The medieval theory of the four elements as one of the sources of chemistry.

The theory of the four elements came from ancient Greek philosophy, especially Plato and Aristotle, who said that all matter was made of four basic elements: earth, water, air, and fire. Each element had its own qualities, like hot, cold, wet, and dry, and they could be mixed or separated by natural or artificial processes. The Christian church accepted and used the theory of the four elements, because it agreed with the biblical story of creation and the doctrine of the four humors. So, can we consider the theory of the four elements as one of the sources of chemistry even if it contradicts the modern atomic theory?

The theory of the four elements affected the development of chemistry and alchemy in the renaissance in three ways: it gave the theoretical foundation for the alchemical goal of changing base metals into gold, it led to the practical method of distilling liquids to isolate and purify the elements, and it encouraged the exploration of nature and its phenomena through observation and experimentation. Some of the famous renaissance chemists and alchemists who followed the theory of the four elements were Roger Bacon, Albertus Magnus, Paracelsus, and Robert Boyle.

However, the theory of the four elements was also questioned and changed by the renaissance humanists, who wanted to recover the original sources of ancient philosophy and to challenge the authority of Aristotle and the church. Some of the renaissance philosophers who opposed the theory of the four elements were Leonardo da Vinci, Giordano Bruno, and Francis Bacon. They argued that the theory of the four elements was too simple and random, and that there were more than four elements in nature. They also suggested different theories of matter, such as the atomism of Democritus and Lucretius, which claimed that all matter was made of indivisible and invisible atoms of different shapes and sizes.

Therefore, the medieval theory of the four elements can be seen as one of the sources of chemistry, but not the only one. It was a useful and influential theory of matter that guided the renaissance chemistry and alchemy, but it was also flawed and limited by its sources and assumptions. It was eventually replaced by the modern atomic theory and the periodic table, which were based on more empirical and rational methods of inquiry.