Think Pieces

with Philip Hefner, "A Fuller Concept of Evolution—Big Bang to Spirit"; and K. Helmut Reich, "How Could We Get to a More Peaceful and Sustainable Human World Society? The Role of Science and Religion"

HOW COULD WE GET TO A MORE PEACEFUL AND SUSTAINABLE HUMAN WORLD SOCIETY? THE ROLE OF SCIENCE AND RELIGION

by K. Helmut Reich

Abstract. This call to *think*, to *feel*, to *read* about the title subject and to *act* first lists five hurdles on the way to a more peaceful and sustainable human society. A number of successful solutions are then presented, such as the UN Convention of the *Law of the Sea*. There follow sections on potential contributions by religion and by collaboration between science and religion. My plea is for a widespread participation at all levels of society and an attitude of cautious, critical yet determined and creative advancement toward said society.

Keywords: actors; humanity's future; religion; science and religion collaboration

To make it clear from the beginning, this is not a regular scholarly work on the title subject. Inspired by the Zygon *Think Pieces* and by Stéphane Hessel (2011a, b), this is a call to *think*, to *feel*, to *read* about this subject, and to *act*. In the first part, the (social) scientific aspects will be in the limelight, in the second contributions by religion(s), and in the third part a possible joint role of science and religion.

MAJOR CURRENT ISSUES

From what I hear, read, and observe (e.g., Bercaw and Raman 2011; Hessel loc. cit.), I would list the following as the main issues we should tackle (jointly as much as possible) to achieve a more peaceful and sustainable human world society:

 A lack of willingness to confront the various issues of concern, possibly partly because of a lack of awareness (e.g., Deacon 2012; Eagleman 2011; Heath & Heath 2007; Hogan 2012; Lane 2009;

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Lloyd & Mitchinson 2006, 2010; Rifkin 2009; Walach and Stillfried 2011)

- (2) A human-made degradation of the environment and the Earth's atmosphere
- (3) An unchecked increase of our numbers and standard of living beyond what our planet can carry
- (4) A growing gap between the Rich and the Poor, both as individuals and as countries
- (5) An increasingly prevalent attitude of "MY will be done"

Depending on one's outlook, a greater or lesser number of issues may be in view, but this should not be decisive for the present considerations.

Although most issues will be clear, a few words may be in order concerning (4) and (5). There always have been rich and poor people, rich and poor countries. However, nowadays this state of affairs is more acute, much more in the public eye, and is less and less accepted. (Americans make up half of the world's richest 1%; worldwide median income is just \$1,225 a year; Censky 2012.) The problem is not only that gross income inequalities lead to a feeling of injustice and frustration by the poor but also that they can lead to a separation of the two groups (e.g., Murray 2012). Whereas the recent events in Egypt, Libya, Tunisia, Yemen, and so on also had political roots, anger has been fueled by such income inequalities (and lack of jobs). This also holds for Occupy Wall Street and similar protests. Such a situation may become explosive in connection with (5): MY will be done. By this phrase I understand an egocentric, even narcissistic concentration on one's own worldviews and interests, and a disregard of others' dignity, interests, and rights. Although "natural" for children and possibly young teenagers, my impression is that we also find it more often in adults (spouses, parents, managers, politicians, etc.) than previously. The results are neglected and exploited children, school dropouts, dissatisfied and burned-out workers, unruly citizens, and so on.

To quote Robert Wright: "I've long thought that the biggest single problem in the world is the failure of 'moral imagination'—the inability or unwillingness of people to see things from the perspective of people in circumstances different from their own. Especially incendiary is the failure to extend moral imagination across national, religious, or ethnic borders."

GENERAL CHARACTERISTICS OF A SOLUTION

I agree with Prince Philip (1982) that the likelihood of a single monolithic solution of such complex issues is small; we should rather search for a balance of pertinent partial solutions, with neither excess nor deficiency of any single one. However, finding the "mean" in any given situation is not a mechanical or thoughtless procedure but requires a full and detailed

acquaintance with the circumstances. Looking for the "mean" involves both (a) factual concerns about an optimized "objective" solution and (b) human attitudes, motivations, and so on that are instrumental to elaborate on it. In view of (1) and (5), the latter will be considered almost exclusively here, drawing notably on historical examples of success with changes for the better. This is also justified in that some of the problems are not new. For instance, when one considers Aristotle's Nicomachean ethic (Kraut 2012), one might be amazed that Aristotle discusses issues still of concern to us yet remaining unsolved in daily life, in particular the need to educate the young with a view to the good of society. The same applies to the writings by "a sincere friend (1799)" and similar works. It must be said, though, that our world has become not only more populated but also more multicultural, multireligious, and mobile than previously, which makes for extra difficulties. For example, my wife volunteers to read fairy tales and short stories to a class of 19 pupils (5 to 6 years old) representing 15 different nationalities with practically nothing in common culturally speaking, not even a reasonable understanding of the local (French) language.

Clearly, resolving the issues listed will take time and sustained efforts by all involved. Also, the effect of a given solution should not make other issues more difficult to solve.

Examples of Successful and Unsuccessful Attempts at Solutions

Rather than starting with theoretical considerations, I will first present a number of successful solutions (not necessarily of issues (1) to (5) above), going from an individual's concern to those of the member states of the United Nations and beyond. The hope is that the conclusions from these examples will be self-evident.

How to develop one's optimal personal performance. Following the personal trainer Matthias Herzog (2010, p. 35), one's optimal performance is due to the combined effect of motivation (30%), learning (30%), relaxation (15%), motion (15%), and right nutrition (10%).

How to improve one's old-age pension scheme. When years ago I started working at a new international laboratory, CERN, the mean age of the staff was about 30 years. Everybody was eager to get the research going, and almost nobody thought of pensions (except one of the administrators who initiated a particular scheme). About a quarter of a century later, when the first colleagues were to retire, it turned out that this existing scheme did not provide enough money to live satisfactorily in the changing circumstances (possibly moving back into one's own country, more expensive tax regime, etc.). We then considered that a 30% increase of the pension payments was required. This was finally achieved thanks to multiple negotiations with the Member States (and a supplementary monetary contribution by the staff) but not without effort: (1) colleagues from a given country invited the Council Delegates from their member states for drinks and a bite and presented their situation in the national language; (2) other colleagues got proficient in the use of computer programs calculating the pension payments as a function of contributions and mortality tables, and so on; (3) the Staff Association held press conferences for local and for international media; (4) when things did not move, a strike was organized during a Council Meeting; and (5) a solution was suggested in which interested participants of the pension scheme could buy additional coverage by paying known amounts.

Let me add a postscript. Given the current economic situation, CERN pensioners were recently informed that henceforth we could not expect a pension increase to compensate price inflation until the purchasing power of the existing pension had lost 8%. That reflects problems found in many pension schemes: longer life spans of the pensioners and lower contributions for several reasons, such as lesser numbers of wage-earning contributors, no increase in their wages, and so on.

How to free a colleague wrongly put behind bars. Another personal experience of combining multiple partial approaches concerns the Russian physicist Yuri F. Orlov. When he was arrested as a dissident in 1977 and sentenced to 7 years in prison plus 5 years of exile in Siberia, Western physicists met to discuss what to do besides sending scientific papers to his prison address. There were plenty of contradictory proposals: (1) cut all relations with Russian colleagues working in the West versus inviting them to our homes, comparing their standard of working and living with ours and discussing the reasons for that state of affairs; (2) decline all invitations to participate in Soviet scientific conferences versus going there wearing T-shirts with a FREE ORLOV message; (3) organizing all this ourselves versus finding a highly placed political leader willing to take this matter up in Moscow behind closed doors. As no consensus could be achieved, most of these approaches were tried. When Orlov was freed in 1986 and came to the West, we asked him which one of the various actions had worked. He replied, "All of them in combination."

How to pacify two countries that have frequently been at war with each other. A publicly known example: For hundreds of years France and Germany were periodically at war, leading to death and destruction in both countries, and this was considered a "normal" state of affairs in both countries. That came finally to an end after WWII, when notably Robert Schumann, Jean Monnet, and Konrad Adenauer together with Alcide De Gasperi and others founded the *European Coal and Steel Community* (which in addition to France, Germany, and Italy also included Belgium, the Netherlands, and Luxemburg). This pooling of essential resources both made a war between the contracting countries rather unlikely and furthered collaboration and economic development.

In the subsequent years, the Franco-German reconciliation progressed along many other paths: town twinning, student exchanges, elaboration of school books with a common view of the history of both countries with respect to each other (a 10-year enterprise), a joint bilingual TV station (ARTE), and so on. Who would have thought this collaboration between France and Germany would be possible as little as two generations ago?

How to come to an agreement between UN members on a matter of diverging The subject of this example is the actual Convention on the interests. Law of the Sea, elaborated in 11 sessions from 1973 to 1982 (in Arabic, Chinese, English, French, Russian, and Spanish), and coming into force in 1994 after ratification by 60 states. This law deals with all matters concerning the sea, from the limits of territorial waters to fishing rights, exploitation of minerals found on the seabed, guidelines to keep the sea safe and alive, and a tribunal to settle any disputes and conflicts. Invited participants were not only states and international organizations, but also, as official observers, certain trust territories and various liberation movements. As to the procedure, "The Conference should make every effort to reach agreement on substantive matters by way of consensus and thereby should be no voting on such matters until all efforts at consensus have been exhausted" (p. 165 of the Final Act, UN 2011). Diverse groups of members likely to find common solutions based on their common interests, such as island countries, countries with a seacoasts, landlocked countries, industrialized countries, and developing countries, negotiated solutions to the seven main issues.

To further strengthen any lessons drawn from these examples, I add two of failures, at least partly because of not observing such lessons.

How not to land a spallation neutron source project. A spallation neutron source is an accelerator-based neutron source that provides intense pulsed neutron beams for scientific research and industrial development. Here is the story of an attempted project I collaborated with as a consultant. It began as a common project of two large laboratories, none of which had a corresponding experience though. After a first joint proposal was worked out without deciding the location of the planned facility, one of the laboratories broke off the collaboration and started working on a new proposal. I remarked that (1) the changes made needed to be better justified to keep up professional credibility; (2) the new proposal needed to be presented to colleagues from laboratories who had more experience with building and running similar facilities to gain support and perhaps receive suggestions for improvements; and (3) offers for main components had to be solicited from industry to base the cost estimates on realistic numbers. I was informed that there was no time for all this and that anyway the good

relations with the funding authorities would ensure a positive outcome. At that point I resigned as consultant. Months later, I learned that the project was aborted by the funding authorities notably because of its ever-rising cost estimates. I was particularly saddened because some project staff who had already been hired had to be laid off.

How to lose out on a synchrotron radiation source. This is a similar story except that it had Europe-wide consequences. A number of laboratories competed for a national synchrotron radiation source. As it happened, I collaborated with one of them. Again, I pleaded for collaboration between the interested laboratories. Actually, I met with a lack of understanding that politicians do not want to favor one laboratory at the expense of deeply disappointing a number of others. I was told that this laboratory had the best connections and they were pretty certain that their proposal would go through. What actually happened is—as far as I understood—that the country in question exchanged that project at the European level for another one, a large wind tunnel, for which only one national laboratory was a potential candidate.

The role of science in all of this. As already stated, the emphasis in these examples was on the human aspects, the attitudes and aims of the actors, the methods employed, and so on. This involves the humanities and social science. However, the "objective" part of the solutions often involved natural science and technology. A recent example concerns "Peak Oil" (King 2012, 1–9). The late geologist M. King Hubbert publicized that notion in 1956 and predicted that around the year 2000 oil output would reach a peak and then decline. That became a general belief supported by the fact that indeed some of the great oilfields (Ghawar in Saudi Arabia, Cantarell in Mexico, etc.) yielded less and less, and not enough new oil was found to replace the loss. However, in recent years the story got a new angle. Better exploration methods and new technologies (horizontal drilling and below-surface hydraulic fracturing of rock) led to huge new gas and oil reserves from shale and other "tight" rock formations, particularly in the United States. For instances, both Arkansas (Fayetteville shale) and Pennsylvania (Marcellus shale) nearly doubled their reserves. Of course, even these reserves will not last forever, but there is more time now to increase renewable energy sources and better control energy use.

From the scientific-technological perspective, it seems most important to me to look for NEW solutions and be ready to revise one's views as soon as reasonable. Projects such as putting a man on the moon or, on a smaller scale, building the Large Hadron Collider (LHC) at CERN can also motivate many persons united by a common objective to cooperate in unexpected and unusual ways.

In medicine, successful treatment is normally based on a thorough diagnosis. Similarly, a realistic and penetrating analysis of both historical events and the current situation needs to be carried out before deciding how to deal successfully with society's future. In this regard, two impressive examples are Schiller's (2012) book *Finance and the Good Society* and Acemoglu and Robinson's (2012) book *Why Nations Fail*, both of which deal (briefly) with the effects of religions.

Almost as important for significant progress, I judge success with keeping up a positive, hopefully realistic, perspective to energize all involved. An example would be the book *Abundance* by Peter H. Diamandis and Stephen Kotler (2011).

ACTORS PROVIDING A SOLUTION

As can be seen from the examples given, a satisfactory, lasting solution to complex wide-ranging issues requires that all social and societal strata concerned—individuals, small groups, villages, towns, megapoles, research institutes, industry, commerce, financial services, governments, nongovernmental organizations, and the United Nations—contribute their share and support the result: The Law of the Sea is a particularly good example in that even representatives of trust territories and liberation movements were present at the negotiations and could be consulted informally. By taking their points of view into account, the danger of later dissension (when they had achieved statehood) was diminished.

The Role of Forgiving

To get from "war" to lasting peace, we need some direct or indirect forgiving. Psychologists, particularly Enright and colleagues (1992), have studied its developmental stages. To learn about all the intricacies of this process, the reader is referred to the article itself. Important aspects are (a) forgiveness is not reconciliation; it concerns only the forgiving person, not the forgiven one (the offender); forgiveness helps prevent bitterness, resentment, and possibly depression from getting hold of the offended person; (b) at the lower stages of forgiveness, it is subject to the offender having suffered a comparable amount or that he/she has repaired any damages. At the middle stages, pressure from peers or societal norms can lead to forgiveness. At the most developed stage, forgiving results from desire for social harmony or even from brotherly/sisterly loving the offender in a moral sense. It is interesting to note that in some regions of Africa, customary legal proceedings against wrongdoers do not primarily aim at punishing them but at reestablishing harmonious communal living.

RELIGIOUS ASPECTS

The Jewish and Christian Bibles contain many passages of relevance to our theme, as does the Qur'an, idem the wisdom literature of Buddhism, Hinduism, and other religions. For instance, most religions teach a form of the Golden Rule: One should treat others as one would like to be treated. They also provide guidelines for specific behavior such as the Jewish and Christian 10 Commandments (Exodus 20:1–17). A short exposition of other relevant Bible quotations follows (NRSV).

Exodus 23:8: You shall take no bribe, for a bribe blinds the officials, and subverts the cause of those who are in the right. Leviticus 19:18: You shall not take vengeance or bear a grudge against any of your people, but you shall love your neighbor as yourself (also Mark 12: 31). Psalm 19:12: But who can detect their errors? Clear me from hidden faults. Proverbs 25:9: Argue your case with your neighbor directly, and do not disclose another's secret. Matthew 5:37: Let your word be "Yes, Yes" or "No, No," anything more than this comes from the evil one. Matthew 18:21-22: If another member of the church sins against me, how often should I forgive? As many as seven times? Jesus said to him, "Not seven times, but I tell you, seventy-seven times." Luke 23:34: Jesus said, "Father, forgive them, for they do not know what they are doing." Romans 13:7: Pay to all what is due to them-taxes to whom taxes are due, revenue to whom revenue is due, respect to whom respect is due, honor to whom honor is due. Galatians 5:22–23: By contrast [to the works of the flesh], the fruit of the Spirit is love, joy, patience, kindness, generosity, faithfulness, gentleness, and self-control. Colossians 3:9: Do not lie to one another, seeing that you have stripped off the old self with its practices. Colossians 3:13: Bear with one another and, if anyone has a complaint against another, forgive each other; just as the Lord has forgiven you, so you also must forgive.

Islamic principles of morality are stated in verse 177 of Surat Al Baqarah [no. 2]: "It is not righteousness that you turn your faces toward East or West; but it is righteousness [the quality of] the one who believes in God and the Last Day and the Angels, and the Book, and the Messengers; who spends of his wealth, in spite of love for it, to the kinsfolk, to the orphans, to the needy, to the wayfarer, to those who ask and for the freeing of slaves; and who is steadfast in prayers, and gives Zakat (Alms); and those who fulfill their covenants which they made; and who are patient and perseverant in poverty and ailment and throughout all periods of fighting. Such are the people of truth, the pious" (www.islamreligion.com/videos/1943).

The Five Principles (Training Rules) of Buddhism (www.buddhanet .net/e-learning/budethics.htm) are "I. All beings have a right to their lives and that right should be respected; II. One should avoid taking anything unless one can be sure that is intended that it be for you; III. Avoid any overindulgence in any sensual pleasure such as gluttony as well as misconduct of a sexual nature; IV. As well as avoiding lying and deceiving, this precept covers slander as well as speech which is not beneficial to the welfare of others; V. Abstain from substances which cause intoxication and heedlessness. This precept is in a special category as it does not infer any

intrinsic evil in, say, alcohol itself but indulgence in such a substance could be the cause of breaking the other four precepts."

Hindu ethics—derived notably from the Upanishads and the Bhagavad-Gita—aims "to help the members of society to rid themselves of selfcenteredness, cruelty, greed, and other vices, and thus to create an environment helpful to the pursuit of the highest good, which transcends society. Hinduism further speaks of certain universal ethical principles that apply to all human beings irrespective of their position in society or stage in life" (www.hinduism.co.za/ethics.htm). "Hospitality, charity, and honesty are extolled. Piety, performance of religious worship, and pilgrimage are also important. Eight virtues of the soul were mentioned in the law book of Gautama—namely, compassion, patience, contentedness, purity, earnest endeavor, pure thoughts, freedom from greed, and freedom from envy" (www.boloji.com/hinduism/032.htm).

The remarkable overlaps and parallelisms, even strong similarities between these several views, have led to *Towards a Global Ethic: An Initial Declaration*, an interfaith declaration, drafted initially by Hans Küng, in cooperation with the Council for a Parliament of the World's Religions staff and trustees and experts (Küng and Kuschel 1993). Drawing on many of the world's religious and spiritual traditions, the declaration identifies four essential affirmations as shared principles essential to a global ethic:

- (1) Commitment to a culture of nonviolence and respect for life
- (2) Commitment to a culture of solidarity and a just economic order
- (3) Commitment to a culture of tolerance and a life of truthfulness
- (4) Commitment to a culture of equal rights and partnership between men and women

More than 200 leaders from over 40 different faith traditions and spiritual communities signed this Declaration at the Parliament of the World's Religions gathering in 1993. As such, it established a common ground for people of faith to agree and to cooperate for the good of all (www.en.wikipedia.org/.../Towards_a_Global_Ethic).

So far, we have already considered some of the positive aspects of religion. One should add that the behavioral guidelines indicated are reinforced through religious services, rites, pilgrimages, and other traditions. All this has led to remarkable achievements such as cooperative communal living, increased spirituality, creation and performance of "nourishing" great music and other artworks, and the establishment of hospitals, orphanages, aid organizations, schools, and institutions of higher learning.

However, looking at history, there are also negative aspects: dogmatic insistence on one's own religion even by force, including crusades, the Inquisition, burning of witches, and religious wars. The obvious challenge is to overcome such tendencies. Nevertheless the honed wisdom of religions potentially can contribute its share to a more peaceful and sustainable human world society.

SCIENCE AND RELIGION

Much has been said and written, also recently, on this subject (e.g., Drees 2010; Raman 2009; Reich 2008; 2009). From the perspective adopted so far, both science and religion each from their particular point of view can contribute to progress toward the envisaged human society provided there is informed collaboration and good will.

Recently, a number of authors have projected such a view—for instance Tenzin Gyatso, the 14th Lama (2011) or Wright (2009). Apart from solving certain problems together, joint insights from a scientific and a religious perspective can lead to a new understanding notably of the "Beautiful Invisible" (e.g., Goodenough 1998; Vignale 2011). A lack of willingness to confront the various issues of concern (issue [I] above) is a major hurdle for progress along that road. Even for people of good will, there is so much to know and to consider that a single person can hardly progress alone. And "interdisciplinary" collaboration is well known to be difficult. To find new promising vistas, one has to have at the very least a working knowledge of other disciplines, be ready to question them, be open to revise one's views, and to collaborate with whomever is likely to further progress, this largely despite whatever objections others may have.

This collection of qualities implies a somewhat rare competence: to be both creative and critical, defend well-established knowledge, yet progress into unknown territory guided by bold, sometimes disputed, hypotheses. The cautious yet determined advance by Walach and Von Stillfried (2011) with a view to understand certain parapsychological phenomena illustrates such qualities.

From my point of view critical hurdles in the way of progress with collaboration between science and religion are (1) understanding their respective qualities and (2) knowledge of various logics and their appropriate use. I will say a few words on each.

Because most major religions are fairly old, they originally integrated knowledge about the natural world that was quite different from ours. That knowledge was understandably used to illustrate some of the religious messages. Unfortunately, those very illustrations were too rarely updated by using new knowledge. That makes it easy for narrow-minded critics to throw out the religious messages along with such outdated knowledge. However, the core of religion is not a description of nature *per se*. Ninian Smart's (1988:11–21) seven dimensions of religion illustrate such a view: *I*. The Practical (rituals and practices, including praying); *II*. The Experiential (religious experience and emotions); *III*. The Narrative (the story side of religion); *IV*. The Doctrinal (formal teachings that underpin the

narrative/mythic parts of religion); *V*. The Ethical (formal and moral laws); *VI*. The Social (institutional organization of the religious community); *VII*. The Material (buildings, instruments of ritual, sacred places, works of religious art).

As regards different logics, let me simply illustrate how they lead to different conclusions by quoting Reich (2002, 88–90), a microanalysis of an impending partnership breakup. In real life, hardly anybody will argue in this way (and certainly not for so brief a time), people being more pragmatic, but using pure forms of thought, each with their particular logic, in this illustration might help to get a better sense of what each brings out.

John and Barbara are Piagetians (followers of Piaget using binary either/or logic): "It's all your fault, Barbara, you never understood me." "And you John, what did you really do to make me happy? I am deeply disappointed." "Well, maybe we were never meant for each other!" For John and Barbara, only black and white exist in their dichotomous world, only fully right or fully wrong. The result is likely to lead singly or in combination to (1) a lowered self-esteem, (2) anger at the partner, (3) devaluating the relationship as long as it lasted, and (4) hesitancy to make future commitments.

Dick and Joan are cognitive complex thinkers: "You know, Dick, I shall miss sailing with you; we were really a good team." "Yes, and we always knew where we wanted to go. But then, you were too easy with spending money, and that put a strain on our relationship." "Well, I thought that with all the raises you told me about, we could afford it." "Now Joan, there is a lot I could say to that and to other things. Nevertheless, I keep some good memories, and anyway, next time, I shall know better." Dick and Joan clearly differentiate and integrate their experience considerably more than our Piagetians. The breakup is less traumatic for them than for John and Barbara, and possibly Dick and Joan will still meet occasionally to speak about their respective new partnerships.

Ron and Liz are dialecticians: "Now, Ron, who would have thought when we first met that it would end with us this way? Do you remember how happy we were, the things we did together?" "Of course I do, Liz, and I shall go on valuing those times. But then, we have changed since. You have started your new career." "And you have developed new interests I simply cannot share." "Well, maybe, Liz, one day we move closer together again, but for the moment a separation seems the most reasonable thing to do. Don't you agree?" Looking thus for changes in either partner within and outside the relationship embeds the breakup into the flow of life. It could even seem as a gate toward further development and would leave positive remembrances intact.

Walt and Anne often use analogies to explain things. "You know, Walt, this is just like what happened with your brother Ted. One day he had

enough and just broke up with his partner, I never understood why." "No, Anne, that is the wrong comparison. Rather take Frank and Nancy. They were together for quite a while until it became clear to them that their partnership was not really fulfilling. So they parted ways in mutual agreement." The good aspect of this discussion is that both partners try to understand what happened (and they do it without directly attacking each other). However, as no two cases of human relationships are identical, there are limitations to this approach. Walt and Anne may never get to the bottom of their impending breakup unless they really focus on their personal case.

Bob and Betty favor relational and contextual reasoning: "Bob, it seems to me as if lately we have a problem with our relationship." "Oh, why do you say that? We still like to travel together to interesting places and we have a good time sharing our impressions, don't we?" "Yes, indeed, but for one thing, I enjoy jogging or skiing with you less and less; you are just too strong for me." "Well, should I admit that your love of going to concerts and expecting me to come along each time is getting a bit much for me? I am not against concerts, but there has to be a measure to everything." "I am glad you are so frank about it, Bob. Maybe we should do more things we like to do together and learn how *not* to get on each other's nerves by either reducing or transforming those less pleasant occasions." "That may not be easy, Betty, but let's try!" By way of bringing in the context and differentiating their respective experiences, Bob and Betty give their partnership a second chance.

¹ Both Albert Einstein (1941) "Science without religion is lame, religion without science is blind," and Pope John Paul II (1997), "Science can purify religion from error and superstition; religions can purify science from idolatry and false absolutes" have indicated how science and religion can meaningfully dialogue and work together. My hope is that such an insight will be accepted more and more and put into a far-reaching practice.

CONCLUSIONS

To repeat, the nature of this essay is a call to *think*, to *feel*, to *read* about our title subject and to *act*. To that effect a number of paths were provided: (1) A list of main issues considered as major hurdles on the way to a peaceful harmonious world society, (2) descriptions of successful and unsuccessful solutions to complex problems that contain lessons thought useful for solving the issues listed as far as the "human" aspects are concerned (with a pointer to the scientific and technological aspects), (3) the potential contributions of religion, and (4) idem for a collaboration between science and religion. The road is at least partly staked out. To advance, more good-willing workers will need to muddy their boots and help push the wagons along.

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