Are the core values of the radiological protection system shared across cultures?

Friedo Zölzer
Department of Radiologie, Toxicology, and Civil Protection
Faculty of Health and Social Studies
University of South Bohemia in České Budějovice

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1. A global perspective of ethics

The last century witnessed an unprecedented globalization, and many societal issues now appear in a new light.

Radiological protection is a global issue – it has been from its very beginning, and will certainly continue to be in the future.

We must therefore make sure that the values and principles underlying our system of radiological protection are understandable and acceptable around the world.

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# 1. A global perspective of ethics

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>1895</td>
<td>Nov 8th - Discovery of X-ray</td>
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<tr>
<td>1896</td>
<td>United Kingdom (incl. Ireland), France, Italy, Germany, Portugal, Czech Rep., Rep. of China, Australia, Japan, New Zealand, USA, Hungary, Poland, Russia, Austria</td>
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<tr>
<td>1897</td>
<td>Malaysia, South Africa, Slovakia</td>
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<tr>
<td>1898</td>
<td>Norway, Singapore, Thailand</td>
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<td>1900</td>
<td>Belgium, Canada</td>
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<tr>
<td>1901</td>
<td>Finland</td>
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<tr>
<td>1903</td>
<td>Netherlands</td>
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<tr>
<td>1905</td>
<td>Spain</td>
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<tr>
<td>1906</td>
<td>Bulgaria</td>
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<tr>
<td>1910</td>
<td>Hong Kong, Uganda</td>
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<tr>
<td>1913</td>
<td>Korea</td>
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<tr>
<td>1914</td>
<td>Iceland</td>
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<tr>
<td>1923</td>
<td>Egypt</td>
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<tr>
<td>1925</td>
<td>Indonesia</td>
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<tr>
<td>1926</td>
<td>Sri Lanka</td>
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<tr>
<td>1928</td>
<td>Albania</td>
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<tr>
<td>1930</td>
<td>Jamaica</td>
</tr>
<tr>
<td>1932</td>
<td>Trinidad &amp; Tobago</td>
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<tr>
<td>1937</td>
<td>Kenya</td>
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<tr>
<td>1938</td>
<td>Peru</td>
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<tr>
<td>1940</td>
<td>Tanzania, Nigeria</td>
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<tr>
<td>1945</td>
<td>Philippines</td>
</tr>
</tbody>
</table>
1. A global perspective of ethics

Nuclear power reactors in operation:
world-wide 434, Asia, Africa and the Middle East 115

Nuclear power reactors under construction:
world-wide 64, Asia, Africa and the Middle East 43

Nuclear power reactors planned:
world-wide 160, Asia, Africa and the Middle East 102

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Milestones for global values and norms:
- Universal Declaration of Human Rights (UN GA, 1948)
- Declaration of the Rights of the Child (UN GA, 1959)
- Declaration on Human Environment (UN CHE, 1972)
- Declaration on Environment and Development (UN CED, 1992)
- Universal Declaration on the Human Genome and Human Rights (UNESCO, 1997)
- Universal Declaration on Bioethics and Human Rights (UNESCO, 2005)

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1. A global perspective of ethics

Voices from philosophy:

- Jürgen Habermas (1998): „World citizenship... is already taking shape today in worldwide political communications.“

- Sissela Bok (1995): „Certain basic values are necessary to collective survival and therefore constitute a minimalist set of such values which can be recognised across societal and other boundaries.“

- Kwame Appiah (2006):
  „We need respect for diversity of culture, but there is universal truth, too, though we are less certain that we have it all already.“

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1. A global perspective on ethics

(1)

The system of radiological protection must be based on values and principles which are shared across cultures.

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2. Biomedical ethics as a model

The ICRP TG94 on „Ethics of radiological protection“ has identified four „core values“ which have permeated the system of radiological protection from its beginning:

1) Beneficence/Non-Maleficence
2) Prudence
3) Justice
4) Human Dignity

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2. Biomedical ethics as a model

These core values are similar to, but not identical with the „principles of biomedical ethics“ (Beauchamp and Childress, 1979), which are widely recognized in medicine and beyond:

1) Respect for Autonomy
2) Non-Maleficence
3) Beneficience
4) Justice

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2. Biomedical ethics as a model

Beauchamp and Childress think of their principles as part of a „common morality“, which is “not relative to cultures or individuals, because it transcends both”.

However, they are not interested in the sources of this “common morality”. They just claim that “all persons committed to morality” would agree with their four principles.
2. Biomedical ethics as a model

In my view, fundamental orientation has been provided throughout the ages by the written and oral traditions of the different cultures, and these continue to be of great influence.

The principles of biomedical ethics are indeed endorsed by the Sacred Scriptures of all the world’s great religions, the works of philosophers such as Aristotle or Confucius, as well as the oral traditions of indigenous peoples (Zölzer, 2013).
2. Biomedical ethics as a model

(2)

Similar to the principles of biomedical ethics, the core values need to be shown to be backed up by the written and oral traditions around the world.
3. The four core values

1) Beneficence / Non-Maleficence

“Do good and do no harm.” (Hippocrates)

“To save one life is tantamount to saving a whole world.” (Talmud)

“If a less substantial instance of harm and an outweighing benefit are in conflict, the harm is forgiven for the sake of the benefit.” (Islamic Jurisprudence)
3. The four core values

2) Prudence

“The cautious seldom err.” (Confucius)

“Act like a person in fear before the cause of fear actually presents itself.” (Krishna)

“Tie up your camel first, then put your trust in God.” (Muhammad)
3. The four core values

3) Justice

“Hurt not others in ways that you yourself would find hurtful.”
(Buddha)

“Never impose on others what you would not choose for yourself.”
(Confucius)

“Therefore whatever you want people to do for you, do the same for them.”
(Jesus Christ)
3. The four core values

4) Human Dignity

“I am the same to all beings. In a Brahma or an outcast, the wise see the same thing.” (Krishna)

“Do we not have one father? Has not one God created us?” (Malachi)

“Ye are all the leaves of one tree and the drops of one ocean.” (Bahá‘u’lláh)
3. The four core values

(3)

The four core values of radiological protection can indeed be found in the written and oral traditions of different cultures.

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4. The four (?) procedural values

5) Transparency

„It is always proper to speak the truth.“ (Mahabharata)

“Every day I examine myself... have I always been true to my word?” (Confucius)

“But let your communication be, Yea, yea; Nay, nay: for whatsoever is more than these cometh of evil.” (Jesus Christ)

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4. The four (?) procedural values

6) Accountability

“The noble person places demands upon himself, the petty person blames others.” (Confucius)

„I the Lord search the heart and test the mind, to give every man according to his ways, according to the fruit of his deeds.“ (Jeremiah)

„Each of you is a guardian and is responsible for those whom he is in charge of.“ (Muhammad)

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4. The four (?) procedural values

7) Stakeholder involvement

“Meet together, speak together... May your counsel be common, your assembly common, common the mind.” (Rigveda)

“When big things are at stake... many should discuss and clarify the matter together, so the correct way may be found.” (Shotoku Taishi)

„Take ye counsel together in all matters, inasmuch as consultation is the lamp of guidance.“ (Bahá‘u‘lláh)

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4. The four (?) procedural values

8) Empathy

“Loving kindness, compassion, empathetic joy and equanimity are the four sublime attitudes.” (Buddha)

“Loving kindness is greater than laws; and the charities of life are more than all ceremonies.” (Talmud)

„Never criticise a man until you've walked a mile in his moccasins.“ (Native American Proverb)
4. The four (?) procedural values

The four procedural values of radiological protection can also be found in the written and oral traditions of mankind.

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5. The importance of balancing

The values underlying radiological protection, similar to the principles of biomedical ethics, have only *prima facie* validity, i.e. they apply as long as there is no conflict between them.

If there is, they need “balancing”, which means their relative importance must be weighed.

This is where cultural specificity can come in, because not everybody everywhere will give the same answer to the question which value should prevail in a particular situation.

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5. The importance of balancing

Should we ignore a patient’s reluctance to having another X-ray examination and impose it on him or her anyway because we know it will allow us to better assess therapy options?

This depends on the balancing between beneficence and human dignity. Both values are upheld in (e.g.) Korea and the Czech Republic, but may have different weights here and there.
5. The importance of balancing

(5)

Making the values underlying radiological protection explicit, and assessing their cross-cultural validity, will help us decide where to accept a plurality of approaches and where not.

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