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# **A Global Basis for Ethics from Evolutionary Psychology**

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# ICRP and IRPA Initiatives

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- **ICRP has established TG 94 to develop a document on the ethical basis of radiation protection**
- **IRPA is holding regional workshops to solicit input from the international RP community on this topic**
- **Since both ICRP and IRPA are global organizations, the guidance provided must be globally applicable and acceptable**
- **Western and Eastern philosophical traditions are broadly compatible, but not identical**



# RP Principles

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- **The ICRP triad of justification, limitation, and optimization can be linked to the western concepts of utilitarian (outcome), deontological (duty), and Aristotlean (vitruue) ethics, as well as to the eastern, Confucian concepts.**
- **However, there is difference between western and eastern systems in the relative importance of the primacy of the individual**



## One point of disagreement

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**Zölzer (2013) has suggested that a “common morality” exhibited by the world’s religions could be one basis of a globally accepted ethical system. But...**

**“HumanRight-ism, a liberal way of thinking that places human rights and secular law above religion, has to be addressed swiftly as it is against Islamic teachings.” Prime Minister Datuk Seri Najib Razak of Malaysia (New Straits Times, 14 May 2014)**



# Evolutionary Psychology

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- **This subdiscipline attempts to understand human behavior in terms of evolutionary principles, i.e., a certain pattern of behavior survives in human beings because it contributes to evolutionary success, i.e., propagating genes into future generations.**
- **At first glance, altruism seems to violate evolutionary principles: how does contributing to another's success help my genes propagate?**



# Kin Selection

- **Evolution strongly biases us in favor of our children, who are the vehicles for gene propagation**
- **Similarly, we are are biased towards others who share our genes, such as siblings and close relatives.**
- **This connection is easily extrapolated to more distant relatives, tribal relationships, and eventually to nationality**



## But what is in it for me?

- If I support another person, e.g., by sharing food, I accept a disadvantage
- But if the person I benefit returns the favor, i.e., by later sharing their food with me, I thereby gain an advantage
- Thus altruism is advantageous if it is reciprocal, i.e., you scratch my back and I'll scratch yours
- Reciprocal altruism has been shown to be an evolutionarily stable state



## Examples

- **Cleaning behavior by fish**
- **Warning calls by birds**
- **Food sharing by bats**
- **Food sharing by primates**
- **Grooming behavior by primates**
- **In humans, reciprocity need not be physical, it can be psychological:  
self-esteem  
peer recognition  
group identity**
- **And it can be transferred: “pay it forward”**





# The Golden Rule

**Reciprocal altruism is strongly emphasized in many religious traditions (Zölzer):**

**“Do unto others as you would have them do unto you” (Matt 7:12, Luke 6:31)**

**“Do not to others what you would not have done to yourself” (Hillel)**

**“As you would have people do to you, do to them” (Kitab al-Kafi, vol. 2, p. 146)**

**“Hurt not others in ways that you yourself would find hurtful”  
(Udarnavarga 5:18)**



## If no reciprocity...

- **Justice is violated, and restitution is owed**
- **Expands from personal relationships to environmental and intergenerational justice**
- **Reciprocity must be commensurate, i.e., the return must be equivalent to the benefit conferred**
- **Unfortunately, valuation of the return is in the eye of the beholder**



# Application to RP

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## Justification

- A risk is accepted, so there must be a reason, i.e., some benefit also involved

## Limitation

- Prevents the accepted risk from exceeding any likely benefit

## Optimization

- Prudent balance of benefit and risk
- Economic and social considerations
- Acceptance of competing perceptions can be a mechanism for autonomy, dignity and respect



## Next steps

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- **Develop the paper for distribution and discussion**
- **The connections between the RP principles and the concepts of reciprocal altruism need to be specified in detail**
- **The advantage is that evolution is common to all humans, whereas religious, economic, and social practices are not**



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