

Ties That Bind:

The Physics of Communion

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The Community Church of Sebastopol
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Acts 11: 1-18

Physicist, Niels Bohr, tells a story about a young rabbinical student who went to hear three lectures by a famous rabbi. Afterward he told his friends, ‘The first talk was brilliant, clear and simple. I understood every word. The second was even better, deep and subtle. I didn’t understand much, but the rabbi understood all of it. The third talk was by far the finest, a great and unforgettable experience. I understood nothing and the rabbi didn’t understand much either.’ So, with those words in mind, what to you say we talk a little physics and a little religion, neither of which I don’t understand very much. But let’s talk because I am no longer convinced that we can keep scientific truth and religious truth in separate boxes.

In our text, Peter, the rock of the church, is in some hot water with the church in Jerusalem – the mother church. Word has come down that he has been hanging out with Gentiles, Romans even, and has been eating their food in clear violation of the Jewish religious law. Remember, the first Christians were all Jews, trying to remain faithful to Jewish law and traditions, including dietary laws. Few barriers were stronger in first century Palestine than the wall between Jews and gentiles. But now Peter, the premiere disciple, has breached that wall. The leaders of the Jerusalem church demand that Peter explain himself. And so he does. He explains his vision of the sheet and the animals, he speaks of hearing the words, “What God has made clean, you shall not call profane” – so much for the dietary laws. Then he tells them of the visit by three men from Caesarea and the word from the spirit not to make any distinction “between them and us.” They take him to a house where he preaches to these gentiles, these outsiders, and is a witness as they receive the gift of the Spirit. Then he concludes his testimony in Jerusalem with these wonderful words: “If then God gave them the same gift that he gave us when we believed in the Lord Jesus Christ, who was I that I could hinder God?” Peter is now convinced that God the creator did not intend to exclude anyone from the community of God’s care. The table has been broadened so that everyone now has a place, all included, all equal, everyone now connected to God and to everyone else. I never before realized that Peter was a physicist!

Welcome into the world of physics, of quantum mechanics, which is beginning to look more and more like the world of religious faith.

According to quantum theory, when a sub-atomic particle decays into two particles, they become a set of “twins” spinning together. So far so good. Now imagine those two particles flying apart – one of them heading to the dark side of the moon, the other lingering in the laboratory spinning above some scientist’s head. If that scientist could reach up and reverse the spin of that particle, the other particle – its twin on the other side of the moon – would reverse itself too. The two particles are in what physicist, Erwin Schrodinger, calls, “quantum entanglement.” No matter how far apart they are, the particles continue to spin in complementary ways. Once two particles have interacted with each other, they remain related regardless of their physical distance from one another. They stay in contact through space and time, behaving no longer as two separate particles but one. I think I begin to understand, at least a little, the phenomenon of twins who make similar choices in their lives, even though they were separated at birth. Or how about that moment when one spouse makes a random comment and the other replies, “Weird, I was just thinking that.”

Reflecting on this, Barbara Brown Taylor, whose helpful book, *The Luminous Web*, forms the backdrop to this sermon, writes, “The new science requires a radical change in how we conceive the world. It is no longer possible to see it as a collection of autonomous parts, as Newton did, existing separately while interacting. The deeper revelation is one of undivided wholeness, in which the observer is not separate from what is observed. The common division of the world into subject and object, inner world and outer world, body and soul, is no longer adequate...Imagine the whole cosmos knit together so that a shiver in the Milky Way gives us a shiver right here, faster than the speed of light...Is this physics or theology, science or religion?”

It is reported that once when physicists John Wheeler and Richard Feynman were discussing string theory, Wheeler said, “Feynman, I know why all electrons have are the same charge and the same mass.

“Why” Feynman asked.

“Because they are the all the same electron!” Wheeler answered.

How does Peter say it? There is no longer any distinction between “them and us.” I also now have a much deeper appreciation for Paul’s image of the church as the “body of Christ.” As different as we are and as many functions as we serve, we are far more than simply a collection of parts. Oh, we may act that way sometimes, with the left side pulling against the right and the feet

refusing to take a step until the hands have apologized. But there are also times when we clearly participate as one, times when together, as one, we truly have the hope of being changed, transformed, of being more complete than we would have been if we had not been part of this community. The more in tune we are, the better we respond.

Indeed there are neuro-scientists, again sounding like theologians, who insist that our brains are created to indwell other brains. We are wired to connect. Our brains only work when we are connected. Synapses fire when they encounter the actions and communications of other minds. Says one researcher, "Science reveals that there is no such thing as an individual, independent mind. Our brains are social organisms that only work when we – when our minds – are in relationship. These scientists believe that the more we are together, the more we share in each other's mind." (Funny, I was just thinking that!) Indeed it has been suggested that one reason human childhood is so long is that our developing brains need the nourishment of other brains...we have a mind when it connects with other minds. All of us, participants in the great unbroken wholeness of the universe.

Like millions of Americans, I was deeply touched, deeply saddened, by the bombings at the Boston marathon. And it was deeply moving to see men and women, all ages, all religions, all ethnic groups, rushing in, in complete disregard of their own personal safety, to do what they could to help. The idea that another bomb might explode didn't seem to enter their minds. They just knew they had to help - connections. But as sad as that day was, what will be sadder – and I'm already hearing it – is if these bombings are used to further divide us – can't trust Muslims, can't trust immigrants, close the borders...keep everyone out. They aren't us. Instead of tearing down barriers, it is so easy to give in to fear and distrust and build the barriers between even higher. But what did Peter say? There is no longer "a distinction between them and us." Again, is he a theologian or a physicist? Be ready, people, because as Peter discovered, as Paul discovered, as Jesus taught and demonstrated again and again and again, the Spirit is at work, even now, breaking down boundaries, leaping over walls, defeating deadly restrictions.

Let's return to quantum mechanics for just a moment. In the world of sub-atomic particles, a thing cannot be said to be one thing or another until something interrupts it to find out what it is. But then, the interruption itself has to be taken into account. You cannot experiment on these particles without becoming part of the experiment. Says Taylor, "The light you shine on a particle so that you can see it carries its own momentum, which bumps into the particle and changes its heading. You cannot observe the phenomenon without entering into relationship with it, and then the relationship changes the equation." There are no bystanders in physics. When you start studying a particle, working with it, you change it. You become a crucial part of the network.

And what is true in the lab, is true in the universe. A child picks up a shovel of sand out at Salmon Creek beach, and thereby affects the composition of a beach in Japan. Again, the revelation of undivided wholeness. As Jesus himself said, "I am in my father and you in me and I in you." And he might have added, we are in each other. Each of us part of some larger whole. So none of us can live a life just to himself or herself. Don't you dare think that your life doesn't matter or really isn't that important. What you do with your life, even in the smallest of ways, has an impact...touches someone else, has influence far beyond what you might suppose. As a colleague of mine likes to say, "There's something for you to do to make the world better. There's something God cannot get done as well without you. You may be a small instrument in a big band but, if you have a part to play and don't play it, you will be missed. No one is indispensable, but in some way or another, everyone is irreplaceable."

We conceive of reality as many. But what if, in fact, it is truly and deeply one? All electrons the same electron, you in me and I in you, all of us in relationship. There really is no place to stand apart from and above the rest of creation. We truly do live in covenant with each other and all of creation, and we live so much better when we realize and accept and nurture that.

Says Barbara Brown Taylor, "When I am dreaming quantum dreams, what I see is an infinite web of relationships, flung across the vastness of space like a luminous net...Where am I in this picture? I am all over the place. I am up there, down here, inside my skin and out. I am large compared to a virus and small compared to the sun, with a life that is permeable to both. Am I alone? How could I ever be alone? I am part of a web that is pure relationship, with energy available to me that has been around since the universe was born.

"Where is God in this picture? God is all over the place. God is up there, down here, inside my skin and out. God is the web, the energy, the space, the light...revealed in that singular, vast net of relationships that animates everything that is. God is the unity, the very energy, the very intelligence, the very elegance and passion that make it all go...For the moment, we see through a glass darkly. We live in the illusion that we are all separate...When the fog finally clears, we shall know there is only One."