was only discovered as late as 1826; and Fluorine, or *Phtore*, as, from its destructive nature, it has been proposed to term it, has not been obtained as a separate substance, and is inferred to exist by analogy only. The analogies of these bodies (Chlore, Phtore, &c.) are very peculiar; for instance, by combination with metals they form *salts;* by combination with hydrogen they form very strong acids; and all, at the common temperature of the atmosphere, operate on other bodies in the most energetic manner. Berzelius[3] proposes to call them *halogenous* bodies, or *halogenes.*

5. The number of Elementary Substances which are at present presented in our treatises of chemistry[4] is *fifty-three*, [or rather, as we have said above, *sixty-two.*] It is naturally often asked what evidence we have, that all these are *elementary*, and what evidence that they are *all* the elementary bodies;—how we know that new elements may not hereafter be discovered, or these supposed simple bodies resolved into simpler still? To these questions we can only answer, by referring to the history of chemistry;—by pointing out what chemists have understood by analysis, according to the preceding narrative. They have considered, as the analysis of a substance, that elementary constitution of it which gives the only intelligible explanation of the results of chemical manipulation, and which is proved to be complete as to quantity, by the balance, since the whole can only be equal to all its parts. It is impossible to maintain that new substances may not hereafter be discovered; for they may lurk, even in familiar substances, in doses so minute that they have not yet been missed amid the inevitable slight inaccuracies of all analysis; in the way in which iodine and bromine remained so long undetected in sea-water; and new minerals, or old ones not yet sufficiently examined, can hardly fail to add something to our list. As to the possibility of a further analysis of our supposed simple bodies, we may venture to say that, in regard to such supposed simple bodies as compose a numerous and well-characterized class, no such step can be made, except through some great change in chemical theory, which gives us a new view of all the general relations which chemistry has yet discovered. The proper evidence of the reality of any supposed new analysis is, that it is more consistent with the known analogies of chemistry, to suppose the process analytical than synthetical. Thus, as has already been said, chemists admit the existence of fluorine, from the analogy of chlorine; and Davy, when it was found

[3] *Chem.* i. 262.

[4] Turner, p. 971.