

# MEDITATION AND SCIENCE: THE *SHAMATHA* PROJECT

**Adeline van Waning participated in The *Shamatha Project Meditation and Science*. In the book *The Less Dust, the More Trust* she brings to bear her professional training and experience as a psychiatrist together with her knowledge and experience as a meditator to explain the nature and significance of these practices from both Buddhist and scientific perspectives. Frits de Vries wrote a review.**

## Introduction

There are two central meditation practices on the regular Buddhist path: *shamatha* or 'calm abiding' and *vipashyana* or 'clear seeing'. *Shamatha* is also translated as 'peacefully remaining' or 'tranquillity meditation'. In *shamatha* you get instructions for your ordinary, conceptual mind. In general you first train with one pointed concentration on a certain object, in order not to let your attention go from that object. When you are familiar with that, you fix your concentration on a point in the space before you and when familiar with that you train without a fixation point. In the Dzogchen training of *shamatha* you do not suppress or reject your thoughts, but when you see them arise you do not follow them. Result is they resolve on their own and you remain peacefully. When you are able to experience long gaps between thoughts in your stream of consciousness you can go to the training in *vipashyana*, which is also called 'insight meditation' or contemplation. In Dzogchen it has the special meaning of a training beyond your ordinary, conceptual mind on the central experience of Dzogchen called *rigpa*: the innermost nature of mind.

The attention in the *Shamatha Project* is fully on the preparatory *shamatha* practices. In the Bon Buddhist tradition *shamatha* is called *zhiné*. *Sha-*

*matha* and *zhiné* can have far reaching mind changes. In the *Wonders of the Natural Mind* Tenzin Wangyal Rinpoche describes how his long during practice of *zhiné* lead him to signs of the experiencing of the innermost nature of mind. Thereafter the confirmation of this experiences by his teacher Lupon Sangye Tenzin was given through the 'direct introduction' to Dzogchen (1, p. 19).

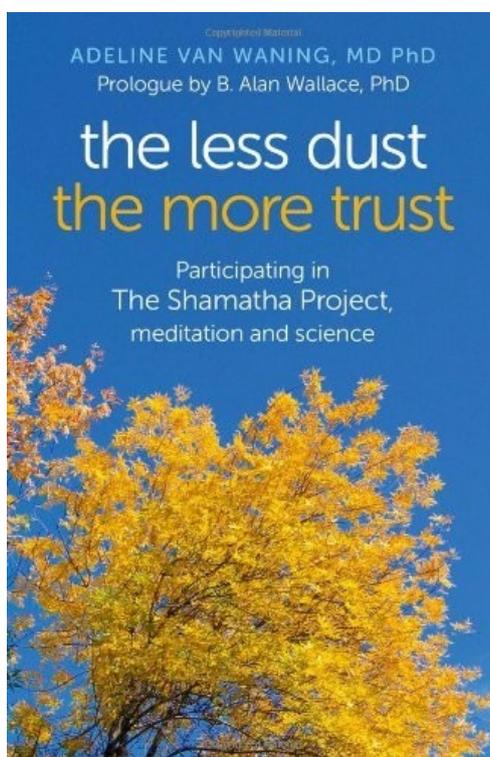
## Mind and Science: the *Shamatha Project*

A group of dedicated scientific researchers, lead by Dr. Clifford Saron, did empirical measurements on Buddhist meditators. Years before Saron was asked to give a presentation to the Dalai Lama, in the third series of *Mind and Life* dialogues between scientists and the Dalai Lama (2). This invitation lead to an encounter with Alan Wallace and the co-founder of the *Mind and Life* dialogues, Francisco Varela. From this meeting resulted the plan for a more comprehensive study on meditation, with full empirical measurements. As perhaps known the Dalai Lama has a life long standing interest in western science. That is why he fully endorses this project.

The overarching research questions for the Project were:

- Can attention be trained through focused attention meditation practice?
- Can training in Loving Kindness, compassion and other beneficial aspirations support attention and improve emotion regulation?
- Are improvements in attention related to psychological function?
- What are the subjective, behavioral, neural, and physiological correlates of such training?

In this way you can have a more quantitative insight into the achievement of *shamatha*. The *Shamatha Project* was set up, based on a serious



meditation program and also on a serious research hypothesis:

*“The research hypothesis was that three months of shamatha training, combined with cultivation of the four ‘qualities of the heart’ would result in improved attentional performance (vigilance, selectivity, and meta-cognitive control), as well as greater compassion, security, and ability to diminish the impact and duration of negative emotions. The large amount of data generated from this study is currently being analyzed.”*(3)

The research was done in a retreat center in Shambala Mountain Center in Colorado, with a selected group of sixty meditators in an intensive three-months meditation program with a longitudinal randomized waitlist control approach. The meditation was lead by Dr. Alan Wallace, an experienced *shamatha* and *vipashyana* trainer. The selected retreatants meditated mostly alone but also as a group. The whole project is long-term research, publications and abstracts are published in scientific journals and magazines. To get an impression of the full scope of the project, look at the project page of the University of California, Davis: [mindbrain.ucdavis.edu](http://mindbrain.ucdavis.edu).

**A personal account**

As a participant of the project, the Dutch psychiatrist Adeline van Waning, kept a diary during the three-months meditation period. She started writing in the context of preparing a thesis for an

MA in Buddhist Studies about the *Shamatha Project*. This material, enriched with more elaborate studies on the *shamatha* and contemplation meditation fields, evolved into a larger text. The text was complemented with guided meditations for beginning Buddhist practitioners. Also, in two chapters she discusses a more psychological point

of view on meditation experiences, not only from her first-hand experiences, but also from her psychological expertise as a professional psychiatrist. As a scientist herself (Ph.D.) she considers the current research outcomes of this unique and ongoing project. (4)

The project started in 2007 and is still ongoing. In her book she has some important recent news (4, p. 361):

*“The news came in fall 2012. This is the headline message of the news-release: The Shamatha Project has been awarded a grant of 2.3 million dollar over three years to continue and extend this most comprehensive investigation yet conducted into the effects of intensive*

*meditation training on mind and body. The Grant, titled “Quantifiable Constituents of Spiritual Growth” will support the latest phase of research that will address two questions. Question one: “After going through intensive meditation training, what differentiates people who develop their lives in ways that relieve suffering for themselves and others close to them from those who do not?” And question two: “How are measured changes in cognitive, psychological and physiological*



Shamatha Diagram





Dr. Saron from the University of California, Davis (UC Davis) talking with His Holiness the Dalai Lama.

*processes related to people's life experience years later?"*

In line with her meditation experiences in the project Adeline studied also more advanced meditation practices like *Mahamudra* and Dzogchen. In the book, she explores the *shamatha* practices in this larger context. Although her meditation experiences are touching on the borders of the primordial state and *rigpa*, the *Shamatha Project* is not designed to go that far. A recapitulation of her experiences is presented in a review (5):

*"When increasingly she could let go of habitual attachment to self, she could feel that not she did things but that things happened through her, resulting in experiences of spaciousness and openness, with feelings of subtle lightness and joy. She noticed how sometimes there was the sense of transcending her physical senses and yet experiencing everything around her more clearly. She achieved a sense of freedom, of not being bound by beliefs, convictions and expectations. Also, she describes a heightened sense of presence in the world. The author addresses a sense of 'breaking the barriers of anxiety,' getting in touch with a deeper trust, beyond the 'dust' of attachments and conditionings."*

Because of these possible far reaching experiences, the basic meditation practice of *shamatha* is very fundamental in the Buddhist tradition. Alan Wallace, her *shamatha* teacher, designed the meditation side of the whole *Shamatha Project* and supervised it. He also wrote the prologue for Adelines book.

As stated before, meditation practices like *shamatha* or *zhiné* can lead to far reaching mind changes. When done properly there is a smooth

connection with the contemplation practice that follows. You need then a teacher or master for the necessary guidance. Especially when you want to continue with Dzogchen contemplation you have to connect with a qualified Dzogchen master. When you are ready he gives you the 'direct introduction' to the natural state. The *shamatha* or *zhiné* practice provides you with the indispensable mental stability to step into the more advanced meditation practices of contemplation.

### Conclusion

Based on her first-hand experiences combined with study of meditation fields Adeline has written a very rich book for beginning and more experienced Buddhist practitioners alike. Concentration skills you not only need in this life practice, but also in other consciousness states, like lucid dreaming, sleep yoga and finally the intermediate *Bardo* state.

**Text by Frits de Vries**

### References

- (1) *Wonders of the Natural Mind*, Tenzin Wangyal Rinpoche, The Essence of Dzogchen in the Native Bon Tradition of Tibet, Snow Lion Publications, 2000.
- (2) *Gentle Bridges*, Conversations with the Dalai Lama on the Sciences of Mind, J.W.Hayward and F.J. Varala, Shambala publication, 2001.
- (3) See: Shamatha Project on: [www.fetzer.org](http://www.fetzer.org).
- (4) *The Less Dust, the More Trust*, Adeline van Waning, M.D. Ph.D., John Hunt Publishing, 2014.
- (5) See: [www.amazon.com](http://www.amazon.com), review J. Broekhoven.

Origin of photos:

Shamatha Diagram from: [www.rigpawiki.org](http://www.rigpawiki.org).

Dr. Saron with H.H. the Dalai Lama from: ....

