

Woad water wonder

*From the diary of the agricultural scientist
Dr. Renate Kaiser-Alexnat*

The number three has always played a significant role in my life. Indeed it even began when I was born as the third of seven children into a farming family. My doctorate was about the resistance of German winter barley cultivars to the Barley Yellow Mosaic Virus. With the aid of classical genetic trisomic analysis and with a set of seven barley strains, each having one of the seven barley chromosomes in triplicate, I was able to localize the resistance gene in question to chromosome 3. Thus the result of my thesis can be summarized with the number three. Later I narrowed down the gene locus with the aid of telotrisomic analysis, in strains of barley, each having one chromosome arm in triplicate, on the long arm of chromosome 3.

The soil borne Barley Yellow Mosaic Virus was first identified in Japan. In Europe it was not confirmed until 50 years later. At that time in Germany cultivars with identical resistance to Barley Yellow Mosaic Virus were still available, even though they were not bred for this particular purpose. Due to the historically earlier appearance of Barley Yellow Mosaic Virus in Japan, the Japanese were well in advance of the Europeans in Barley Yellow Mosaic Virus research. For this reason I visited my Japanese colleagues in connection with an international conference in Kyoto.

After my return from Japan I decided that I would like to go back and the next stay would be longer. As luck would have it, shortly after this my prospective host professor came to Germany. When we met, we arranged my visiting fellowship in the Land of the Rising Sun. Following a selection process by the "Alexander von Humboldt Foundation" I received a grant from the "Japan Society for

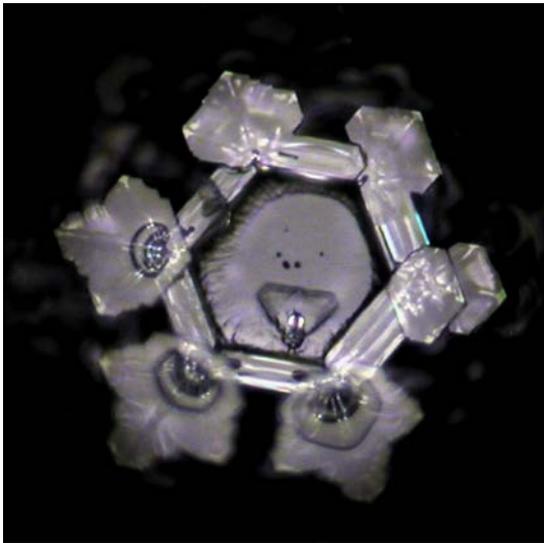
the Promotion of Science" which made a research stay in Japan financially possible for me. There was as well a strong parallel between my work and that of my host professor. Through his research he had found out that a very important Asian resistance gene against Barley Yellow Mosaic Virus is also located on the long arm of chromosome 3.

My stay in Japan was followed by a three-year research project, in which I was engaged in the cultivation and evaluation of an extensive range of dye producing plant species. Among the dye plants the emphasis of my work was focused on the species dyer's weld which produces a yellow dye. In the human energy system yellow is the colour of the third chakra. After Barley Yellow Mosaic Virus and dye plants, corn pests were the third field of my active research existence.

Because I had been so enthused by the dye plant project, the wish emerged to work with dye plants again. To realise this aspiration within the strictures of the "Institute for Biological Control", where I worked at that time, I did trials testing the inhibitory effect of woad fruit on the germination of other plant seeds as well as the efficacy of woad leaf extracts against some pest and diseases in cultivated plants.

Through the close connection with the woad in my garden, I received information of the metaphysical dimension about this species of plant around Epiphany. Stimulated by the title of the book "*Wunderwesen Wasser*" – "Wonder (being) water" written by my choir friend Dr. Marianne E. Meyer, I created the story book "*Wunderwesen Waid*" – "Wonder (being) woad" to document my most remarkable experiences with this native indigo-bearing plant woad. In the meantime "Woad (being) wonder work", which is how a friend who is specialist in German studies named the book, has been published under the title "Wonder Woad" in English as well.

After Marianne told me enthusiastically about her water crystal photos, I wanted to conduct an experiment of my own. In the week before my birthday in 2008 I set a test-tube with distilled water in the middle of the leaf rosette of my woad plant. On my birthday I sent the woad water sample to the Swiss laboratory of Ernst F. Braun, who specializes in taking photos of water crystals to visualize energetic signatures, using the methods of the Japanese author Dr. Masaru Emoto.

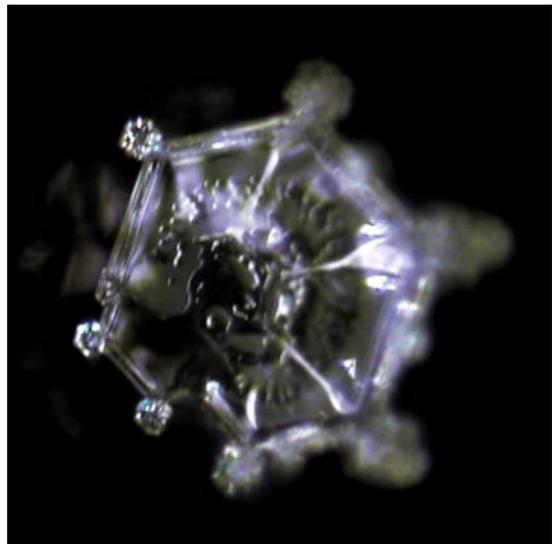


First woad water crystal with triangle

The metaphorical language of water crystals cannot be understood analytically, but instead is perceived intuitively. Marianne explained to me that the first two pictures of a series with water crystals are the most important. When I showed her the pictures of my woad water birthday experiment, Marianne said spontaneously: “In the first picture I see a triangle and the second picture seems to look like a mushroom cloud.” I was immediately able to understand her interpretation of the first picture as a triangle, because the three was important to my research work. When I looked at the first

water crystal the European corn borer moth came spontaneously to mind, because at that time I was engaged in the control of corn pests such as this economically destructive moth. The second picture was lost on me.

In the year of the woad water experiment I held my last scientific talk to an international audience at an event involving three conferences. On the way to the conference I landed in England at Birmingham airport early one morning. On the same morning the son of my friend from Tokyo landed together with his friend at the same airport on the outset of their European tour. Our travel preparations were independent of each other and we didn't see each other at the airport. I only accidentally learned about this extraordinary coincidence, because my friend and her husband planned, that the two boys should visit our family at the end of their European trip.



Second woad water crystal with mushroom cloud

Only three years after the woad water experiment, the interpretation by Marianne became clear. The picture of the second water crystal shows something that at that time was a future

direction for research. Soon after the earthquake with its epicentre in Sendai in Japan on 11th March 2011, and the consequent atomic catastrophe of Fukushima, it came to me in a flash that woad is able to draw radioactive substances out of the soil and thus woad cultivation could contribute to the cleaning of the soil. During my occupation with this unexpected theme I found confirmation that in similar manner plants of the family of crucifer, to which woad belongs, are cultivated for the hyper accumulation of heavy metals. However, it was necessary to verify this hypothesis with a scientific experiment.

At first I contacted my friend concerning a woad experiment in Tokyo or Fukushima. The experiment design was comparatively simple, but my friend informed me that such an undertaking would most likely come up against closed doors in Japan. However the son of my friend, who visited us at home three years ago, had started a new job in the city of Sendai a few days before the momentous earthquake took place. I hoped that this would provide a chance to make the cultivation experiment happen. Would he personally take a packet of woad seeds that I would send to him, to the agricultural faculty of the Tohoku University? Nevertheless this tactic came to nothing, due to the tense and difficult situation in the troubled area so I temporarily stopped my efforts.

A short time later, an acquaintance called very excitedly and told me that she had visited an event the day before. During the break the conversation turned to Japan. One woman said that that morning she had read in the Stuttgart newspaper that there is a plant, which is used for Prussian blue dyeing, and that it is able to draw radioactive substances from the soil. Immediately I contacted the lady and asked her to send me the article “*Mit Preußischblau gegen radioaktives Cäsium*” - “With Prussian blue

against radioactive caesium” printed in the Stuttgart newspaper from the 2nd of April 2011. Although Prussian blue is a natural inorganic pigment and has no bearing on woad, I took this opportunity to spring into action again and send a mail to the Tohoku University in Sendai. But I didn’t receive any reply.

One month later, to my great surprise, my Japanese friend sent me a mail with information about a newspaper article which urged the cultivation of sunflowers around Fukushima. This message from Japan gave me courage for further steps. I contacted the person in the article as well as the Japanese deputy minister for agriculture, because he had assured his support for this proposal. My mail concerning this included a suggestion for a woad cultivation trial in the neighbourhood of Fukushima to verify the above hypothesis with a scientific experiment. I didn’t receive a reply to this mail either.

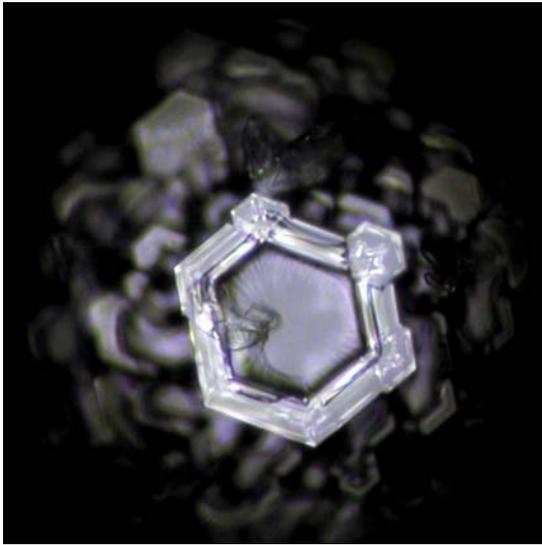
Everything has its time.



“Tree triplets”

On the same day that Marianne informed me, that she had received an acceptance for her third water book, I discovered a formation with three trees standing in a row very close to each other during a walking-tour in the Black Forest. At that time I had not yet read Marianne’s message. Later on, when I browsed my diary for this essay in Marianne’s new water

book, I realised that I had begun with this essay exactly five years to the day since my last working day on the active side of research. At the same time a craftsman for whom we had waited a long time, began with the sanding of our parquet floor. In his work I saw a parallel to the theme of cleansing the soil through the cultivation of woad. When reflecting on this coincidence I saw confirmation, that now the time was ripe for the publication of my stories about the woad water wonder.



Last woad water crystal with a Japanese man in the gratitude position

In Japan reverence is expressed by a deep bow. In the last water crystal picture of my birthday trial I see a Japanese man kneeling on the ground in a position of gratitude. This crystal expresses my deep gratitude for the wonderful offer of assistance.

If one considers scientific development, it is clear that the crossover between spiritual and material becomes more and more verifiable. At the interface between a pure materialistically orientated research and a holistic contemplation, the view

turns from the pure material to the spirit, which quasi represents the motor for the embodiment of the material. The water crystal pictures confer a visible expression to this universal knowledge.

In the awareness of the entity of nature and the metaphysical around us, I see the key to a true science, in which the separation between the humanities and the natural sciences will disappear with increasing awareness.

In a particular phase of life I realized: "Everything is absolutely logical, each stone - how it sits, each blade of grass - how it stands." My previous perspective of the world extended, whereby I watched the game of life from a higher perspective. For years I wrote down my experiences to publish them in a book called "Researches of a soul". Meanwhile I accepted that life is a mystery that only God can comprehend.

Michelstadt, 19th December 2014

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Supplementary notes

Before I finished the German version of this essay on 21st December 2013, I gave the woad water essay to a colleague with a request for feedback. When I asked him for his opinion, he showed me a document on which he was currently working at that time. As though by accident he pointed to a passage, in which the date 11th March 2013 was readable. Immediately I remembered that it was the anniversary of the earthquake in Sendai. My translation of the essay into the English version was finished exactly one year later to the day of my request for feedback from my colleague.