concentrated that state of mind through which I was then striving toward unification. Still he must have considered that I made good progress in chemistry, for he marked my notes from the start “creditable,” and I kept this grade through all the classes.

One day I found at an antiquary's in Wiener-Neustadt Rotteck's history of the world. Until then, in spite of the fact that I received the highest grades in the school in history, this subject had always remained to me something external. Now it grew to be an inner thing. The warmth with which Rotteck conceived and set forth historic events swept me along. His one-sidedness of view I did not then perceive. Through him I was led to two other books which, by reason of their style and their vivid historical conceptions, made the deepest impression on me: Johannes von Müller and Tacitus.

Amid such impressions, it was very hard for me to take any interest in the school lessons in history and in literature. But I strove to give life to these lessons from all that I made my own out of other sources. In this manner I passed my time in the three upper classes of the seven years of the Realschule.

From my fifteenth year on I taught other pupils of the same grade as myself or of a lower grade. The teachers were very willing to assign me this tutoring, for I was rated as a very "good scholar." Through this means I was enabled to contribute at least a very little toward what my parents had to spend out of their meagre income for my education. I owe much to this tutoring. In having to give to others in turn the matter which I had been taught, I myself became, so to speak, awake to this. For I cannot express the thing otherwise than by saying that I received in a sort of dream life the knowledge imparted to me by the school. I was always awake to what I gained by my own effort, and what I received from a spiritual benefactor, such as the doctor I have mentioned of Wiener-Neustadt. What I received thus in a fully self-conscious state of mind was noticeably different from what passed over to me like dream-pictures in the class-room instruction. The development of what had thus been received in a half-waking state was now brought about by the fact that in the periods of tutoring I had to vitalize my own knowledge.

On the other hand, this experience compelled me at an early age to concern myself with practical pedagogy. I learned the difficulties of the development of human minds through my pupils.

To the pupils of my own grade whom I tutored the most important thing I had to teach was German composition. Since I myself had also to write every such composition, I had to discover for each theme assigned to us various forms of development. I often felt then that I was in a very difficult situation. I wrote my own theme only after I had already given away the best thoughts on that topic.

A rather strained relationship existed between the teacher of the German language and literature in the three upper classes and myself. The pupils considered him the "keenest professor," and especially strict. My essays had always been unusually long. The briefer forms I had dictated to my fellow pupils. It took the teacher a long time to read my papers. After the final examination, during the celebration before the close of the session, when for the first time he was "in a good humour" among us pupils, he told me how I had annoyed him with my long themes.

Still another thing happened. I had the feeling that some thing was brought into the school through this teacher which I must master. When he discussed the nature of poetic descriptions, it seemed to me that there was something in the background behind what he said. After a time I found out what this was. He adhered to the philosophy of Herbart. He himself said nothing of this. But I discovered it. And so I bought an *Introduction to Philosophy* and a *Psychology*, both of which were written from the point of view of Herbart's philosophy.

And now began a sort of game of hide-and-seek between the teacher and me in my compositions. I began to understand much in him which he set forth in the colours of Herbart's philosophy; and he found in my compositions all sorts of ideas that came from the same source. Only neither he nor I mentioned Herbart as the source of our ideas. This was through a sort of tacit agreement. But one day I ended a composition in a way that was imprudent in view of the situation. I had to write about some characteristic or other of human beings. At the end I used this sentence: "Such a man possesses psychological freedom." Our teacher would discuss the compositions with the class after he had corrected them. When he came to the discussion of this particular theme, he drew in the corners of his mouth with obvious irony and said: "You say something here about psychological freedom. There is no such thing" I answered: "That seems to me a mistake, Professor. There really is a psychological freedom, only there is no 'transcendental freedom' in an ordinary state of consciousness." The lips of the teacher became smooth again. He looked at me with a penetrating glance and remarked: "I have noticed for a long while from your compositions that you have a philosophical library. I would advise you not to use it; you only confuse your thinking by so doing." I could never understand at all why I would confuse my thinking by reading the same books from which his own thinking was derived. And thus the relation between us continued to be somewhat strained.

His teaching gave me much to do. For he covered in the fifth class the Greek and Latin poets, from whom selections were used in German translation. Then for the first time I began to regret once in a while that my father had put me in the Realschule instead of the *Gymnasium* . For I felt how little of the character of Greek and Roman art I should get hold of through the translations. So I bought Greek and Latin text-books, and carried along secretly by the side of the Realschule course also a private *Gymnasium* course of instruction. This required much time; but it also laid the foundation by means of which I met, although in unusual fashion yet quite according to the rules, the *Gymnasium* requirements. I had to give many hours of tutoring, especially when I was in the *Technische Hochschule*[4] in Vienna. I soon had a *Gymnasium* pupil to tutor. Circumstances of which I shall speak later brought it about that I had to help this pupil by means of tutoring through almost the whole *Gymnasium* course. I taught him Latin and Greek, so that in teaching him I had to go through every detail of the *Gymnasium* course with him.

The teachers of history and geography who could give me so little in the lower classes became, nevertheless, important to me in the upper classes. The very one who had driven me to such unusual reading of Kant wrote once a lecture for a school report on *Die Fiszeit und ihre Ursachen*.[5] I grasped the meaning of this with great eagerness of mind, and conceived from it a strong interest in the problem of the glacial age. But this teacher was also a good pupil of the

distinguished geographer, Friedrich Simony. This fact led him to explain in the upper classes the geological-geographical evolution of the Alps with illustrative drawings on the blackboard. Then I did not by any means read Kant, but was all eyes and ears. From this side I now got a great deal from this teacher, whose lessons in history did not interest me at all.

In the last class I had for the first time a teacher who gripped me with his instruction in history. He taught history and geography. In this class the geography of the Alps was set forth in the same delightful fashion as had already been the case with the other teacher. In the history lessons the new teacher got a strong hold upon us. He was to us a personality in the full sense of the word. He was a partisan, enthusiastic for the progressive ideas of the Austrian liberal movement of the time. But in the school there was no evidence of this. He brought nothing from his partisan views into the class room. Yet his teaching of history had, by reason of his own participation in life, a strong vitality. I listened to the temperamental historical analyses of this teacher with the results from my reading of the Rotteck volumes still in my memory. The experience produced a satisfying harmony. I cannot but think it was an important thing for me to have had the opportunity to imbibe the history of modern times in this manner.

At home I heard much talk about the Russo-Turkish war (1877–78). The employee who then took my father's place every third day was an original sort of person. When he came to relieve my father, he always brought along a huge carpet-bag. In this he had great packets of manuscript. These were abstracts of the most varied assortments of scientific books. Those abstracts he gave to me, one after another, to read. I devoured them. He would then discuss these things with me. For he really had in his head a conception, somewhat chaotic to be sure but comprehensive, concerning all these things that he had compiled. With my father, however, he talked politics. He delighted to take the side of the Turks; my father defended with great earnestness the Russians. He was one of those persons still grateful to Russia for the service she rendered to Austria at the time of the Hungarian uprising (1848). For my father was on no sort of terms with the Hungarians. He lived in the Hungarian border town of Neudörfl during that period when the process of Magyarizing was going forward, and the sword of Damocles hung over his head – the danger that he might not be allowed to remain in charge of the station of Neudörfl unless he could speak Magyar. This language was quite unnecessary in that originally German place, but the Hungarian regime was endeavouring to bring it to pass that railway lines in Hungary should be manned with Magyar-speaking employees, even the privately owned lines. But my father wished to hold his place at Neudörfl long enough for me to finish at the school at Wiener-Neustadt. By reason of all this, he was then not friendly to the Hungarians. So, since he could not endure the Hungarians, he liked in his simple way to think of the Russians as those who in 1848 had “shown the Hungarians who were their masters.” This way of thinking manifested itself with extraordinary earnestness, and yet in the wonder-

fully lovable manner of my father toward his Turkophile friend in the person of the "substitute." The tide of discussion rose oft times very high. I was greatly interested in the mutual outbursts of the two personalities, but scarcely at all in their political opinions. For me a much more vital need at that time was that of finding an answer to this question: To what extent is it possible to prove that in human thinking real spirit is the agent?

1. *Attraction Considered as an Effect of Motion*.

2. *The General Motion of Matter as the Fundamental Cause of All the Phenomenon of Nature.*

3. *Critique of Pure Reason*

4. The *Technische Hochschule* does not correspond wholly to any English or American institution. It might be called a "university" with marked scientific emphasis.

5. *The Glacial Age and Its Causes.*
