9. QUANTITY & A LITTLE QUALITY

Let's start with a list of the ten Categories, Substance, and the nine Accidents, and add a short definition:

Categories		Definition
Substance		Be-in-self
Quantity]	
Quality]	
Relation]	
When]	
Where]	Be-in-other
Action]	
Passion]	
Habitus]	
Situs]	

The substance, or substantial form, of a thing 'stands up' by itself. The word, *substance*, comes from the Latin verb *stare*, to stand. The prefix 'sub' as remarked earlier, adds the character that such an entity 'stands under' its appearances. Accidents only exist *in something else*. You never see green by itself, only in grass, plants or trees. You never see a grin except on someone's face. The humour of Lewis Carol's tale of the Cheshire cat derives 1. from the fact that a cat can't grin, and 2. from the fact that, even if it could, the grin could not exist except on a face.



Quantity, as we noted last week, is the accident which gives to a substance, extension (i.e., a body) and parts. You can draw a line on the blackboard and notionally divide it into successive parts. You can draw something more subtle, like a fox, and the parts, body, legs, head, ears, nose, involve a deal more sophistication than those into which you might divide a mere line. When men make things they always use natural materials. If I make a table or a chair, or a girl makes a dress, we do this by

arranging the (naturally derived) parts artificially. But when God makes something like a real, living, fox, He does so by arranging it into parts with infinitely greater sophistication than the carpenter or dressmaker. For the parts he gives the fox *do* things and they do so because the chief part He gives it enables it to move itself! The parts enable the fox to run, to smell out its prey, to eat and to drink, each of which actions is for the good of the fox.

Now, notice that a (corporeal) *substance* can't exist without *quantity*. Conversely, there is never a body (a quantity) without there being an underlying substance.

We discussed last week how *quantity* renders the matter of the substance incommunicable in the larger substances, like a boy or a girl. It was, perhaps, a little unfair for me to use water poured from one bucket into another to illustrate the point by way of negation. You can pour water because the substantial form of water attaches to the very smallest that water can be which we take, from the investigations of physicists, to be the molecule. Every bucket of water contains billions and billions of individual substances (molecules) of water all associated with each other. The principle of incommunicability of matter rendered by *quantity* operates with water too *at the molecular level*. You can't destroy it except by, say, getting the molecule to react with some other element or compound such as sulphur dioxide, when the substantial form of each is changed into a third, sulphurous or sulphuric, acid. Then the *quantity* of the water molecule gives way before the molecule of the new substance with its proper *quantity*.

This business of substances of different sizes may lead us to consider just what is the biggest living substance on earth. The Blue Whale is, true, immense; but it is not the biggest. That honour belongs to the biggest tree on earth, a Sequoia or Californian Redwood, called 'General Sherman' which is 275 ft high and weighs in excess of 1,900 tons!



Quantity is that accident which renders substance individual. Here are some definitions to note—

Substance is Be-in-Self
Accident is Be-in-Other
Individual is that which is itself undivided but is divided from others.

Let us go back to John-Pat chasing his shadow across the football field with the sun behind him. In

the *order of motion*, we recall, his shadow comes first; in the chronological order (time), the two are together; but in the order of reality, the ontological order, John-Pat comes first because John-Pat can exist without his shadow, but his shadow can't exist without John-Pat. Similarly, *substance* is ontologically prior to *accident*, because *substance* exists—'stands up'—by itself. *Accidents*, all of them, in contrast, exist only *in* some substance. As my teacher, Doc Woodbury, used to say: "substances are up-standers; accidents are in-stickers."

So, while in *the order of time* they come into existence (and continue) together, in the ontological order, *substance* is first and *quantity* second. As soon as (a corporeal) *substance* comes to be, *quantity* comes to be: as soon as *substance* causes, *quantity* causes.

Now there are other accidents, too. And among them there is an ontological ordering. For instance, before the dog can have fur or black colouring, it must first have a body. *Quantity* gives it a body while the next accident, *quality*, gives it the fur and black colouring. So *quantity* precedes *quality* in the order of reality.

But *quality*, the accident which ennobles and qualifies a substance, does much more than give a dog fur and colour. *Quality* has a number of modes, or ways, in which it manifests itself. The contribution of the three, *substance*, *quantity* and *quality*, to the reality, *dog*, might be summarised roughly like this—

Substance	Quantity	Quality
Dog	This dog	This sort of dog

Let us take Lucy, Julian's (regrettably now deceased) dog, as an instance of what *quality*, in one or other of its modes, provided:

- Female
- Healthy and vigorous
- Provenance (Staffordshire terrier/Border Collie/Kelpie crossbreed)
- Fun
- Colour black with white socks
- Pleasant nature
- Weight of about 20 kilograms
- 'Intelligence' (said, of course, secundum quid)

Each of these, you will note, gave something fixed and determinate to the dog, especially its sex and provenance. The others might have varied as Lucy got older. For instance, old age might have turned her colouring to a dark grey, reduced her weight, and affected her health and vigour. But these are simply incidents of being composed of matter. It is *form*, not matter, that fixes and determines the reality of anything. This is the case even with accidental forms. And on this point, let us observe that 'accidental' does not have the meaning we associate with the modern use of that term, something happening which was unintended. An *accidental* form is called so because *it befalls*, *or qualifies*, the corporeal substance but a substance can't exist without these accidental forms, especially, *quality*. For *quality* perfects and actuates its subject primarily and essentially.
