

## Trinity Sunday 2020

Children's talk

Quiz question.

What came into being on 10 August 1932, founded by Ole Kirk Christiansen and is now the largest company of its type in the world? If you want another clue, and I think this will give it to you, here's one of their products, though it comes in unassembled form. This was put together by my son a few years ago. Lego started out with wooden blocks but moved on to plastic in the late 1940s and at least in my day the basic and almost sole elements were oblong and square bricks like this....

Lego helps us understand the world, that it's made up of smaller bits that are put together to make everything that we see around us. So at school when we come to do chemistry and physics we learn that everything that we see around is made up of much smaller building blocks, but these building blocks are so small that there are no jagged edges like there always is with Lego.

IN Lego the whole thing has to be held together by clicking one brick to another. In the real world what's going on deep down far smaller than anyone can see is very tiny bricks that are held together by an invisible energy that lies in the big spaces between them, the same sort of energy that becomes visible when you see a flash of lightning, the same sort of energy that means the moon keeps revolving around the earth rather than rushing off to another part of the galaxy and that keeps our earth revolving around the sun so that we don't career off into a frozen darkness.

Now that's funny, because when we look at the stuff around us we see things that look pretty solid – this printer, this book, my hand – you can't see through it. We imagine that if you zoomed in on these solid objects it would be like lego – the bits that make up what we see are as solid as what we see. But science tells us that deep down reality isn't solid; most of reality isn't things, it isn't stuff, it's energy, it's fields of force, it's something you can't see.

There are other things in the universe that we can't see but are what makes the universe real for us. You can't see Peace but you can feel it, you can't see Joy but you can be overwhelmed by it, you can't see Love but you can know that's its more important than anything else in life. You can't see God but you can feel him, you can be overwhelmed by him and you can know that God is love and that love has become visible in the person of Jesus in whom we see and know and love the God we cannot see.

I was a natural scientist. I did my A levels in maths, physics and chemistry. Preparing for this I did an internet search on the word molecule and clicked to images. I wanted to see if people were picturing these things in the same way as we were 40 years ago. WE didn't have the internet then, of course – we hardly had computers. Most of our images were 3D ones with little spheres representing atoms and springy rods the bonds that lay between them. The ability to produce images has changed enormously but the basic image is the same. I spent years of my life looking at pictures and models like this. I was taught – I could say indoctrinated – into thinking that this was ultimate reality: the lego bricks from which everything is built: solid spheres of atoms bound together with other atoms by bonds like sticks. IT's a helpful way of learning, it may be the only way of picturing that reality which is too small for us to see.

The problem is that it has educated generations of students into thinking that the world is like lego and the underlying reality of everything is solid matter.

But you then have to be untaught as you go through A levels into university. The world isn't really like that at all. It would be much more accurate to speak of the world being made of fields of energy and force – or even that the world has to be seen both as made up of stuff, particles, and also of fields & energy and not just as both co-existing in the same universe but both describing the same basic reality of the universe at the same time. Have I lost you? Well, I'm afraid you need to do some degree level physics.

But let me just share one thing that we can learn about God and ourselves and the nature of reality from what we know of the water molecule, one of those I found in my google search.

Remember I'm not showing you a water molecule. I can't, we can't see it; even if we had a microscope powerful enough we couldn't see it. This is a model that bears as much relation to the real thing as [the lego model].

Water exists because the very smallest lego brick of the atomic universe, Hydrogen, is lonely. It doesn't like being on its own. And that's because Hydrogen is made up of a nucleus with one proton balanced by an electron whizzing round it like a moon. But we know that a molecule much prefers to have two electrons whizzing round it, so it really likes to find a mate who will share an electron with it. Oxygen has eight protons in its nucleus and so has eight balancing electrons whizzing round. Now there's only room for two in the first orbit and there is room for up to eight in a second higher orbit. But similarly to hydrogen, oxygen likes to have not only the full 2 in its first orbit but a full eight in its second, so it really likes the idea of pal-ing up with two hydrogen atoms and entering into what you might call a communion, so that, as you see in this image of what's going on, the hydrogen is sharing its energy, the oxygen is sharing energy: they both become more complete, more fulfilled by that communion but it also binds them together so that they are no longer two or three but also one.

The next atom in the periodic table after hydrogen is Helium. Helium has two protons in its nucleus and therefore two electrons whizzing round it in orbit. And Helium is happy; it's got its two and doesn't want any more. It's therefore happy to be on its own, inert. It doesn't need to pal up with any other atom or element, because it is self-sufficient.

[When Jesus sent out his disciples to baptise in the name of the Father and the Son and the Holy Spirit; when St Paul blessed his beloved Corinthian church community with the grace of our Lord Jesus Christ and the love of God and the communion of the Holy Spirit – they were inviting those first Christians into faith in a] God that was more like hydrogen, than helium; a God who did not want to be on his own and so by his Spirit made all things and as the crown of creation us, whom the good book says he made in his own image, male and female he made them because, it says, it was not good for the man to be alone. If we are made in the divine image than the God we are like perhaps also does not want to be alone and is not alone, but is a communion of love that we speak of in our own inadequate terms as the holy Trinity.