

Samenvattingen

Brigitte Van Tiggelen, *Prussian Blue - the Biography of a Chemical Object*

In a delightful tale of serendipity, Prussian Blue was first synthesized in 1704 in the workshop of a color manufacturer, who borrowed an ingredient from an alchemist. The process for making Prussian Blue remained a secret until 1724 when it was described in the *Philosophical Transactions of the Royal Society*. The next year a first academic memoir was published at the Royal Academy of Sciences in Paris, towards a possible theoretical explanation of the artificial compound, followed by many others. As investigations in the composition of the substance unfold, there is a general agreement that Prussian Blue is a compound of iron and a “coloring principle.” Macquer and Scheele investigated the matter further. In the hands of the talented Berlin chemist Marggraf, the formation of Prussian Blue became a classical analytical method to detect either iron or the “coloring principle” in any given wet sample.

In the frame of the anti-phlogiston chemistry, the focus moves from the substance as a whole to one of its parts, namely “radical prussique” (later HCN). In 1811 Gay-Lussac gave the final experimental evidence leading ultimately to the abandonment of Lavoisier’s oxygen theory of acids. One would have expected that this substance, produced at first with blood and then with other animal matters, would have been better understood as the 19th century unfolds. But as numerous workers devoted a significant portion of their research to this substance, the question remained unsolved for more than a century and a half.

Summarized in this way, the biography of Prussian Blue appears like a linear story of scientific achievements and understanding. However the substance was used and accommodated in the meantime in a wide variety of frameworks: workshop, manufacture, mineralogy or medicine, to mention a few only. In this talk we will focus on several such episodes from the early years of Prussian Blue.

Joost Mertens, *Arseengroen en de opkomst van de volksgezondheid*

Het groene pigment koperarseniet, in 1775 uitgevonden door Scheele, werd in de 19de eeuw verwerkt in tal van consumentenproducten zoals snoepgoed, behang, lampenkappen en baljurken. Medici, chemici, farmaceuten, toxicologen zijn hiertegen in het geweer gekomen en hebben op die manier bijgedragen aan de opkomst van de openbare hygiëne en de forensische geneeskunde. Onder het hoofd *trias hygienica* zal tenslotte de vraag aan de orde komen waarom het meer dan zestig jaar heeft geduurd tot arseengroen voor consumentenproducten kon worden verboden, samen met het antwoord op deze vraag dat Gerard Jorland heeft geformuleerd in zijn recente geschiedenis van de 19e-eeuwse Franse volksgezondheid.