5. SUBSTANTIAL FORM

A little revision of the chief characteristics of the formal cause-

	[in mind is	immaterial &	universal
Form	[
	[in the thing is	blended with matter &	particular [i.e., this]

Now there is something we have to learn about the difference between artificial and natural forms. Natural things are infinitely more complex and intricate in their make-up than anything artificial, than anything man can make, even a Jumbo jet or a computer. We call the form of any natural thing 'substantial', so—

[substantial form Natural thing [is comprised of [[matter

The natural is, thus to be compared with anything made by human hands, so that the distinction can be laid out as follows—

[*natural* – and these are substantial forms ; Forms are [or, either [[*artificial* – and these are artificial forms.

But there is something more. The substantial form of a natural thing has another name ; it is its *substance*.

The traditional division of natural things is in three categories, animal, vegetable and mineral. When I was a boy and we listened to the radio (there was no television in those days !) there was a quiz show called 'Animal, Vegetable and Mineral'. The contestants were given a mystery word or phrase and had to guess what it was in twenty questions—a little like aural charades—and the first question the panel would ask was : 'Is it animal, vegetable or mineral ?' Now, give me a list of ten natural things that you can think of and we will see into which category each falls. Here they are ; we will mark them as A, V or M.

Tree	V
Oxygen	Μ
Rock	Μ
Water	Μ
Dog	А
Grass	V
Gold	Μ
Rabbit	А
Bird	А
Fish	А

You will notice that oxygen and water are classified as minerals. Back in the third century AD a philosopher named Porphyry (the word means 'purple' in Greek) of Tyre laid out a list of natural bodies in what has become known as 'The Tree of Porphyry'. Here is part of the 'Tree' laid out sideways (!) showing how natural forms (that is, *substantial forms*) are divided :

	[<i>living</i> , and ther	n [<i>animal</i> , and [<i>man</i> , or
	[either,	[then either, [
Natural forms are	[[[brute, or
either :	[[
	[[<i>plant</i> (vegetative), or
	[
	[non-living –	mineral

Now to the substantial form, or *substance*, of a living thing, whether of a man, brute animal or plant, we give a special name, a name you are all familiar with, the soul. The soul is not only the substantial form of the living thing, it is what gives it life. It does something more, as we shall see.

Parable of the Two Rabbits

I told this story some time ago. It is very useful in illustrating the points that need to be made. Imagine that I have here in each hand, I am holding up, a rabbit. They are brothers, twins. One of them is full of life and kicking because it doesn't like being restrained. The other has just been shot through the head by Jim, the girls' elder brother, using his $\cdot 22$ rifle. The two rabbits are alike in every respect : there is nothing discoverable in the one that is not in the other whether in structure, organs, bones, fur, etc., right down to their body temperature (though the dead one is beginning to cool). There is no difference in weight. There is no scientifically detectable difference between the two to show what it is that gives the one life and not the other. Yet *there is* a difference between them as anyone with common sense is well aware. It is not a *physical* difference, it is *metaphysical*, and it is critical.



What is missing in the dead rabbit is life, true. It is missing its soul. But it is missing something more. The soul is the *substantial form* of the rabbit, its *substance*. Therefore, what is missing in the dead rabbit is its *substance*. We may call it a rabbit still but it is no longer a rabbit ; it is a rabbit carcass. My mother used to buy 'rabbit' at the local butcher and cook it for the family to eat. (My father didn't like eating rabbit ; he called it 'underground chicken' !) But what my mother bought was not rabbit, but a rabbit carcass. Now, if I was to tell any modern scientist that what is missing in the dead rabbit is its *substance* he would laugh at me. He thinks, all modern science thinks, the dead rabbit still has the substance of a rabbit because it still has the fur, the ears, the bones, the

body, etc. of a rabbit. But this modern usage of the word is a misuse of it.

The reason the scientist misunderstands the true meaning of the word 'substance', and that in common speech we, too, tend to miss its true meaning, is a consequence of the errors that descended on human thinking after the Protestant Revolt in the sixteenth century. When certain Catholics rejected God's authority in favour of their own—as Martin Luther and Henry Tudor (King Henry VIII) did, and encouraged great numbers of Catholics to follow them—they not only committed a grievous sin, they committed a theological error. There was a price of their rebellion. People became infected by this folly and began to err about the principles of human reason. Having abandoned the truth in one field, the most important field, they began to abandon it, willy nilly and all unknowingly, in others. In philosophy they began to commit serious errors. The chief proponent of these errors was a Frenchman named René Descartes who lived more than a century after the revolt. We will deal with the errors and how they developed later in the year. It is interesting to see how the people of the time regarded the radical new approach to the world that had begun as 'enlightened'—they called the pervading ethos *The Enlightenment*. But it was the very contrary of enlightened.

For the moment it is sufficient for us to note that in place of a *metaphysical* view—which recognises the immense contribution to reality of the immaterial—they began to satisfy themselves with the physical, the merely material. Having denied the authority of God, Who is immaterial, they began to deny the very existence of the immaterial. Their philosophical error has the generic name *Materialism*. So the problem that confronts the scientist—as it confronts the man in the street today—is not a defect in his science, which has produced the most extraordinary discoveries, but a defect in the philosophy to which he gives obeisance.

But, to get back to the subject in hand, there is something more that the soul of the rabbit does, apart from being its substance and giving it life. This 'something' is contained in an aphorism of Aristotle which exposes a profound truth. He said :

"For living things, to live is the same as to be."

What the soul does is to give the rabbit existence, or as I prefer to say, it gives it *be* (in Latin *actus essendi*, or *esse*). Now that it is dead, the rabbit has ceased to be ; it has ceased to exist.

That *the substance* of anything is its underlying principle may be seen in the very word. 'Substance' comes from two Latin words, *sub-*, a prefix meaning 'under', and *stans*, a noun derived from the participle of the verb *stare*, 'to stand'. The word means '[that which] stands under'. 'Stands under what?', you may ask. It stands under its appearances which, in the case of the rabbit are its fur, ears, nose, bones, eyes and twitchy nose !

Scientists began to follow the lead of the various materialist philosophers who succeeded Descartes—John Locke, George Berkeley and David Hume—and followed their re-invention of the definitions of the ancient Greek thinkers like Aristotle which gave a materialist slant to their view of reality. So, Sir Isaac Newton, for instance, preferred the views of Descartes and Locke to those of Aristotle. These scientists, having abandoned the deference demanded by reality that everything that exists has an underlying *immaterial* principle, transferred the name 'substance' to the *material* aspects of the thing. (As an aside I should say that not all uses of the word 'substance' are in error. If a lawyer was trying to persuade a judge of his view he might not be doing a very good job of it. The judge might then say to him, "So, Mr Jones, the substance of your argument is... " and then go on to summarise what the lawyer was trying to say. That is, he would spell out what was *underlying* his arguments.)