

## **Water as a Multidimensional Entity**

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# Water as a Multidimensional Entity

## An Interview With Franklin Frederick, Advocate of the International Free Water Academy, Brazil



**FIGURE 1** Franklin Frederick in the Rio de Janeiro Botanical Gardens. (Photo by Stephan Rist)

**Stephan Rist (MRD):** Could you tell us something about the mountainous Circuito das Águas region of Brazil where you have lived and worked?

**Franklin Frederick:** It is in the middle of a huge area called Serra da Mantiqueira. Besides the Circuito das Águas—or “Water Circuit”—with its high concentration of mineral water sources, the region contains one of the most important Brazilian national parks, the Itatiaia Park, known for its famous mountain peak, the Agulhas Negras (Black Needles). The mineral water sources are concentrated in “water parks” distributed among 4 small towns: São Lourenço, Caxambu, Cambuquira, and Lambari. Towns were founded around these water parks in the 19th century, when the water sources and their medicinal properties were discovered.

Apparently, people in Circuito das Águas recently began to mobilize against Nestlé/Perrier’s production of “Pure Life” water in São Lourenço. Why did they do this, and what are the main stages in this mobilization?

About 3 years ago many people in São Lourenço, including myself, began to notice a change in the taste of the mineral waters inside the Water Park, and one of the most famous water sources there, the Magnesiana, dried up and stopped flowing. We suspected that these developments were linked. Water usually needs hundreds of years inside the earth to be slowly enriched by minerals. If it is pumped in quantities greater than nature can replace it, its mineral content will gradually decrease, bringing the change in taste that we were noticing. We investigated this situation until we eventually found that Nestlé/Perrier was responsible for what was going on. We decided to ask the company for an explanation, and the Town Council held a public meeting with several members of the Board of Nestlé/Perrier in Brazil. The company failed to answer our questions or understand our concerns. Worst of all, they were so arrogant that it was clear we could expect no help from them.

Next we created the Water Citizenship Movement and collected information about production of Pure Life. We discovered that Nestlé/Perrier was pumping huge amounts of water in the park from a well 150 m deep. The water was then demineralized and transformed into Pure Life table water. As the Brazilian constitution does not allow mineral water to be demineralized, we brought our findings to the attention of the public prosecutor of the State Public Ministry in São Lourenço, who began an official investigation of Nestlé/Perrier’s activities in São Lourenço. This led to charges against the company at the end of 2001, and a federal investigation of Nestlé/Perrier. Meantime, we organized citizen protests against the company and collected 3000 signatures on a petition.

What is the outlook for the future? Do you plan to capitalize on and foster the social mobilization and creativity of the people in the region?

The Nestlé/Perrier issue aroused the whole area. Other towns feared that what was happening in São Lourenço could soon happen to them as other water parks faced the threat of privatization. The Citizenship Movement spread to other towns; NGOs were created to defend the water parks and raise awareness about their uniqueness and the need for alternative development projects in the region. We are seeking a new model project that will enhance the fantastic potential of this area while respecting the vulnerability of the water parks—a hydrogeological wonder that nature took millions of years to create.

In your experience with this emerging social movement, you had many contacts with scientists, policy makers, local authorities, businessmen, artisans, farmers, and internationally renowned artists. How do you see the role of scientists in this process?

It is commonplace nowadays that the sciences are going through a very deep paradigmatic change. Perhaps this can be seen more clearly in terms of water and our

relationship to it than anywhere else. The Citizenship Movement in Brazil is one of the most important contemporary social developments in a country that has only recently returned to democracy after 20 years of military dictatorship. But scientists and their social concerns will also be needed to bring about effective change. Citizens and scientists will have to cooperate to change old beliefs about the “neutrality” of science—an alibi for scientific support of power politics. We need the political support of science for our cause. We also have to create together a new vision of water that can be the basis of an alternative project in which exploitation of mineral water would not be the main concern. This will involve new discoveries about memory of water, as well as physical properties discovered by some scientists, which indicate that water is much more than we commonly perceive. All old world traditions—including those of the Brazilian Indians—have considered water to be sacred and respected it far more than we have. Developing an alternative project in Circuito das Águas that combines the new scientific view and old traditions could be an important step towards a new comprehension of our relationship with water and its potential.

You also mentioned important contributions coming from experts in lithopuncture—the art of healing of the earth—resulting in an innovative blend of science and art. How should art and science combine efforts to make significant contributions to regional sustainable development?

In 1998, Marko Pogacnik, the famous Slovenian sculptor, launched a lithopuncture project to enhance energy in the water parks. He developed a unique approach to nature through what he calls lithopuncture of the earth, consisting basically of work with the subtle energy fields of the earth. We must remember that in the very beginning, art and science were closely linked with philosophy and poetry. Perhaps their paths have diverged too widely, and the time has come for a new approach that can reunite science and art. Each deals with the same world from a dif-



**FIGURE 2** Protected mineral spring outlet in the São Lourenço Water Park. Visitors pay an entrance fee to the Park and can tap as much water as they like. (Photo by Stephan Rist)

ferent point of view; they can complement each other, bringing together new approaches that will help us immensely to overcome many problems in the world today. The funny thing is that human beings fail to differentiate between art and science in our everyday relationship with nature and the world. But when we take a specialized point of view, problems arise. This is why I think it is so important for all of us to approach things first as human beings—in the simplicity of our everyday experience—and only afterwards, and with much care, assume our roles as politicians, scientist, or artists. What we are trying to develop in Circuito das Águas may be a first step in this direction.

Could you tell us about your plans for an International Free Water Academy? Will this be a normal university specializing in water, or do you have something particular in mind?

The International Free Water Academy will not be just a normal university focusing on water. I feel the need to create a space where the multidimensionality of water will be taken into account in a creative and interdisciplinary way. In recent years, I have been discussing this with many people in Brazil and abroad: scientists, artists, and people connected to social movements concerned with water.



The International Water Academy should above all be an open meeting place for everyone interested in broadening and deepening their understanding of what water really is and how we can cooperate to find more creative ways to deal with its problems and potentials. Water should be seen as a living multidimensional entity; only through ongoing dialogue involving the scientific and artistic communities and social movements can we grasp its real meaning. I think scientists need to get more deeply involved in broad and often very complicated social issues. On the other hand, a dialogue with artists and social movements trying to awaken our society to the sacred and spiritual dimensions of water could provide a strong impulse for more imaginative scientific ways of understanding water. Through the International Water Academy, we hope, for instance, to study and revive all the old Indian traditions concerning water and do the same with our African heritage brought here by slaves. These are important traditions that contain a huge amount of deep knowledge that has not been taken properly into account. The potential of these traditions to change and deepen people's relationship to water is immense. It is time to listen again to the voices of the ancient gods and goddesses of water from Indian

and African cultures. They may even have important things to say to contemporary science.

What do you think about the relation of science to other kinds of knowledge? How should they relate in order to really make significant contributions to sustainable development that addresses all spheres of human and natural life?

I think Occidental science has somehow become too isolated, in the sense that it very seldom interacts with the knowledge contained in old traditions, rituals, and everyday practices of ancient communities all around the world. This isolation has brought great onesidedness in the way science approaches reality and denies the multidimensionality of water from the outset. We all can see where this attitude has led us. It is no longer possible to maintain this onesided approach to reality if we want to face the difficult challenges we all have ahead. New approaches and creativity can only come about on the basis of respect and dialogue involving different kinds of knowledge. By assuming the multidimensionality of water, we are also assuming our multidimensionality as human beings. A sustainable future for the whole planet must be built on our own wholeness.

Franklin Frederick studied literature and psychology at the Federal University of Rio de Janeiro. He has organized several international conferences on water, health, and environment and has served as a consultant for the Water Citizenship Movement and as coordinator of the Water Citizenship Movement in Circuito das Águas. He was also a consultant to the state water company COPASA in Minas Gerais, Brazil.

Stephan Rist is an agronomist specializing in rural sociology. He is the coordinator of Social Learning for Sustainability (SOLES), an international partnership program, at the Centre for Development and Environment, University of Berne, Switzerland. He interviewed Franklin Frederick in São Lourenço, Brazil, in August 2002.



**FIGURE 3** The site of the Nestlé/Perrier Pure Life bottling plant. Has water extraction been so intense that trees in the area have perished? (Photo by Stephan Rist)