

Primo Levi's The Periodic Table is the compilation of one man's history within the trade of chemistry. Levi claims, "every element means something to someone (something different to each) like the mountain valleys or beaches visited in youth" (225). This work is his recognition and remembrance of the elements that hold deep meaning in his own life. He presents to the reader the intimate way in which his life is tied to chemistry by presenting his experiences with the elements of the periodic table that governs the science. His overarching theme is the deep connection between his life and the science and practice of chemistry. To the reader unschooled in the structure, usage and properties of the elements of the periodic table he provides his background story through which he or she may intimately know the previously foreign elements. Levi attempts to provide the reader with the same intimacy he himself feels with his chosen trade of chemistry and the elements within it: "every chemistry student, faced by almost any treatise, should be aware that on one of those pages, perhaps in a single line, formula, or word, his future is written in indecipherable characters, which, however, will become clear 'afterward': after success, error, or guilt, victory or defeat" (225). In his work Levi presents the "afterward": his own picture of the intimate role of chemistry in his life. This work does not give a complete picture of the elements of the periodic table, nor of Levi's life through the trauma and triumph, but the intersection and interweaving of the two.

In Levi's chapter on gold, he tells the story of being captured and placed in a prison where he meets a man who pans for gold. He illustrates his deep connection to chemistry through the effects it has had on his life through several avenues in this chapter. He presents not only the emotional importance of chemistry to him but also the

tangible and physical consequences his involvement in chemistry and his education bring. The story he tells is not all about gold, but serves as a justification and explanation of his interest in gold as well as carbon. Without the backdrop of the prison and his thoughts of imminent death he would most likely never had acquired a connection to gold deep enough to be remembered in the context of this overview. Similarly, without the backdrop of his alienation he would not have realized the profound nature of his connection to carbon, the explanation of which he first yearns for in this chapter. Levi's story of a carbon atom is intimate and central to the theme of the interaction of life and chemistry and the comfort and importance he draws from it. In his chapter on gold, Levi presents a many-faceted and persuasive argument and description of the profound effect chemistry has had on his life.

While the reader may not be aware of many of the chemical processes described in Levi's sagas, or be familiar with the elements that provide the titles and inspiration for each chapter, the stories themselves are meant to give the reader a human connection to that obscure science through Levi's life tales and experiences. In the chapter on gold there is relatively little technical science or language. Only in his desire to explain the "poetry" of the life of a carbon atom may the reader not be able to identify completely with the mind of the scientist. Levi's tales give the reader a connection to a world otherwise likely to be obscure to him or her, who most likely is not a chemist well-versed in all the processes Levi describes. On page 129, in his description of the leaders of the fight against Fascism, Levi lists chemistry as one of the places he and his colleagues have searched for answers to the situation of their country: "Out of the shadows came men whom Fascism had not crushed—lawyers, professors, and workers—and we recognized

in them our teachers, those for whom we had futilely searched until then in the Bible's doctrine, in chemistry, and on the mountains." This description allows the reader to connect to Levi's world, a world in which chemistry is an essential part of life, by listing his trade juxtaposed with nature and religion, one of which is likely to be connected as intimately to the reader's life and chemistry is to Levi's. From this type of statement the reader is able to connect with Levi's ideas and better understand his theme. Through this relation Levi presents his trade to the outside world in an understandable manner. He communicates his intimacy with chemistry clearly and without forcing the reader to be well-versed or fluent in the subject. In this way the technical chemistry in the work does not hinder the theme but rather deepens its meaning by allowing the reader to taste the flavor of Levi's trade and the memories and importance it has held in his life by being immersed in its intimacies rather than confused by them.

One of the most direct effects of chemistry upon Levi's life is the esteem his knowledge and education in chemistry brings to him in the eyes of those who otherwise judge him to be inferior. Despite being considered an inferior citizen because of his religious beliefs, he is still held in some level of esteem, and most likely saved, by his status as a doctor of chemistry. Levi's education helps to differentiate him from others and perhaps save his life in the respect it brings him from other Italians who may otherwise have completely discarded his worth as a human being. Even Fossi, his interrogator, holds some respect for Levi because "deep down in his class-oriented soul he did not believe that a man with a university degree could really be 'a subversive'" (133). This same esteem is shown when the man who beats Levi during his capture apologizes for doing so when he learns the high level of Levi's education. The ability to

perform the art of chemistry also gives Levi more of a chance while in the internment camps because he is seen as useful. So above and beyond the experiences with the elements of the periodic table that bring meaning to Levi's life, the theme of the effect of chemistry upon his life is even further brought out by the quite literal and direct effects his knowledge of chemistry has had. These are particularly emphasized in the chapter on gold, where Levi speaks directly to his treatment by his captors and how it was affected by his education and involvement in chemistry.

One of the unique things about the featured element in this chapter is the importance of gold to chemistry itself, regardless of the feelings of the practitioner. While each of the elements Levi writes about has a special personal meaning to him as a result of the experiences he has had involving that element, gold is important to him for more than that. Part of gold's importance to Levi hinges on his own involvement and love with the science of chemistry itself. Gold has been important to chemistry since its very beginnings, and due to chemistry's importance to Levi, emphasized throughout the work, gold must also have meaning in his life, even without the special significance his experiences with it have given him. Gold is special to all chemists because it is at the very heart and beginning of the profession of chemistry, as Levi mentions in his statement that he yearns "to find again my chemical trade in its essential and primordial form, the *Scheidekunst*, precisely the art of separating metal from gangue" (137). It is also closely bound to alchemy, the precursor of chemistry, in which many practitioners aimed ultimately to make gold from lead. This is one of the reasons Levi finds gold and the search for it important in his remembrance of his life in chemistry. In his telling of the story Levi assigns deep significance to the search for gold and all that it would bring

to him. He states that he would search for gold “not to get rich but to try out a new skill, to see again the earth, air, and water from which I was separated by a gulf that grew larger every day” (137). This statement alludes to three of the four fundamental elements earth, air, fire and water studied by the earliest of chemists before an understanding of the atom and the periodic table of the elements was even conceived of. The connection between gold and the elements of the earth we are able to sense and perceive on the level of interaction (namely earth, air, fire and water) is also shown in the stranger’s description of the Dora and the origin of its name: “Because it’s made of gold” (136). This textual connection, both through juxtaposition of the descriptions of, and analogies between the elements of the periodic table, specifically gold, and the fundamental elements of the earth (water in the aforementioned case) demonstrates part of Levi’s connection between life and the elements of the periodic table: between the most tangible elements and the most technical. In this section he shows the reader a picture of how an element known to all can have deep meaning to the chemist apart from the meaning it has for the everyday man.

This chapter is unique in that it tells the story of the events leading up to Levi’s incarceration in the internment camps. This subject is on the most part avoided by the novel, anomalously so, if we are to believe that this work is a true and full representation of Levi’s life, but not so if he aims only to write about the elements that have deeply touched his life. He recalls, when in prison, a yearning to pan for gold, not for the chance to get rich as many would, but to satisfy the “piercing desire for everything, for all imaginable human experiences” brought on by the thought of his own impending death (137). His yearning for any and all human experience is made more intense by the belief

that the only human experience left to him is that of humiliation and inevitable death at the hands of his captors. To Levi the value gold symbolizes is not monetary, but the deeper and fundamental urge and freedom to exercise his humanity. The story of his experience, from life in Milan to being captured and imprisoned, and finally of his interaction with the stranger is necessary to explain his deep connection to gold. His feelings towards the stranger and towards the gold the stranger covets would not have been nearly as significant outside the context of his tenuous situation within the prison. The reader can understand his dismal frame of mind and how it interacts with the gold as an element in his concluding thoughts on the meaning of gold at this point in his life: an unattainable and lost friend. “I listened—in the silence of curfew one could hear the murmur of the Dora, lost friend, and all friends were lost, and youth and joy, and perhaps life: it flowed close by but indifferent, dragging along the gold in its womb of melted ice” (138). The significance of his conversation with the stranger lies in the contrast in their situations and the desperation in Levi’s own situation. Levi has presented his situation (ostracized politically, captured by enemies and in mortal danger) and contrasts it with that of the stranger “who would soon return to his precarious but monstrously free life, to his inexhaustible trickle of gold, and an endless series of days” (138). Because of this experience gold signifies to Levi the freedom to have the human experience, which to him is fundamentally tied to practicing the trade dearest to him.

In this chapter Levi first introduces the idea of the story of a carbon atom. This story is the concluding chapter of the book and is the strongest and most compelling argument Levi could put forth to emphasize the connection between chemistry and life in that it presents the very real and necessary connection between the two. Levi presents the

idea as a yearning to connect to people through chemistry when he finds himself alone in Milan, forced to perform a job he does not believe in. He states “I felt a widower and an orphan and fantasized about writing the saga of an atom of carbon, to make the people understand the solemn poetry, known only to the chemist, of chlorophyll photosynthesis” (128). This statement is hard to understand by itself, especially to those who have not made their life’s work the study and understanding of such processes (most of Levi’s audience). The understanding of this statement is delayed and drawn out through the remaining chapters until it is finally revealed in the final chapter. Carbon is one of the essential building blocks of life. The “solemn poetry of chlorophyll photosynthesis” is the connection it provides among all living beings (128). Levi’s final chapter depicts the travel of a carbon atom through photosynthesis and into his own mind where it allows him to write his prose: “the atom in question, is in charge of my writing” (232). Since carbon connects and powers all living things it is therefore one element essential to all living things, unlike some of the elements Levi presents in his memoirs. This importance provokes Levi to the statement “One must perhaps make an exception for carbon because it says everything to everyone, that is, it is not specific, in the same way that Adam is not specific as an ancestor,” which can be interpreted as the statement that all people are drawn together by their interest in carbon, whether or not they specifically know it (225). In the story of a man torn by the differences between men, who is persecuted for his lineage and religion an all-encompassing element is an important concept. The reason carbon is important to Levi when he feels most alone and senses the danger approaching from his differences, is because it is the one force that unequivocally draws him and those who would be his friends and enemies together. “And yet it is exactly to this carbon that

I have an old debt, contracted during what for me were decisive days. To carbon, the element of life, my first literary dream was turned, insistently dreamed in an hour when my life was not worth much: yes, I wanted to tell the story of an atom of carbon” (225). Here Levi admits that not only has chemistry as a trade been a large part of his life in which he has experienced many things, but it has also allowed him the solace of understanding that all men are created equal on some level. His understanding of the chemistry of life, the way that carbon will enter all men equally and form the same molecules regardless of race or religion, pulls him through the darkest hours of his incarceration. Even in a world obsessed with the differences between men, “‘they’ had declared us ‘different,’ and different we would be,” chemistry is an equalizer in the knowledge that all living things share a commonality of chemical structure and composition (129). He is, in effect, saved from any doubt that he might truly be inferior by the pure chemistry of life and brought through by the motivation to show all those around him that this is true by writing the story of a carbon atom: an atom that is literally interwoven into the existence and lives of all men.

Levi’s The Periodic Table is not, and does not claim to be, a technical discussion of the periodic table of the elements in chemical terms. In fact, Levi claims not to aim to describe the technical aspects of chemistry nor to tell the story of his life but to tell “the history of a trade and its defeats, victories, and miseries” (224). The theme Levi presents throughout is the effect that chemistry has had upon his life. Every chapter is his memory of a story having to do with an element on the periodic table. The reader is presented with the idea that any given element may have a profound effect upon the chemist studying that element and is the given the set of elements that have made an

impact upon the author's life. It is an important distinction to make that this is not a work describing in detail the periodic table of the elements, but a work discussing the periodic table of Levi's life. That is, Levi sets out to present set of elements in the periodic table of the elements in chemistry that have had a profound and lasting effect upon his life specifically. The chemistry of these elements is deeply intertwined into the experiences and the memories of the author, and the process by which they have become so important is the story Levi aims to tell. The most important elements in Levi's life are, in fact, those chemical elements presented here, his experiences with which have profoundly affected his way of life and which have, in their own ways, contributed to his character. The trade of chemistry has given him a connection to and deep spiritual understanding of the elements through important and life-changing experiences and Levi presents in this work the compilation of his own periodic table: the chemical elements intertwined in his life and mind through his work in chemistry. His "history of a trade" is the history of how this trade has affected and is forever bound to his life (224).