Of matter or the craft of chemistry according to writer Primo Levi

The republication of Primo Levi’s (1919-1987) *The Periodic Table* in Portugal (in May 2012) by Teorema [1] was an opportunity to again bring this work to our attention, for many reasons, but mainly because it is his autobiographical account, in broad terms, of the craft of chemistry. Various characters, episodes and scenes from that context appear in this retrospective look at his life. It is a human portrait, which provides food for thought on the place of knowledge in the individual life and the subtleties of the writer’s relationship with the objects of his work.

*The Periodic Table* was first published in 1975, by Einaudi, in Turin, where the writer was born and lived for most of his life. By then Primo Levi had already published other works in which biography explicitly fed the literary enterprise – as in *Se questo è un uomo* (1947) and *La tregua* (1963). By virtue of the central role of chemistry in *The Periodic Table*, the work was selected by the Royal Institution of Great Britain as ‘the best science book ever’, in 2006. Those who were displeased with this choice – among other titles in contention was Richard Dawkins’ *The Selfish Gene* (1976) – argued that Levi’s work did not deserve to be selected because it was more a book about science than a scientific book. Apart from the issues of selection, *The Periodic Table* clearly inhabits another category: it is a book which shows how a strong youthful interest, which will later become a craft and a profession, remains with us and continues to be practised at different times of life.

The main interest of the 21 chapters of Primo Levi’s autobiography lies in knowledge of the subject matter and the study of chemistry. It was ingenious of this lover and practitioner of the metaphor to have chosen elements of the Mendeleev’s Periodic System Table, so familiar to chemistry students, for the resonance of their properties, to tell “the history of a trade and its defeats, victories, and miseries” [2] (chapter ‘Carbon’). And just as the places visited in one’s youth represent different things to different people, so the elements of that Table evoke specific matches in each chemist. Starting with Argon gas, which provides the title for the first chapter, and the inertia and rarity of which led Levi to equate it with his Jewish ancestors established in Italy, in Piemonte, and in whose acts he uncovered, as a common feature, “a touch of the static, an attitude of dignified abstention, of voluntary (or
accepted) relegation to the margins of the great river of life” (chapter ‘Argon’). Argon contains a childhood revisited and some of the more prominent figures (uncles and aunts, grandparents, his father), including a very young Primo, already distilling contexts, relatives and even words, like those which his ancestors invented so as not to be understood and also served to relieve “the heart without abrading the mouth” (chapter ‘Argon’).

From being the adolescent who knew for certain he would be a chemist to the chemist in charge of a paint factory, an area in which Primo Levi specialized, from 1947 to 1977, he remains someone who has the same fixation on unravelling and confronting the material world, but who over time acquired new knowledge of how it changes. From the impulse and impetus to discovery, one moves to dedicated and vigilant attention, aware that matter and chemistry also hold “small futile mysteries” (chapter ‘Potassium’). At sixteen, Levi recalls, everything around him was a mystery to be unravelled – from “the old wood of the benches (...) [to] the vain flight of the pappus down in the June air” (chapter ‘Hydrogen’) – and the goal he and his friends who aspired to be chemists most sought was something like grasping Proteus by the scruff of the neck and obliging him to speak. At fifty-six, when he published *The Periodic Table*, he had long ago understood that the material world has a “sly passivity (...) [it was] portentously rich in deceptions, as solemn and subtle like the Sphinx” (chapter ‘Iron’). The material world and its often very tiny differences, but which may have “radically different consequences, like a railroad’s switch points” (chapter ‘Tin’); according to Levi the work of the chemist consists in large measure in paying attention to those *nuances*, to acquire an intimate knowledge of them, in order to predict the effects of misleading similarity.

A popular saying has it that knowledge takes up no space. Does it not? Even though the author does not ask this question, the ambiguous valuation of knowledge inherent in this saying is tested in the chapter entitled ‘Cerium’, in which Primo Levi discovers that he is a number in a broken down series. At Auschwitz, where he was a prisoner between February 1944 and January 1945, this Jew for whom his origins were, during childhood and adolescence, “a small amusing anomaly” (chapter ‘Zinc’), made the discovery, amongst other things, that knowledge may represent survival. Death was the most tireless neighbour, and the possibility of liberation (“the Russians”) was less than one hundred kilometres away. Because he had knowledge of chemistry – he had graduated in 1941 and had already been hired to
do some work as a chemist – Primo was able to become a laboratory assistant in the camp. And since food in those days was “our prime stimulus”, he devoted himself to diverting, transforming and reproducing any matter he could.

It was not by chance that Primo Levi said he had at that time had his “first literary dream”: to tell the story of a carbon atom, an element of life. It is the tale of this character’s transition which brings The Periodic Table to a close. The journey begins in a limestone rock and is made up of multiple encounters and attractions, broken connections, new encounters, more or less fleeting addresses. It should be noted here that alongside the stories based on his experience as a prisoner and survivor of a death camp, also published by the firm which brought out The Periodic Table [2] – Primo Levi wrote an important series of short stories, of which A tranquil star (2007), in the English version, is an example. These are moments of understanding and imagination materialized in fiction, where confusion reigns. And if Teorema should choose this work to continue promoting the author in Portugal, it is surely time to let go of the colour red with which it usually prints the name Primo Levi. Even wounds have more than one colour.

Notes

[1] Gradiva was the first to publish this work in Portugal, in 1988.


[3] Se Isto é um Homem; A Trégua; Os que Sucumbem e Os que se Salvam.

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