

Francis Bacon - Experiments touching Sulphur and Mercury

This section on the making of gold is included Century IV of Francis Bacon's *Sylva Sylvarum, or a Naturall Historie in ten Centuries...* London, 1627, which was part of Bacon's unfinished *Instauratio Magna*.

This text was transcribed by Marcus Williamson.

Experiments in Consort touching *Sulphore* and *Mercury*, two of *Paracelsus Principals*.

There bee two *Great Families* of *Things*; You may terme them by severall Names; *Sulphureous* and *Mercureall*, which are the *Chymists* Words: (For as for their *Sal*, which is their Third Principle, it is a Compound of the other two;) *Inflammable*, and *Not Inflammable*; *Mature* and *Crude*; *Oily* and *Watry*. For wee see that in *Subterrancies* there are, as the *Fathers* of their *Tribes*, *Brimstone* and *Mercury*: In *Vegetables*, and *Living Creatures* there is *Water* and *Oile*: In the *Inferiour Order* of *Pneumaticalls* there is *Aire* and *Flame*: And in the *Superiour*, there is the *Body* of the *Starre*, and the *Pure Sky*. And these Paires, though they be unlike in the Primitive Differences of Matter, yet they seeme to have many Consents: For *Mercury* and *Sulphure* are principall Materialls of *Metalls*; *Water* and *Oyle*, are principall Materialls of *Vegetables*, and *Animals*; And seeme to differ but in *Maturation*, or *Concoction*: *Flame* (in Vulgar Opinion) is but *Aire Incensed*; And they both have Quicknesse of Motion, and Facilitie of Cession, much a like: And the *Interstellar Sky*, (though the Opinion be vaine, that the *Starre* is the *Denser Part* of his *Orbe*.) hath notwithstanding so much Affinity with the *Starre*, that there is a Rotation of that, as well as of the *Starre*. Therefore, it is one of the greatest *Magnalia Naturae*, to turne *Water* or *Watry Iuyce* into *Oile* or *Oily Juyce*: Greater in Nature, than to turne *Silver*, or *Quick-silver*, into *Gold*.

The Instances we have, wherein *Crude* and *Watry* Substance turneth into *Fat* and *Oily*, are of foure kindes. First in the *Mixture* of *Earth* and *Water*; which mingled by the help of the Sunne, gather a Nitrous Fatnesse, more than either of them have severally; As we see, in that they put forth *Plants*, which need both Juyces.

The Second is in the *Assimilation* of *Nourishment*, made in the *Bodies* of *Plants*, and *Living Creatures*; Whereof *Plants* turne the Juyce of meere *Water* and *Earth*, into a great deale of *Oily Matter*: *Living Creatures*, though much of their *Fat*, and *Flesh*, are out of *Oily Aliments*, (as *Meat*, and *Bread*,) yet they Assimilate also in a Measure their *Drink* of *Water*, &c. But these two Wayes of *Version* of *Water* into *Oyle*, (namely by *Mixture*, and by *Assimilation*) are by many Passages, and Percolations, and by long Continuance of soft *Heats*, and by Circuits of Time.

The third is in the *Inception* of *Putrefaction*; As in *Water Corrupted*; And the *Mothers* of *Waters Distilled*; Both which have a kinde of *Fatnesse*, or *Oyle*.

The Fourth is in the *Dulcoration* of some *Metalls*; As *Saccharum Saturni*, &c.

The Intension of *Version* of *Water* into more *Oily Substance*, is by *Disgestion*; For *Oile* is almost Nothing else but *Water Disgested*; And this *Disgestion* is principally by *Heat*; Which *Heat* must be either *Outward*, or *Inward*: Again, it may be by Provocation, or Excitation; Which is caused by the Mingling of Bodies already *Oily*, or *Disgested*; For they will somewhat Communicate their Nature with the rest. *Disgestion* also is strongly effected by direct *Assimilation*, of *Bodies Crude* into *Bodies Digested*; As in *Plants*, and *Living Creatures*, whose Nourishment is farre more Crude than their Bodies: But this *Disgestion* is by a great *Compass*, as hath beene said. As for the more full Handling of these two Principles, whereof this is but a Taste; (the Enquiry of which is one of the Profoundest Enquiries of Nature,) We leave it to the *Title* of *Version* of *Bodies*; And likewise to the *Title* of the *First Congregations* of *Matter*; Which like a Generall Assembly of Estates, doth give Law to all *Bodies*.