Will one war plus another war equal peace? Will it help to bring the science-religion dialogue into conversation with the ecumenical dialogue, or will it simply compound war upon war? Is ecclesiastical warfare the right imagery for describing the split between eastern and western churches, or for describing the contest between Reformation Protestants and Roman Catholics? Is warfare the right imagery for describing the interaction between Christian faith and modern science?

Let’s look at the alleged warfare between science and faith. Is warfare the best extended metaphor for understanding how scientific knowledge and Christian faith get along? The battle metaphor goes back to the late nineteenth century, most probably to the influence of the notorious book by A.D. White, *A History of the Warfare of Science with Theology.* But, we will ask here: does the image of a declared state of war accurately describe the current interaction between theological thinking and natural science? No, not completely.

Oh, yes, there are some warriors who believe science defeats religious superstition and narrow-minded dogmatism in the name of reason and intellectual openness. These warriors are the reductionist materialists or naturalists. And, on the other side, religious soldiers have entered the battle. The *Syllabus of Errors* of 1854 pitted the Vatican against modern science and modern culture; and American Fundamentalists in the 1920s attacked the intellectual establishment of evolutionary science. Yet, beneath the smoke and fire, less actual combat between science and faith is taking place than most realize. Contemporary controversies such as the evolution vs. creationism and naturalism vs. intelligent design are not actually battles between science and faith; rather, they are battles over what constitutes honest science. In addition, the prevailing mood among both scientists and theologians is one that supports a search for peace, peace either as separate co-existence or the search for complementarity or even consonance.

Let’s look at our ecumenical and inter-religious responsibilities as Christians. All Christians share one Lord and one faith and one baptism; hence we all share responsibility for one another. And beyond the doors of the church, we share a responsibility with

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the whole human race for justice and peace and sustainability on our planet. To get at this double responsibility, I distinguish between the *ecumenical* agenda and the *ecumenic* agenda.

**Our Ecumenical and Ecumenic Agendas**

Our term ‘ecumenism’ derives from the Greek word, *oikos*, meaning ‘one house.’ It’s the same root for our word ‘economic’ which today refers to things having to do with money, as in ‘economics,’ but which in the ancient church referred to divine activity in the world, as in ‘economic Trinity.’ In the epics of Homer the term, *oikoumene*, referred to the inhabited world, consisting of islands and continents. Surrounding the *oikoumene* on all sides was the *okeanos*, an ever-running river of water that stretches to the horizon. The horizon, as we squint our eyes look out over the stretches of water, marks the boundary between the world as we know it and the mysteries that transcend us. The *oikumene* was the world household, inclusive of all that could be known this side of transcendent reality.3

Since Galileo focused his telescope, we in the modern world have come to identify our *oikoumene* as the planet earth; and by implication we identify the *okeanos* with the infinity of outer space. Peering outward toward the unfathomable horizon of intergalactic mysteries, we feel awe at our relative minuteness translated into insignificance. Yet, when we ask our astronauts to turn back toward earth with camera in hand, we see our planet as a shiny blue sphere, round, singular, united, and precious. From the distance of an orbiting astronaut, eyes cannot see the boundary lines that we put on our maps to divide nations. Looking from space eyes cannot see the divisions between races, the acrimony between conflicting political interests, the rivalry between religions.

In short, variants on the term *oikoumene* connotate oneness, unity, and the healing of community. For those of us in the Christian church, it takes two distinguishable yet complementary forms. The *ecumenical agenda* is the specifically Christian agenda: it is the pursuit of Christian unity. It reflects the shame we feel at the fragmentation and dismembering of the body of Christ through schism. And Jesus’ admonition that we “all be one” inspires us to work toward healing. For this purpose and with this passion, Paul Wattson called into existence the vocation of the Franciscan Friars of the Atonement.

The *ecumenic agenda* has to do with the relation of the church to the world beyond the church. As an *ekklesia*, from the Greek word to be called out, the church is called out from the world to witness to the world. Yet, at the same time, the church belongs completely to the same world to which all humanity and all nature belong. We share a common life on this planet with non-Christians, anti-Christians, and adherents to high minded religious and philosophical ideals in independent religious traditions. When it comes to striving for world peace, for example, Pope John XXIII said in *Pacem in terris* that Catholics should work vigorously together with all people of “good-will” for the welfare of life on our planet.

Among the various tasks within the ecumenic agenda, prominent is the dialogue between faith and science. There is but one God, we along with our Jewish and Muslim conferees claim; and this God is the creator of our cosmos. If this be true, then finally faith and reason cannot be at odds. What we learn about this cosmos through scientific methods must, in the long run, complement and not contradict what we believe to be the activity of our creating and redeeming God. Even if science and theology approach reality from differing methodological starting points, we are aiming at a single shared reality. There is but one reality, and sooner or later we can expect to see some consonance between the differing domains of discourse and thought.

**The Ecumenic Approach of Pope John Paul II**

The connection between the ecumenical and ecumenic agendas has been foreseen by Pope John Paul II. In 1987, the Holy Father initiated a series of international seminars dealing with divine action in the natural world. Under the auspices of the Vatican Observatory in Rome and the Center for Theology and the Natural Sciences in Berkeley, California, blue ribbon teams of natural scientists, philosophers, and theologians have been meeting at two year intervals
to take up the theological implications of new discoveries in quantum theory, physical cosmology, chaos and complexity theory, biological evolution, and the neural sciences. On the occasion of the first of these seminars, and in honor of the three hundredth anniversary of the publication of Isaac Newton’s *Philosophiae Naturalis Principia Mathematica*, the pope penned these paragraphs.

As never before in her history, the Church has entered into the movement for the union of all Christians, fostering common study, prayer, and discussions that “all may be one” (Jn 17:20). She has attempted to rid herself of every vestige of anti-semitism and to emphasize her origins in and her religious debt to Judaism. In reflection and prayer, she has reached out to the great world religions, recognizing the values we all hold in common and our universal and utter dependence upon God....

Turning to the relationship between religion and science, there has been a definite, though still fragile and provisional, movement towards a new and more nuanced interchange. We have begun to talk to one another on deeper levels than before, and with greater openness towards one another’s perspectives....The unity we perceive in creation on the basis of our faith in Jesus Christ as Lord of the universe, and the correlative unity for which we strive in our human communities, seems to be reflected and even reinforced in what contemporary science is revealing to us....As dialogue and common searching continue, there will be growth towards mutual understanding and a gradual uncovering of common concerns which will provide the basis for further research and discussion. Exactly what form that will take must be left for the future. What is important, as we have already stressed, is that the dialogue should continue and grow in depth and scope.4

The pope is willing to lay before the scientific community a challenge, an ecumenic challenge.

Is the scientific community now prepared to open itself to Christianity, and indeed to all the great world religions, working with us all to build a culture that is more humane and in that way more divine?5

Finally, rising to a crescendo of eloquence, John Paul II says,

Science can purify religion from error and superstition; religion can purify science from idolatry and false absolutes. Each can draw the other into a wider world, a world in which both can flourish.6

### Loss of Transcendence

What is the cultural situation to which the pope is addressing his elocution? What are the assumptions regarding the relationship between science and faith that need addressing?

Two distinguishable yet overlapping models of the connection between science and religion are relevant here: the *two language model* and the *scientific imperialism model*. What both share is the assumption that science is rational whereas religion is nonrational or irrational. What distinguishes them is that the two language model advocates peaceful co-existence, while scientific materialism advocates replacement of religion by science.

Harvard anthropologist Stephen Jay Gould advocates the two language model through his NOMA slogan: science and religion represent two Non-Overlapping Majesteria.

NOMA honors the sharp differences in logic between scientific and religious arguments. NOMA seeks no false fusion, but urges two distinct sides to stay on their own turf, develop their best solutions to designated parts of life’s totality, and, above all, to keep talking to each other in mutual respect...7

Robert Pollack, a Columbia University microbiologist and devout Jew, provides another good example of the two language model. His agenda is to complement evolutionary biology, genetics, and the practice of medicine with human awareness of the unknowable and transcendent dimensions of God. His faith in God as a Jew is the result of his free choice, he says. Science is rational and devoid of meaning, whereas religious feeling is irrational and the pro-
ducer of meaning. We need both. “By accepting both facts and the feelings, both can be acknowledged in scientific terms as hard-won details of the natural world and in religious terms as examples of unknowable design capable of lending meaning and purpose to the facts.”

I refer to the Pollack position as the two language view because accordingly science speaks the language of facts while religion speaks the language of feeling. Science speaks the language of reason, whereas religion speaks the language of faith. Science speaks the language of the material world; whereas religion speaks of transcendence. Rather than reduce religion to science, Pollack cedes integrity to both. Religious feeling accompanied by individual free choice is to be celebrated, not replaced by scientific rationality. There is no warfare here. Rather, this is a model of peaceful coexistence.

When it comes to scientific imperialism, in contrast however, the war is on. Those flying the banner of reductive materialism see themselves as fighting for reason against faith. Faith, as they perceive it, is a delusion. Faith is a delusion because it posits the existence of a transcendent reality yet, actually, faith is an expression of emotion. In order to win the war against religion, the strategy of reductionism is to capture transcendence and incarcerate it within human emotion.

In a recent book, the publisher of Skeptic magazine, Michael Shermer, puts it this way: some people are interpreting transcendent realities “as being outside the mind (demons, spirits, angels, ghosts, aliens, God) and the more rationally prone people are interpreting these as being inside the mind (lucid, dreams, hallucinations, fantasies).” The problem with faith, according to Shermer, is that it confuses inside emotions with outside realities. “Belief in God is a matter of personality and emotional preference, also known as faith.” Once we become rational—and science is rational—then we will not allow faith to confuse us about alleged transcendent realities outside our minds. Note how a sharp line is drawn between the rational and the irrational, and religion is placed on the irrational side.

This leads to the penchant in some materialist circles to try to explain religious phenomena scientifically. One way to win the alleged war is to provide a scientific or secular explanation of religion that is superior to the explanation provided by religion’s own explainers, the theologians. Victory is gained when the theologians are displaced by the scientists. Here, the sociobiologists provide a good example, because they presume they can reduce the transcendental claims of religious intuition to material processes active in human evolution. “Blind faith, no matter how passionately expressed will not suffice,” writes E.O. Wilson; “Science for its part will test relentlessly every assumption about the human condition and in time uncover the bedrock of the moral and religious sentiments. The eventual result of the competition between the two world views, I believe, will be the secularization of the human epic and of religion itself.” In short, rational science will provide an explanation for irrational religion.

Soldiers in the army of scientific imperialism want to pillage religion. They want to run off with two spoils of war. They want to take away reason and transcendence. Reason they want to put under scientific lock and key; transcendence they want to dump onto the trash heap of discarded history.

The Battle Against Scientism

What I here call ‘scientific imperialism’ most refer to as ‘scientism.’ The indefatigable warrior against scientism is former M.I.T. humanities professor and world renowned scholar of religion, Huston Smith. According to Smith, “science is on balance, good, whereas nothing good can be said for scientism.” What scientism adds to science is two corollaries: first, that scientific method is the only reliable method for gaining truth, rejecting religious knowledge out of hand; and, second, that material entities are the most fundamental things that exist. Neither of these corollaries is necessary. Both are deleterious.

What Smith argues for is a retrieval of the premodern and hence prescientific worldview wherein the ultimate reality can be seen as transcending the material reality subject to scientific research. What motivates Smith is the human heart, the imago dei within us that stretches us beyond the mundane toward the sublime. The language of religion is a language science cannot speak.
There is within us—in even the blithest, most light-hearted among us—a fundamental dis-ease. It acts like an unquenchable fire that renders the vast majority of us incapable in this life of ever coming to full peace. This desire lies in the marrow of our bones and the deep regions of our souls.... Whether we realize it or not, simply to be human is to long for release from mundane existence, with its confining walls of finitude and mortality.13

The limit to science is that it cannot speak about release from mundane existence; and the problem with scientism is that it forbids talk about such release. For Smith, religious language needs liberation from scientific language if the human spirit is to soar toward the sublime.

From Faith to Reason

When advocates of scientism—that is, warriors in the army of scientific imperialism—deny credibility to religious language, they imply that faith is irrational. Only science is rational, they assume. When Smith argues against scientism, he seems to give the case away by plunging into the depths of the human heart, the existential dis-ease within human subjectivity. Smith is by no means hysterical or irrational, to be sure; yet inadvertently or perhaps deliberately, he cedes the realm of reason to scientific knowing.

Yet, something significant is missing here. Throughout Christian history theologians have thought of themselves as rational. They have sought support for their faith in reason, even scientific reason. Gregory of Nyssa, for example, assumed that the divine mind and the human mind are linked by reason. “Amongst all the Powers of reason some have been fixed like a Holy Altar in the inmost shrine of the Deity.”14 Origen, for another example, saw reason leaping from physical observations to spiritual conceptions. We, by pursuing “a rational understanding, also, advancing from small things to great, and from things visible to things invisible, may attain to a more perfect knowledge.”15 My point here is that contemporary convention exploited by scientific imperialists depicts religion as nonrational, as contrary to science; whereas Christian theologians have traditionally thought of themselves as embracing what is rational in pursuit of transcendent truth.16

Reformer Martin Luther trusted the scientists of the sixteenth century to provide rational understanding of the natural world; but he trusted revelation for our knowledge of a gracious God.

The astronomers are the experts from whom it is most convenient to get what may be discussed about [the moon and the stars]. For me it is enough that in those bodies, which are so elegant and necessary for our life, we recognize both the goodness of God and His power, that He created such important objects and preserves them to the present day...I am nevertheless aware that human reason is far too inadequate to be able to gain a perfect knowledge of these matters.17

For Luther, scientific reason produces knowledge of creation, and creation exalts its creator, God. Yet, such reason is inadequate to comprehend fully the creation, let alone the divine which transcends the creation. To employ science for the purposes of denying transcendence is unnecessary if not illegitimate. Contemporary Jesuit astronomer and cosmologist Bill Stoegger mourns the loss of transcendence, a loss that is unnecessary; and he objects to blaming scientific understanding for its loss.

The spiritual and the immaterial are revealed through accepting the death of the material and the physical, and are at the basis of the destiny toward which we all tend and for which we all hope. It is this basis—this ultimate reality—which absolutized, uncritically expansionist philosophical versions of the conclusions of the natural sciences have systematically challenged and removed. And it is this removal that drains the meaning and significance from our culture and our contemporary lives...18

Scientific reasoning need not trash transcendence. Only scientism as a materialist ideology that goes beyond the limits of what can be learned from empirical research rejects transcendence.
From Dialogue to Consonance

We have just mentioned two models: the two language model and the scientific imperialist model. No dialogue between science and faith is possible in scientific imperialism. But the two language view provides a minimal opening for dialogue. Stephen Jay Gould, as we saw above, advocates “mutual respect” and that we “keep talking.” The clear advantage of the two language view is that it lends itself toward dialogue. There is a limitation, however. Gould tells us that the two sides should “stay on their own turf.” That is, by presupposing two distinct languages or separate turfs, this model presupposes at the outset that they have nothing to say to one another.

Suppose we modify the two language view slightly to make it more conversational. Suppose we accept the “mutual respect” part, where each domain is given preemptive credit for having integrity. Then suppose we add an understanding of dialogue that is open to possible overlap, cooperation, maybe even convergence. Such a move does not dogmatically assert in advance what the convergence should be; rather, it seeks honestly to inquire about possibilities. Could we open the door to more than separation by turf?

The optimistic thought that honest dialogue could open us to more has led to the proffering of a model that goes beyond the two language view, namely, hypothetical consonance. “Consonance” evokes a sense of correspondence, resonance, harmony. “Hypothetical” places it in the form of a question, the form of an inquiry. Whether science and religion may discover consonance in their respective domains of knowing is the question to be pursued. Dialogue is the path for pursuing this question.

According to the hypothetical consonance model, we begin with mutual respect between natural science and theological reflection. We presume that both science and theology are concerned with truth about the one reality in which we live and that, at least hypothetically, we ought to be able to find a common domain of discourse about it. Hypothetical consonance does not claim at the outset that science and religion have already converged; but it provides sufficient warrant to set an agenda of inquiry. Dialogue is the initial mode of inquiry, whereby we accept Gould’s admonition to “keep talking.”

Principles of Dialogue

What is dialogue? When it comes to the experience that many of us have had with ecumenical dialogue and inter-religious dialogue, we intuitively embrace principles such as mutual respect and hope for fruitful conversation. I believe the following conditions obtain for genuine dialogue to occur:

1. Each party to the dialogue should have a position to put forth.
2. Each party to the dialogue should begin with a disposition toward openness combined with the willingness to listen sympathetically to the position being advanced by representatives of the other tradition.
3. Genuine dialogue requires a disposition of love, love for the neighbor plus love for the truth.
4. Genuine dialogue requires sufficient time and stamina to discuss matters in depth and with thoroughness.19

Could such principles apply to conversations between scientists and theologians? And, if such conversations between scientists and theologians take place, might they serve as catalysts for ecumenical dialogue, or even for inter-religious dialogue? Could these other dialogues be enriched by the science-religion dialogue?

Truth

I believe the answer is affirmative. My affirmative answer lies in one feature that natural scientists at their best embody and articulate, namely, the ruthless and uncompromising pursuit of the truth. Dialogue can be trusted by all parties when all are willing to yield themselves humbly before the truth. “Good research,” says Nobel Prize winning plant geneticist Barbara McClintock, “requires a disposition to hear what the material has to say to you.”20 In the tradition of Maximus the Confessor, John Zizioulas reminds us that “nature” is the “equivalent of the truth of things.”21 Listening to what reality says—
whether it be material nature or revelatory insight—is the first and indispensable step toward truth. Scientists who imbibe this essential spirit of science bring an integrity to dialogue that can benefit us all.

That we are finite and can only see through a “mirror, dimly,” (1 Cor. 13:12), places limits on the absoluteness and exhaustiveness of the truth we can possess. Yet, these limits should in no way discourage the pursuit. Philosophical theologian Janet Soskice reminds us: “To say that man cannot see things from a God’s eye view is not to say that we cannot see truly at all. Rather it is to admit to the human condition, as good theologians and scientists have always done. We know, as men and women, not as angels.”

Short of absolute truth, we can value a dialogue for its fruitfulness “in opening up constructive insights (new knowledge).”

Rather than warfare, the relation between science and theology can be understood as a dialogue; and through this dialogue ecumenical conversation partners can be reminded of the allegiance we all need to show toward truth.

Endnotes


5 Ibid., M7-M8.

6 Ibid., M13.


10 Ibid., 103.


13 Ibid., 28.


16 It is safe to assert that Christian theology sees itself as rational. However, it would be excessive to mount an apologetic that makes theology solely responsible for the rise of empirical science with all its triumphs. John Hedley Brooke cautions us by contending “that religious beliefs have penetrated scientific discussion on many levels, that to reduce the relationship between science and religion to one of conflict is therefore inadequate, but that to construct a revisionist history for apologetic purposes would be just as problematic.” Science and Religion, 50.


22 Soskice, 86.