## Western Science Education in the Monasteries of Tibetan Buddhism.

Werner Nater\*

At the request of the Dalai Lama, the monastic Tibet Institute in Rikon has been involved for 18 years in the efforts to make nuns and monks, living in Tibetan exile monasteries in India and Nepal, acquainted with Western natural science. What considerations lie behind this project?

In 1959 the 14th Dalai Lama fled Tibet to India. Many fellow Tibetans followed him. As a consequence of that, and in concomitance with the intense traveling of the Dalai Lama, Tibetan Buddhism started to open to the West. At the same time, the interest of the western population in Tibetan Buddhism grew. Soon, however, a major communication problem between the Western and Buddhist ways of thinking became apparent. For instance, this divergence is illustrated in the fact that in Buddhism, unlike in Christianity or Islam, no creator god is worshiped, but each person can find the divine within oneself.

## **Buddhist contemplation of nature**

The Buddhist and Western views of nature differ greatly: Buddhist philosophy (Illustration 1) is largely based on the teachings of five masters who lived on the Indian subcontinent from the 2nd to the 7th century. Their writings are mainly interpretations of Buddha's teachings (5th century BCE). Since then, with few exceptions, hardly anything new has been added. Monks and nuns memorise large parts of these texts and then, through the practices of debating and meditating, gain their own understanding of them.

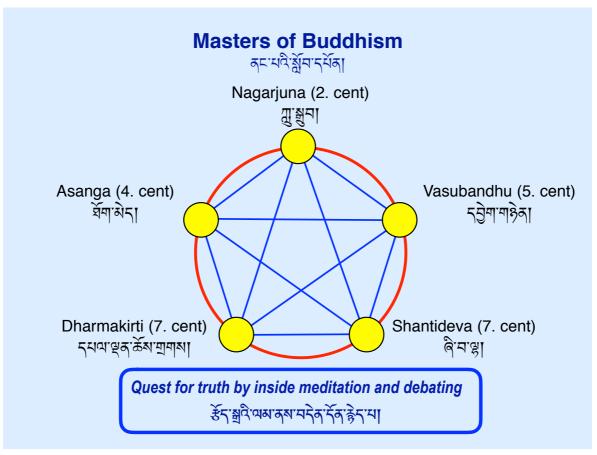


Illustration 1: The yellow dots represent the five great masters of Tibetan Buddhism. Their teachings were mainly a result of introspection (without external observations of nature). The quest for truth consists primarily in confronting and correlating these teachings through debates.

Western philosophy and science appear quite different (Illustration 2): starting with the Greeks (which were well acquainted with Eastern teachings), the Occident attained its knowledge through observations and experiments. Subsequent scientists developed their findings, building on the foundations established by their predecessors. Especially Galileo (Renaissance) and Descartes (Enlightenment) provided decisive impulses for the occidental way of thinking that, throughout the age of colonization, became the basis of today's globalization.

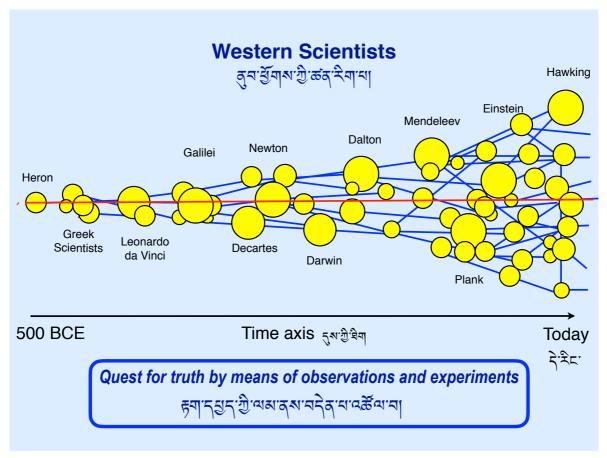


Illustration 2: Each yellow dot corresponds to a scientist. Of course there should be thousands of such points. Everyone builds on the knowledge and experience that their predecessors achieved by means of observations and through discoveries. In this context, experimenting and measuring plays a central role, although Heisenberg's uncertainty principle sets limits on the accuracy of their results.

The importance of the project "Science meets Dharma" (SmD: "Western Science and Buddhist Teaching Meet Each Other") is underscored by the following reasons:

- 1. Globalization does not stop at the monastery precincts.
- 2. The growing gap between nuns and monks, on the one hand, and the Tibetan laymen, on the other hand, has to be reduced since they live in India, Europe and America, where they are confronted with the Western way of thinking.
- 3. A dialogue between Western way of thinking and Buddhism is also in our interest. It can enrich not only our search for meaning, but also our science, which indeed today, with its model thinking, reaches insurmountable limits (eg wave-particle duality).

## **Opening the Way to Western thinking**

The SmD teaching is based on the methodology and didactics of Martin Wagenschein (Wagenschein M., 1995: The Pedagogical Dimension of Physics). The objective of the lessons is not about imparting a general knowledge of mathematics, physics, biology and chemistry. Rather, Western way of thinking is conveyed by means of observation and experience, using selected examples from everyday life.



Illustration 3: With extreme intensity monks dissect a fish as part of the "Science Introduction Workshop" (Level 2). For this purpose, they help themselves with the latest technology, by illuminating the details with their smartphones. After dissecting out the brain and spinal cord, one asked, "And where is now the consciousness?" This question shows us the limits of Western science as well as the opportunity to search for new ways of researching truth in dialogue with Buddhist scholars.

In those monasteries where SmD teachers have taught for years, the responsibility for science education has meanwhile passed to the monastery authorities. Today, the SmD project focuses mostly on smaller monasteries in India and Nepal, which do not yet offer science education. The program starts with the "Science Introduction Workshops", a one-week event with six hours of teaching per day. The goal is to motivate and provide nuns, monks and monastic authorities with insights into the natural sciences. If a monastery shows itself ready to incorporate science lessons in the monastic curriculum, coaching support will be provided to the construction and implementation of the program. However, it will be decades before the vision of the Dalai Lama will one day be fully realized.

\* Werner Nater is the project leader for "Science meets Dharma" at the Tibet Institute Rikon since 2011 and is board member of the institute. After completing his studies in Physics at the ETH, he earned his doctorate there in Atmospheric Physics. From 1979 to 1983 he was a lecturer in Physics at the Technikum Winterthur (the former ZHAW School of Engineering). At the Paul Scherrer Institut (PSI), his research focused on forest damage and ecosystem. From 1987 to 1991 he acted as a project manager for the Swiss Agency for Development and Cooperation (SDC) in Nepal.

Published on 10.10.2018 in the ZHAW-Impact under: <a href="https://browserclient.twixlmedia.com/f470c3072c8ea5f3593732413d86c813/dossier%2042">https://browserclient.twixlmedia.com/f470c3072c8ea5f3593732413d86c813/dossier%2042</a> 18/4728