

Knowing Experimentally: Quakerism in a Scientific Age

By Jocelyn Burnell
Britain Yearly Meeting

Jocelyn Burnell, an astrophysicist at Britain's Open University and former clerk of Britain Yearly Meeting, shared her reflections on science and religion. The minutes of North Pacific Yearly Meeting sum up some highlights of her challenging talk:

Jocelyn shared with us her life interests and how her Quakerism and science fit together, as well as other interests that fit less comfortably.

The Friend in Residence addressed the Problem of Suffering, reviewing some theological stands about why it exists. She revisited assumptions about God, rejecting them as a scientist. She is not willing to abandon her faith in a loving, caring God, but she tries the thesis that God stands back and lets unfortunate things happen. God then cannot be blamed for suffering—nor coincidentally for good things either. Instead one can ask God to accompany us and support us in all our conditions.

She also looked at the controversy of the Creation of the Universe. Assuming that science will reach an accurate description of Creation, what does it mean if God is not the first creator? Many of us find God "in" nature; she cannot attribute the natural world's beauty to God, but she finds God "through" the cosmos, and described some natural processes that demonstrate our intimate connection and part in the universe. Knowledge of God is me-



Jocelyn Burnell — Staff Photo

Jocelyn Burnell gave Swarthmore Lecture ("Broken for Life") in 1989; recently served as Clerk of Britain Yearly Meeting; and has long been active in Quaker-ecumenical relationships. She also just finished eighteen months as a sojourning member of Princeton MM, Philadelphia YM.

diated to us through the world as it is through other people. This led to her reflections on the hostile nature of most of the universe and our ephemeral place in it—eventually the universe will not support life. She concluded by responding to the question—What is the nature of hope in such a universe?—and by presenting her image of God.

For the full text of Jocelyn Burnell's talk, see the *Friends Bulletin* website at <http://members.aol.com/friendsbul/Friendsbulletin.html>.

I was born and brought up a Quaker and so my science and my Quakerism developed side by side. Now, decades later, they are comfortable bed-fellows, each accommodating to the shape of the other. There are other bodies in the bed, too, and some are not easy bed-fellows. For example, one labeled housewife/wife/mother is now dormant, but in its active phase tended to be in conflict with science, in the sense that it was hard to give proper, or even adequate, attention to both. This tension fueled my interest in women's issues, which is one of the other bodies in the bed. For the record, the other two bodies are spirituality and recreations (sometimes called avocations in the US).

I was prompted to develop a map of the areas of concern or activity in my life (that is, to identify the bodies in the bed) when I took part in some workshops in Berkeley on science and religion. I was the only woman out of some twenty-five participants in the workshop, although there were several women observers. I remain immensely grateful for the encouragement and strengthening I received from those women through numerous, ad hoc, unofficial support group meetings in the women's bathroom! It seemed that the

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men in the workshop were more focused and had fewer active areas in their maps. Furthermore they were willing to let being a scientist define who they were. I insist that I am not a scientist only, but have other skills and experience as well. And as I get older I suspect that United Kingdom academic scientists are being forced to be even more focused and specialized, and work even longer hours, and so I insist even harder that I am not only a scientist.

The distinction between Quakerism and spirituality in my map may puzzle, so let me define my terms. In Quakerism I include activities like being an Elder in my local meeting or being Clerk of the YM. It includes activities like the thinking about Quaker theology that I have had to do through representing Quakers on ecumenical bodies. It includes also the special study I did on suffering and the ministry of the wounded, and the intellectual reconciliation of science and theology. The link with spirituality is strong, but I have wanted to separate the two. The separation is essentially into head-and-hands, and the intuitive (heart).

Spirituality forms the center of my life and is the driver. As far as I am concerned everything begins and ends here. As far back as I can remember I have had a sense of the numinous—the holy, the sacred, an awareness of the presence of God. The sense of worship and prayer that can come over me is God-given, God-sent, God-prompted, and I live better when I heed it and take time out to sit quietly in that presence. My alertness to such promptings is better developed, I believe, if I take regular times of quiet to meditate or pray. These impulses (or in their absence, my yearning for them) form a strong core to my life and enable me to be brave in other areas.

God the creator of the universe

From what I have learnt as an astronomer I suspect that God did not create the universe, but rather that it created itself, it happened. Scientists do tend to be overconfident, even arrogant, and I recognize this danger. The processes are not yet fully understood, and we might be completely wrong. But usually major developments in science extend what was previously known, tactfully including the previous in a bigger picture, rather than proving it completely wrong.

So I have begun to think through the consequences of provisionally adopting

the idea that God is not the first creator. Once again I find that Meeting for Worship is as powerful and as gripping an experience as always and that this line of thought has not caused my world to fall apart. I do sometimes find myself in Meeting for Worship addressing God as creator, but I know that I do not mean it literally! My vocabulary is limited and I do not have a single word for the relationship I experience, so a succession of approximations, including 'creator' get used.

If God is not the creator of the universe, then God is not the creator of the natural world around us. Many of us feel close to God in the outdoors and we believe we find God when we tend our gardens, admire the sunset or are moved by the beauty of the night sky. We have a deep connectedness with the rest of the universe. The atoms in our bodies were forged inside stars, made available by the death of stars, and are on loan to us. We really are made of star stuff. One of my main recreations is tending the plants in my garden, and I too am stirred by magnificent scenery. If the whole of life is sacramental, as we assert, then God's grace can be mediated to us through these things, and we can be brought to the point where prayer begins. But none of this strictly requires God as the creator of the natural world, I believe.

Parallels between scientific research and the Quakerly search

For any faith, denomination or religious group there are three possible sources of authority: their Holy Writings; their history and traditions; and continuing revelation—God speaking to his/her people today. Different religious bodies place the emphases differently amongst these three. Quakers in Britain are unusual amongst the religious bodies there in that we place considerable emphasis on the third (continuing revelation) and sit rather more lightly than many churches to the first two. We are also unusual in the degree to which we encourage (require) individual members to be responsible for their continuing revelation. Hence the emphasis on 'What canst thou say?' that is common in Quakerism.

A body that depended only on continuing revelation could easily be led astray by articulate but deranged people, and so we have developed checks on that process. We have Clearness Committees, and Monthly Meetings (and maybe even

Yearly Meetings) to test the leadings of individual Friends. These are examples of the community moderating and, if appropriate, endorsing the leading and action arising from it.

The scientific community plays a similar role in research. Scientific proof is more difficult than many imagine; one's peer community makes judgments about the value of one's work, and perceptions formed by such colleagues are very important in determining reputation, funding, access to key equipment, etc.

Of course, when any human group is involved, and especially when it is involved in making judgments, then fashion and bandwagon effects sway decisions, and so can discrimination; it can be very hard to listen openly.

Another parallel between Quakerism and scientific research is the searching, exploring that takes place, and the evolution of understanding that goes with it. Sometimes religion is presented as a stable, comfort zone, unchanging, predictable, sure. But in Quakerism we are encouraged to look for new light, and to keep checking that what we profess is based on live experience. Similarly the research scientist checks, tests, revises, tests again, devises new experiments and slowly pushes the boundary of the known out into the unknown. It is this openness that makes Quakerism attractive to scientists.

Both activities require us to live with provisional pictures that are likely to be modified as we gain understanding. Both activities leave a trail of loose ends. Neither is for the tidy-minded or those who see things in black and white!

The future of the universe and the nature of hope

We live in a universe that is largely inhospitable, indeed hostile to life. Furthermore it appears that it will not always support life. In the distant future changes in the universe mean that life will be forced out of existence, throughout the universe. What then is the nature of hope? How can we hope if we know that life is ultimately going to be killed off? What is God playing at?

A quotation from the Czech President, Vaclav Havel, is helpful:

Hope is not a prognostication. It is an orientation of the spirit, an orientation of the heart; it transcends the

world that is immediately experienced, and is anchored somewhere beyond its horizons...[It is] an ability to work for something because it is good, not just because it stands a chance to succeed. [*Disturbing the Peace*; translator unknown.]

We have to accept that nothing lasts, and learn to love anyway.

My image of God

I find God in Meeting for Worship and in quiet times. Sometimes I find God in the day-to-day, in moments of grace. The God I find is a caring, loving, supportive, empowering God, but one who will only work through people. 'He has no hands but ours,' said St. Theresa.

I have had the experience of working hard at some of the intellectual questions about science and religion, and then going, with the questions unresolved, into a good Meeting for Worship. The questions

floated away. In that covered meeting they were found to be unimportant, irrelevant. What mattered was being present, letting go, letting drop all things that interfered with that communion....Just being there, totally attentive...moving beyond words, praying without words, breathing becoming prayer.

This seems more important to me than the intellectual resolution of questions about science and religion. And so I tend to be a bit cavalier about those issues, judging that that is not where I'm meant to be.

One final academic comment before leaving the subject. From the feminist movement I learnt to ask, 'What's going on here?'—to observe the processes as well as the content. If I apply this to my own thinking it becomes clear that my theology has been accommodated to my science. Why? Is it because I am weak on Quaker theology in this area? Or is it that Quaker theology itself is weak in this

area? Whilst I have had discussions with scientists about the scientific method, I have never engaged with Quaker theologians on these issues.

Conclusion

The universe that today's astronomers describe is infinite, cold, almost empty, with no center, no purpose and uncertain future. There is no need for God, no special role for human beings and no obvious implications for human behavior. And yet we know that there is more to life than physical existence.

We cultivate that 'other' in our Quaker communities—thinking together, struggling with the hard issues together, learning together, washing dishes together. The anchor for me is in the Meeting for Worship, and the community of Friends past and present. I hope we will go on together, thinking hard, sitting quietly, being patient and persisting faithfully. □