

Nuclear Christian Fellowship-Reno

## "Integrating our Christian Faith and our Nuclear Engineering Vocation"

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### A Christian and Nuclear Engineering

When I was exploring carrier options while an undergraduate, nuclear engineering appealed to me as it seemed the best way to even out the vast disparity of energy usage in the world and thus provide a better opportunity for the third world to enjoy the benefits the modern world. Throughout scripture God admonishes his people to look out for the welfare of widows, orphans, strangers, and particularly the poor and needy. He gave practical instructions for helping the poor such as the 'Year of Jubilee' and for farmers to but partially harvest their fields and expected the broader principle to be accomplished with creativity.

In modern times access to energy is especially burdensome to the poor, who typically give 15% of their income for energy while the rich get all they need for just 4%. The life span of high energy users is about 72 years as opposed to 44 years for low energy users. Poverty is a complex problem but my motivation to pursue nuclear engineering was that nuclear energy would be the energy source most readily transported to impoverished countries.

I soon found that other views challenged this perception and choice. A popular book on the campus, Small is Beautiful, by E. F. Schumacher, expressed the view that *nuclear power is... "an evil of an incomparably greater dimension than anything mankind has known before and is a terror threatening the abolition of man"*. From a theological perspective, a National Council of Churches Position Paper declared the very substance of plutonium to be morally evil.

While I agreed with Schumacher that there needs to be a place for small enterprises and small solutions to societal ills, the promise of nuclear energy to provide for human need made his concern trivial. The declaration by the Church Council that any mortal substance is morally evil seemed more pagan than Christian and could be readily dismissed. Christians recall that this world is part of the created order and the chemical elements are part of that order; *"God saw all that he had made, and it was very good"* (Gen 1:31).

I recall asking myself at the time if a technological society would survive if a biblical world view is abandoned, as I saw Schumacher and the Council apparently doing.

### Teachings of Jesus

*“Teacher, what is the most important commandment in the Law?” Jesus answered: “Love the Lord your God with all your heart, soul, and mind. This is the first and most important commandment.<sup>39</sup> The second most important commandment is like this one. And it is, “Love others as much as you love yourself.” All the Law of Moses and the Books of the Prophets<sup>[6]</sup> are based on these two commandments. (Matt 22-37-40)*

### **Love God**

As we love God with all our heart, soul and mind we consider Him in all our actions, in our family, community, and vocational activities. It is clear that God knows and cares about what we do for a living. He cares also how we do about our tasks. We were created in God’s image and he did all things well. We were charged at Eden to innovate, judge, and manage the creation. When we put our best effort into our vocational work we honor our Lord.

The creativity of engineering appears also to be implied in God's charge to humanity to fill the earth and subdue it, and without creating technology the vision would be futile. Man’s nature to create is, however, both a considerable blessing and a danger. It is a blessing as the technology he develops can solve many problems; it is a danger as the fall induced a capacity to (1) possibly create destructive means and ends and (2) a temptation to pull our basic confidence in the future from God to man’s handiwork. That means God’s principles and laws need to guide the creative realization of the possibilities inherent in nature.

The first commandment was a broad prohibition against faith in other gods, and the second showed a particular concern about faith in the products of man's hands, e. g. engineering and technology. We must not put our confidence and faith in the products of our vocation. On the second commandment, American poet Joy Davidman noted that: *“If we are to be saved, it will not be by wood, however well carved and polished; nor by machines, however efficient; or by social planning, however ingenious.”* Davidman also commented on the ninth commandment forbidding coveting. *“There is no use pretending that our elaborate technologies can’t be destroyed; like all other civilizations, it can. There is even less sense in pretending we can’t live without it; we can, as men did before it was dreamed of. Let us pray to be free of the idolatry of material things...”* As an object of faith, technologies such as nuclear energy will disappoint; we need an eschatological faith--to discovering that our treasure must be in heaven, where moth and rust do not destroy. Worshiping or coveting the means or the ends of technologies, or in the Progress they enable, is idolatrous and in defiance of the commandments. Our faith and hope must be in something substantially more durable. The core human dilemmas are sin and death, and technologies can but postpone the second and can affect the first either way.

### **Love neighbor**

The theology of our vocation sets the standard also for loving our neighbor. Engineering can be a responsible calling to appropriate the promise of technology to increase life span, reduce back breaking labor, allow for educational opportunities, etc. As stewards of the created order we need to do these things and do them in a responsible way. As its steward, we are not to befoul the creation; an arrogant attitude toward the creation is sinful and is not in keeping with loving our neighbor.

Hope is an essential part of the Christian message and we can work on developing nuclear energy as we serve a God who controls the outcome of history. Some with a religious viewpoint agree with Paul Ehlich that *“Giving society cheap abundant energy would be the same as giving an idiot child a machine gun”* or Amory Lovins who wrote *“It would be disastrous for us to discover a source of clean, cheap, abundant energy because of what we would do with it”*. In contrast, the biblical view is that the universe and our lives are under control of a benevolent Father and our hope is justified.

Justice and concern for the poor are also biblical themes and providing cheap abundant energy also provides resources to love our neighbor.

### **Ethics**

We note that technology seem to be principally concerned with ‘means’ i.e., with *ways* of accomplishing purposes and ‘getting things done’. What *ought* to ‘get done’, on the other hand, would not appear to be a technological question. However, as nuclear engineers and scientists we are vitally concerned that the products of our handiwork fit our obligations as stewards of God’s creation and that the work progresses in an ethical way. The American Nuclear Society has developed a Statement of Ethics and we all need to be aware of its expectations and follow them. The Statement reflects, we believe, biblical principles.