

Chapter 46

The Central Viewpoint Triad

By the application of the *Principle of Relationship*^a, we may now take the Flatlander's world and shift this entire sequence up by one dimension. Let's look very briefly at how it would apply to *Sphere* and his 3-Dimensional world which Rev Abbott termed Spaceland (remembering of course that this is not our universe – it is one dimension lower).

Spacelanders

As we saw in Chapter 9, as the expression of the *Edge-On Principle*^b, *Sphere* looks out and views his world in flatscreen like an enveloping spherical photograph, and like the Flatlander he also has his viewpoint jammed up against his perception at zero distance. We saw how, living in a 3D space-time, *Sphere* is...

- ‘hemmed in by the inside of a flatscreen sphere of confining 2-Dimensionality with no beginning and no end’.

For the Spacelander it is his 3rd Dimension that acts as his means of change. *We* see it as depth, but *he* experiences it as time, because his universe has no spatial depth. His immediate proximity to the flatness all around him renders him ‘shrink wrapped’ by its 2D surface, which is what I mean when I say that his world exists at zero distance from his sensory perception.

In terms of the magic treadmill^c, his temporal dimension extends radially away from him in every direction as though he were at the centre of a floating dandelion head; this is the 3D equivalent of the Flatlander's 2D cartwheel. In precisely the same way, his last dimension – his means of change – remains physically invisible to him because he views it as 0-Dimensional, viewing it from within point-on like looking out through the spines of a sea urchin. And the whole stacks up constantly in spherical ‘onion-skin’ ripples like the shock waves in space from a supernova, forming his ever-growing 3D block universe past.

This may be hard for us to process, but it is the direct extrapolation of the Flatlander's 2D space-time into 3D. All the principles remain the same, and with his 3rd Dimension acting as time the Spacelander has exactly the same choices to make as the Flatlander, namely:

- 1) He may decide on a direction to face, and
- 2) He may move in that direction.

The only difference for *Sphere* is that his first choice gives him two degrees of spatial freedom (length *and* width) on the inner^d surface that ‘enspheres’ him, rather than one. Because time is not really a choice his second option is the same as for *A Square*; his last space-time dimension, the 3rd, is temporal, acting as his means of change.

^a *The Principle of Relationship*: Whatever is true of the relationship between two adjacent dimensions is true of the relationship between *any* two adjacent dimensions.

^b *The 'Edge-On' Principle*: Each dimension is viewed from within itself one dimension lower.

^c *The Magic Treadmill Principle*: Time, as the *n*th Dimension in an *n*Dimensional space-time, issues forth perpendicularly and radially from within the frame of reference of each space-time event. To the observer this *n*th Dimension appears 0-Dimensional (is viewed ‘point-on’) and is therefore invisible, but results in (*n*-1)Dimensional change, and stacking of the (*n*-1)D surface into the *n*th Dimension, taking the form of the past.

^d Although technically his spherical world has no ‘inner’ or ‘outer’ to its surface because, being truly 2D, it has no depth.

So where would all this place *Sphere*'s mind-mapping capabilities? Extrapolating directly up by one dimension from Flatland (by the *Principle of Relationship*^a) we must now ask whether it is reasonable to conclude that the Spacelander:

- Senses in 2D
- Experiences in 3D
- Imagines in 4D

Of course we must now rely on dimensional logic, because the introduction of 4D denies us the luxury of visualisation. However, simply by transposing our conclusion from last chapter up by one dimension, the geometry tells us that the Spacelander is able to mind-map his 3D space-time using the same process enjoyed by the Flatlander. He 'looks down upon' his 3rd Dimension^b which acts as the repository of his past – the container for all his meanderings to date through his 3D block universe – mentally conscious of a drone camera (bird's eye) view, in his case from a 4th Dimension. Again there is no storage facility, unless his block universe containing the *actual original experiences* may be thought of as such.

All the principles remain the same, but there is no need for us to linger too long in the purely theoretical and hard to picture world of the 3D Spacelander. Our second extrapolation will prove far more fruitful because it brings us up into the real world:

Our world.

Hyperlanders

So how does all this apply to the denizens of the place we earlier dubbed Hyperland, populated by 4-Dimensional beings who dwell a whole dimension up from *Sphere*'s Spaceland, and two dimensions up from Flatland? We need to know how all this affects our character *Abbott*, because... *Abbott* is us.

As we have seen, *Abbott* inhabits the 4D universe, which is our universe. He too is a dimensionally composite character, and like the previous characters in dimensions below him *Abbott* does not actually view his world in 4D, but one dimension lower. He looks 'across' at his 4D world, viewing it 'edge-on'^c in 3D. *Abbott* is...

- 'hemmed in by a depth-of-field sphere of confining 3-Dimensionality with no beginning and no end'.

In other words, because our universe is 4D, all around us the world we see and touch is 3-Dimensional, and our means of change is the 4th Dimension, issuing forth radially (0-Dimensionally, therefore invisibly, in keeping with the *Magic Treadmill Principle*^d) from the point-event at which each one of us stands.

^a *The Principle of Relationship*: Whatever is true of the relationship between two adjacent dimensions is true of the relationship between *any* two adjacent dimensions.

^b Which to us would appear as depth – a series of onion skin spheres growing away from his shrink-wrapped present and containing his past.

^c *The 'Edge-On' Principle*: Each dimension is viewed from within itself one dimension lower.

^d *The Magic Treadmill Principle*: Time, as the *n*th Dimension in an *n*Dimensional space-time, issues forth perpendicularly and radially from within the frame of reference of each space-time event. To the observer this *n*th Dimension appears 0-Dimensional (is viewed 'point-on') and is therefore invisible, but results in (*n*-1)Dimensional change, and stacking of the (*n*-1)D surface into the *n*th Dimension, taking the form of the past.

Because the principles of *Flatland* hold good, in order for Abbott to put together a mind-map of his 4D universe he too must have a bird's-eye view. Like the Flatlander and the Spacelander, Abbott has to be viewing the 4th Dimension dimensionally from above. Therefore, his mind *must* in some sense be 5D.

In this way, *the simple geometrical principles of Flatland demonstrate that consciousness is 5-Dimensional.*

Sense, Experience, Imagine

So, strange and highly controversial as it may sound, the *Principle of Relationship*^a leads us to the reasoned conclusion that in some sense, the living mind conceives of the world in which it dwells from the vantage point of a 5th Dimension. The plain logic of *Flatland* geometry offers a straightforward mathematical description of the way in which, as living organisms:

- We sense in 3D
- We experience in 4D
- We imagine in 5D

I will refer to this expression as it applies between dimensions 3, 4 and 5 as our *central viewpoint triad* because the relationship between these three defines *geometrically* the link between the physical world and life itself. Like *A Square* we are composite dimensional beings. He lives it out in theory, but we in reality, because – as mathematicians and physicists from Einstein to Hawking affirm – the basic principles of *Flatland* apply in the real world.

Here is how the central viewpoint triad might be expressed mathematically:

(where n is the number of the dimension)

- We sense in $(n - 1)D$
- We experience in nD
- We imagine in $(n + 1)D$

Or...

If we inhabit an n -Dimensional universe (nD), we sense it in $(n - 1)D$, but imagine it in $(n + 1)D$.

Reflection... So, if mathematicians and physicists are already aware that *Flatland* principles apply in the real world, why is the logic of the *central viewpoint triad* not common knowledge?

I would suggest three reasons:

- 1) *Flatland* the story has been accepted at face value, with the characters' consciousness dismissed as artistic license – a charming Victorian 'Walt Disraeli' literary device – along with the Flatland fog and the Lineland song.
- 2) *Flatland* has been considered by the experts exclusively in terms of geometry. What it

^a *The Principle of Relationship:* Whatever is true of the relationship between two adjacent dimensions is true of the relationship between *any* two adjacent dimensions.

implies for perception has been overlooked because in this age of specialisation, perception falls outside the remit of maths and physics^a. And conversely, it perhaps hardly occurs to psychologists to contemplate geometry.

- 3) Traditionally, the scientific world doesn't like to think of consciousness in terms of dimensions – 'serious' scientists would be reluctant to touch the idea with a barge-pole. As a glance through any newsstand will confirm, the world is awash with dubious notions of higher dimensions of an arbitrary nature. Understandably, but sadly, science tends to leave that sort of 'dodgy' stuff to the New Age Movement. Scientists are only human like everyone else (or as the legendary bluesman Johnny Winter put it, "*Life is hard, and then you die*"). Along with their hopes and dreams they also have fears – fears of not being taken seriously, fear of ridicule, fears of having their work discredited. And it's not just reputations that are at stake, but funding – to put it bluntly: their living. If anyone doubts this scenario then Michael Brooke's history of cold fusion^b should suffice to convince.

Science Up, and Science Down

So, the direct extrapolation of *Flatland* principles leads us to a dramatic conclusion: the way that the dimensional structure fits together suggests that there is a sense in which life itself operates in 5D. Every one of us is empowered dimensionally to look down upon the 4th Dimension – the one that we experience as time – from the vantage point of a 5th Dimension, which is similar in principle to the way that *Sphere* was able to survey Flatland.

Please note that this conclusion was not arrived at *metaphysically*, nor even *philosophically*; it was derived *geometrically*, by applying the basic principles of *Flatland* to generate the central viewpoint triad, which connects the physical world, via time, to processes which objectively define consciousness. And, unlike frameworks which allow a 'specialness' to time, or attribute 'spatialness' to dimensions above the 4th, it behaves consistently throughout the dimensional structure, allowing unique freedom of definition to each dimension *as long as the principles of Flatland are adhered to*.

The upshot of this is that, because we are physical dwellers *in* time, and experience the world and each other 4-Dimensionally, in order to access our minds *we must look up*. And, as *A Square* discovered, looking up is not so simple. Einstein's geometrical mentor, Hermann Minkowski taught that we look at each other and the world in 4-Dimensions, and although time is invisible we all experience it in much the same way. But our minds are different. They are more like an army of helicopters, hovering tantalising above the sands of time, ropes dangling, because the 5th Dimension that is going on in our heads is not simply 'out there' like the 4th, it is also dimensionally 'up there'. And it is this upness that gives us the impression that it is hidden from view.

It is very important to remember that everything changes depending on whether you look up, across or down from inside a dimensional structure – this is a major theme of all our principles. And we have no choice but to look from somewhere, because we, our consciousness, and absolutely everything else are all inside it, because the dimensional structure is everything. In dimensional terms, everything boils down to

^a Roger Penrose excepted, but he ploughs a lonely furrow.

^b Michael Brooks, *13 Things That Don't Make Sense*, Profile Books 2010, P57

viewpoint. From this, Dimensionality supplies a simple geometrical explanation for the division of the sciences, as follows:

- the physicist looks across into the 4th Dimension and down.
- the psychologist looks across into the 4th Dimension and up.

If the physicist's job is not easier, it is certainly more straightforward, more clear-cut. And because she is able (in theory) to observe the complete picture dimensionally from above^a, she may use numbers.

Reflection... The dimensional structure reveals that it is not because psychology is a different *kind* of science from physics that we find it so much more nebulous and imprecise, but our viewpoint.

In the same way that *A Square's* 2D world of Flatland was a whole degree of freedom more complex than Lineland – and as such utterly beyond the *King of Lineland's* ability to grasp using simple line-measurements – it is our viewpoint that dictates the level of complexity that we perceive. Consider: how many lines laid side by side does it take to form a plane? You see the *King's* problem. He would have to turn his measuring stick on its side – but the world of Lineland measuring sticks has no sides! And how do we turn an equation on its side when the world of Hyperland equations also has no sides? Were we to attempt the use of equations to describe our dreams we should find precisely the same difficulty.

This is why neuro-psychologists are frustratingly limited to placing electrodes on our heads, passing us through scanners, analysing print-outs and recording our behaviour and words. *They can never access our thoughts directly.* They can only evaluate the *effects* of our thinking as they are expressed in shared and universal 4-Dimensionality. We *must* in some way reveal the activity of our minds physically – even if it's through body language or sweat glands – because the place where they are actually going on is the 5th Dimension (and also, as I will shortly posit, higher).

In harmony with the geometrical quality of the dimensional structure, *any* effect of another human being's thinking may only be perceived in 4D as it resonates through space and time.

I'm a Soul Man

It is highly modern to consider the mind and the brain the same thing. In dimensional terms this is and is not true, because a cross-section of any dimension is always the dimension below, yet still an integral part of the dimension above^b. A cross-section of a plane is a line, a cross-section of a sphere is a disc, and a cross-section of time is the physical moment now. In precisely the same way, all expressions of another person's mind are 4D because we are viewing the 5th Dimension in cross-section. We are constrained by the principles of *Flatland* to viewing the 4D lifetime of a living organism as it spans time (and that only in tiny sequential 3D cross-sections which we call the present).

Yet again we are right back in Flatland with the relationship between *A Square* and *Sphere*. In this way, a very great mystery is solved by the deployment of very simple logic.

Dimensional logic.

^a *The Principle of Accessibility:* Each dimension sees and may influence all those below.

^b This 'double life' of the cross-sectional slice is highly significant to the function and appearance of the dimensional structure. It turned up in Chapter 3 with the *Principle of Character*, then we came across it in Chapter 22 with the *Principle of Duality*. In Chapter 56 we will look at the structure-wide implications of the slightly more complex *Cut the Cake Principle, Parts 1 and 2*, of which the *Principle of Duality* may be a special case.

We all know that, like the body, the minds of all humans bear a degree of similarity, and yet each is unique and its perceptions largely subjective – indeed it is the very source of the term ‘subject-ive’. The range of diversity between individuals is mind-boggling, but this should not surprise us – after all, how many circles does it take to make a sphere?

It has now emerged that the living organism, like *A Square*, is a dimensionally composite thing because the trail has led us to the point where we are no longer living in the dimensional structure – *it is living in us*. The structure transcends both the physical universe and time, and all I am is a cross-section.