David Gamez, *What We Can Never Know* (London & New York: Continuum, 2007), pp. 217-20.

Chapter 5 - Ontologies

> One kind of aspect might be called 'aspects of organization'. When the aspect changes parts of the picture go together which before did not.
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> (Ludwig Wittgenstein, *Philosophical Investigations*)[1]

I emerge from the thicket, and a mushroom stands poised in the clearing before me: velar remnants, cap, crowded gills, stem, ring, stem and a basal bulb half buried in the moist autumn earth.

This mushroom is a distinct object that I separate out within the general field of the clearing. Had I been bear watching, I would not have seen it at all - it would have formed part of the general background to the bears that I was observing.

The mushroom has parts. The velar remnants, cap, gills, stem, ring or bulb can be made to stand out against the general background of the mushroom. When I focus on the gills, they become a distinct object for me and I cease to be consciously aware of the basal bulb and cap.

The divisions between the parts of the mushroom can be nested or they can overlap: one part can be broken down into smaller parts or different overlapping divisions can be made. For example, the mushroom can be divided into spore bearing parts and supporting tissues or it can be separated into top and bottom.

Through the microscope another field of partitions opens up: divisions of the mushroom's flesh into hyphae, spores, and all the structures within them. At higher magnifications further fields are revealed.

When I emerged from the thicket *a* mushroom stood poised in the clearing

before me: a physically separate mushroom; similar to other mushrooms and yet distinct from them.

The presence of *a* mushroom is also a form of partitioning. Not because the mushroom is distinct from its forest backdrop, but because we separate it from the millions of other mushrooms that bear its likeness.

I could have said that there was *some* mushroom in the clearing - that a portion of the totality of mushroom stood before me. Instead, I separated the mushroom in the clearing from all other mushrooms; I partitioned the totality of mushroom into physically distinct objects. Mushroom became millions of mushroom***s*** with parts that have many similarities between them.

This distinction between the totality of mushroom and physically distinct mushrooms is described by Quine as a distinction between mass and general terms:

> The contrast lies in the terms and not in the stuff they name. It is not a question of scatter. Water is scattered in discrete pools and glassfuls, and red in discrete objects; still it is just 'pool', 'glassful', and 'object', not 'water' or 'red', that divide their reference. Or, consider 'shoe', 'pair of shoes', and 'footwear': all three range over exactly the same scattered stuff, and differ from one another solely in that two of them divide their reference differently and the third not at all.
>
> So-called *mass* terms like 'water', 'footwear', and 'red' have the semantical property of referring cumulatively: any sum of parts which are water is water. Grammatically they are like singular terms in resisting pluralization and articles. Semantically they are like singular terms in not dividing their reference ... But semantically they do not go along with singular terms ... in purporting to name a unique object each.[2]

Mass terms do not divide what they refer to: there is just a mass of what they name. We do not describe a lake as *a* water, we say that there is water in the lake. The truck does

not have a red on it; it is a red truck, a truck with a portion of red upon it.[3]

Masses indefinitely extend and have no internal parts.[4] However, they are still partitioned from one another - water can be distinguished from alcohol, even though there are not any individual waters or alcohols.

When I emerged from the thicket a *young* mushroom stood poised in the clearing before me. A mushroom at an early stage in its development - a mushroom that the days had not dilapidated.

Young mushrooms are plump, beautiful and firm. Older mushrooms are yellowing-soggy and scarred by the rasps of slugs.

Physical objects persist through time and change over this period, and we divide the span of an object's existence into stages. These divisions can be very crude (the seven ages of man) or articulated more finely (the stages of infant development).

The different states of a physical object are similar to its stages, with the difference that stages generally progress in a linear fashion. A mushroom can be healthy or diseased, soggy or dry; water can be frozen, liquid or gaseous. Different collections of an object's properties identify its distinct states.

Different stages of an object cannot be present together. An object cannot be both young and old at the same time, although some of its parts can be young and others old. The same is true of different states.[5]

States are distinct from the objects that are in the different states, but they can overlap with the properties that are used to identify the states.

When I emerged from the thicket, part of the clearing was white, firm, crimson,

fragile, soft, slightly rubbery, loose, aromatic and tasty.

Part of the clearing has properties that are not present in other parts. There is fragile softness twelve centimetres from the ground and seven metres from me. Some sticky crimson below this, some rubbery white firmness and then some more fragile softness.

Some properties are overlaid (the ones from the different senses), whilst others cannot coexist at the same physical location. For example, aromatic and fragile can be co-present, whereas red and blue cannot. When I am focusing on one property, the others form a general diffuse background that is not perceived in any detail.

Properties can be indefinitely divided: we separate out different colours and make fine distinctions between shades of the same colour, temperatures can be measured to fractions of a degree, and we have a range of words and tests for different levels of hardness.

At higher resolutions we encounter different properties within the mushroom - the viscosity of fluids within the hyphae; the elastic rigidity of the spores. Further magnifications reveal the properties of molecules, atoms, electrons and quarks.

I have roughly outlined the ways in which reality is partitioned into objects, parts, stages, states and properties. Within each of these partitionings considerable variation can be brought about.

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1 Ludwig Wittgenstein, *Philosophical Investigations*, translated by G. E. M. Anscombe (Oxford: Blackwell, 1994), p. 208.

David Gamez, *What We Can Never Know* (London & New York: Continuum, 2007), pp. 217-20.

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2 Willard Van Orman Quine, *Word and Object* (Cambridge, Massachusetts: M.I.T. Press, 1960), p. 91.

3 This distinction between general and mass terms is not strict and they can often be used interchangeably. For example, I might ask for two waters in a restaurant, or suggest that we go out on the water when we are windsurfing. On the other hand, I might ask for some lamb at the butchers, or offer to put some apple in the salad.

4 This is not true at radically different scales. For example, water can be divided into parts at the molecular level.

5 This is true within each aspect, but different aspects may attribute different stages to the same object. An ageing pop star might be a young painter.