

THE LICHENLOUNGE IN HAVRANÍKY

TEXT AND FOTOS BY KLAUS FRITZE
SUPPORTED BY DR. JAN VONDRÁK

INTRO

At the end of 2023 Dr. Jan Vondrák („Honza") asked me if I would make an artistic contribution to the meeting of bryologists and lichenologists in Havraníky. Since as an artist I deal with contemporary images of nature, I like to talk about them with Honza and as a lover of lichens I appreciate his work very much, I agreed. As a lecturer at the Bauhaus University, I also like to point out the beauty of lichens and their important role for climate and biodiversity, noting that the cryptogamic flora covers about 30 percent substantial parts of the world's land surface. However, lichens escape the attention of most people because of their tiny appearance. They thrive as unpopular settlers on building and settlement sites, and often we see efforts to eliminate them. In doing so, diverse lichen growths on exposed concrete, limestone rocks, fruit trees, gooseberry bushes, old glass containers and road signs contribute to improving the climate balance, as terrestrial flora of lower plants (which includes Lichen) alone sequester 14 billion tonnes of carbon dioxide and 50 million tonnes of nitrogen globally.

Moreover, I am fascinated by their biomorphic geometry, their patterns of expansion and growth. The cooperative and fusing way of life of dual creatures is an instructive example that not only competitive and parasitic strategies, but also mutualism can lead to successful survival in a changing environment. Lichens are often so specialized that they can colonize territories that are uninhabitable for other creatures.

Out of this enthusiasm, I am looking for ideas to make lichens more visible and to pass on my enthusiasm to others. In my search for suitable attributes, I found cooperativeness, protection, hospitality and patience, among others.



THE MEETING OF BRYOLOGISTS AND LICHENOLOGISTS IN HAVRANÍKY (CZ)

DYJÍ (CZ) THAYA (A) NATIONAL PARK, APRIL 2024



LICHENLOUNGE IN HAVRANÍKY
INSTALLATION, PROCESS BY KLAUS FRITZE, COLOGNE (D)

My LICHEN Mission

Lichens cover the earth and were here long before us. They take much longer to grow than yeasts or fungi and, in my opinion, have not yet found their way into the fermenters of biotechnologists, even though they synthesise rare and valuable substances. Lichens are often so specialised that they can colonise areas that are uninhabitable for other organisms.

I picked up an important insight from Jan Vondrák during a lecture for our students in Weimar, which I would like to reproduce in my own words: Fungi rule the world, in the course of their evolution they have managed to develop all the biochemical pathways of energy production known so far. One could say that in the taxonomic realm of fungi, nature has invented everything conceivable in terms of ana- and metabolism, with one exception: the ability to produce available energy and sugar from light and inorganic substances is reserved for plants and cyanobacteria; from an ecological point of view, it simply does not seem compatible with the somewhat light-loving way of life of fungi to obtain energy from global solar radiation. In other words, evolution has excluded them from this extremely sophisticated way of obtaining energy from space.

However, a significant number of fungal species use solar radiation directly through their own strategy. Having become lichenized, they have acquired the ability to enter into mutualistic relationships with the protagonists of the photosynthetic plant world in order to benefit energetically from sunlight.

Not only fungi, but also algae and cyanobacteria benefit from this symbolic connection. Their living conditions are often precarious due to water scarcity and their photosynthetic balance is reduced or even damaged by excessive sunlight.

The mycelium and its morphology act as protective screens, providing support and structure and creating moist spaces that act as incubators. Through special fruiting bodies and vegetative shoots, they can spread hundreds of kilometres. Sexual strategies are so highly complex and diverse that the expertise of the global scientific community is needed to understand them.

In fact, the lichen-like coexistence of fungi with microscopic algae and cyanobacteria on walls, gravestones and in the branches of our fruit trees is very obvious but still little known and generally treated somewhat disrespectfully. As Jan Vondrák told us, as an internationally renowned lichenologist, he cannot convince even his own mother that the colourful lichens do not penetrate the living tissue of her fruit trees and berry bushes. The fact that lichens growing on tree bark are not parasites, but merely use the tree, which branches in all directions, as a support base and protect it from phytopathogenic fungi and bacteria by colonizing it, is as little known as their profane contribution to nitrogen oxide detoxification. While some nature-loving people know from hiking through mountain valleys that lichens appreciate clean air, few know that they have been certified as reliable indicators of air quality in large cities.

Description/Materials

Cocktail umbrellas on ice cream cups have fascinated me since I was a child. Protective umbrellas are used all over the world, both figuratively and literally. In Asian societies, people like to carry them to keep their skin light in the spirit of beauty, while they are used on beaches to protect against sunburn. The democracy movement in Hong Kong turned umbrellas into symbolic signs of their protests, governments set up rescue umbrellas for their fiat currencies and in many agricultural areas, climate change makes it essential to shade plants and animals, umbrellas are practical modular systems that can be used quickly and effectively for protection.

Last not least umbrella species should be mentioned. By definition these are species selected for making conservation-related decisions, typically because protecting these species indirectly protects the many other species that make up the ecological community of its habitat (the umbrella effect). Actually the amazing lung lichen is one of umbrella species – a distinct, large, but vulnerable lichen which is used as “labe” for protecting the whole epiphytic communities (Jan Vondrák, personal information). I have only ever seen the lung lichen in photos and in the herbarium. Its size and vigor have not prevented it from disappearing from the forests. Many of the cocktail umbrellas are covered with macrographs of lung lichen specimens from Thuringian herbarium Hausknecht in Jena. I hope for their return to our forests and that they can be used again in the future as a remedy for bronchitic diseases.

The umbrellas are often hung with small cards containing either ancient train tickets or small comments. Thanks to Melika Sadegzadeh, who constructed many umbrellas and wrote comments while her art student residency in my studio. Thanks to Dr. Jörn Hentschel, Hausknecht Collection, Jena (D) for viewing the *Lobaria* specimens.

Naturalia and Artefactae of the installation were provided by the LICHENLOUNGE project, artists` archive and gathered in the surrounding area of Havraníky. Natural materials were returned to the environment after showing.



MEETING ROOM WITH PARTS OF INSTALLATION
ARTWORKS: WAITING FOR THE RETURN LOBARIA PULMONARIA (L.)

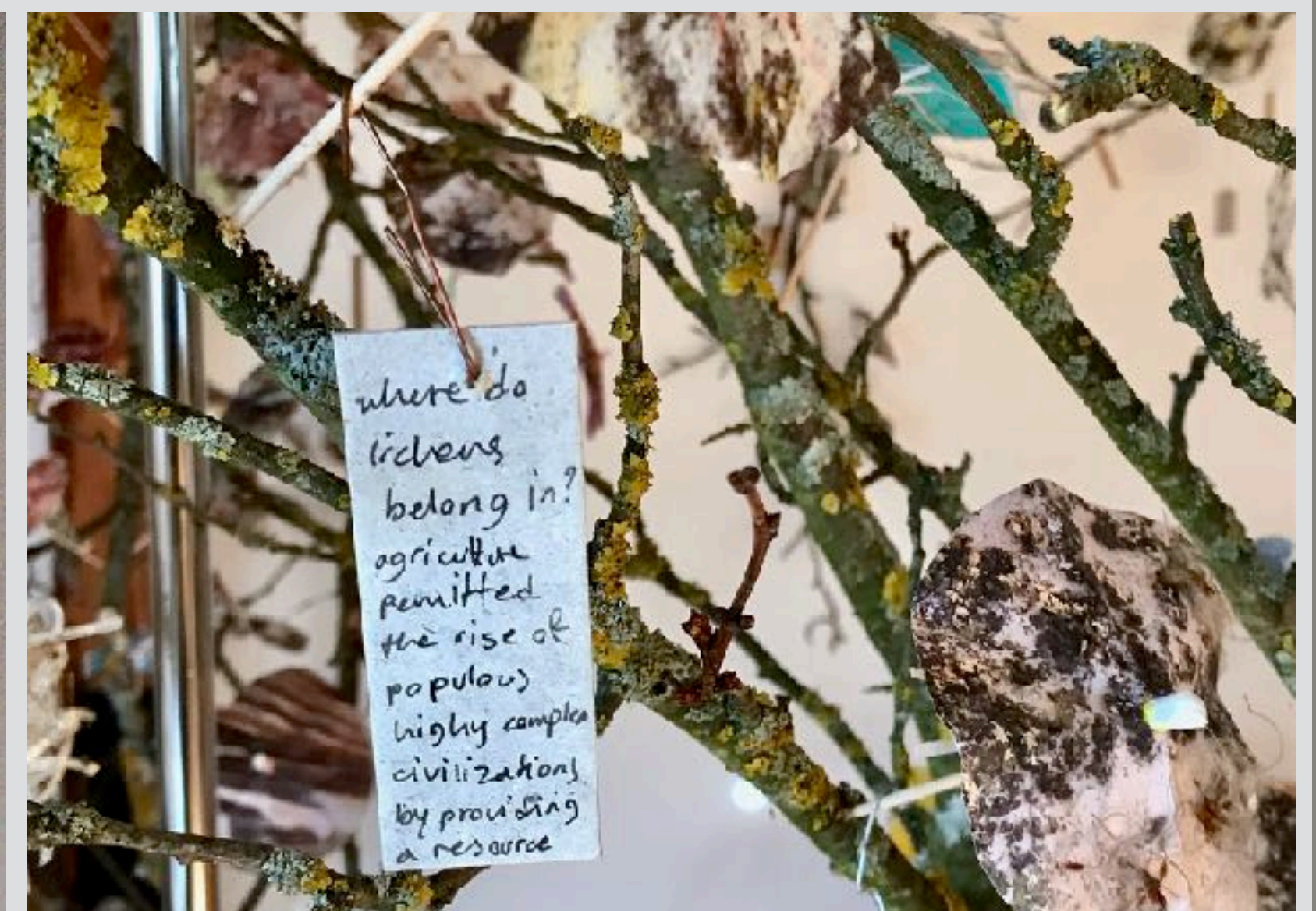


**UMBRELLAS ARE PRACTICAL, MODULAR DEVICES,
THAT CAN BE USED QUICKLY AND EFFECTIVELY FOR PROTECTION**



COUNTLESS UMBRELLAS DESIGNED BY BIOMORPHIC SYMETRIES OF LICHEN

LOBARIA PULMONARIA ET. AL.



SILKSREEN PRINTS USING INKS MANUFACTURED WITH LICHENSUBSTANCES

EXCERPTS FROM THE BACHELOR THESIS BY CARMEN DRAXLER, BAUHAUS UNIVERSITY WEIMAR (D) 2023



LICHENLOUNGE AND UMBRELLA TREE
SPACE FOR PATIENTLY WAITING AND HOSPITALITY

The LICHENLOUNGE, an alliteration

The term LOUNGE is commonly used to describe an exclusive waiting room or lounge for travelers - such waiting rooms are often found in airports and train stations. Reception areas and -rooms in hotels are also widely referred to as lounges if they have comfortable seating. Lounges are also used to describe bars or parts of bars with a quiet atmosphere.

This is why the LICHENLOUNGE was anticipated as a lounge and a place of opportunity. The LOUNGE is dedicated to the patient waiting for lichenogenic fungi to make contact with microalgae and cyanobacteria, following their multiple relational patterns, promoting biodiversity and anti-consumerist lifestyles, as well as celebrating the fascinating fusion of microorganisms into lichen communities. The project although seeks to address the existential dangers posed by climate crisis and to advocate for a nonhierarchical, worldview influenced by scientific as indigenous or traditional knowledge, which envisions all elements of nature as one family rather than as materials for use and exploitation by humankind.

Together with students, we developed a small selection of drinks and small dishes that refer to the historical use of lichen as a food and have special flavor nuances. On the menu were preparations made from commercially available *Cetraria* and *Usnea* lichens from wild collections in Macedonia and Romania. We expressly refrained from using our own wild collections, which are offered by the tea trade. Together with Julius Metzger, an artist who conducts artistic research into taste and food, a lichen liqueur and refreshing cocktails were developed, as well as a vegetable kimchi preparation with fermented *Usnea barbarata*. Increasing quantities of dried and mortared cetraria were used to bake bread rolls whose bitter taste went well with other foods.

We look forward to further information from lichenologists on the edibility and vice versa on the harmful effects of lichens. The tasting of lichens is not aimed at consumption and added value, only small taste samples are offered and no one is encouraged to use lichens as everyday food.



Possibility space

In the LICHENLOUNGE, curious travelers shorten their waiting time by patiently observing the initiation of the connection of a lichenogenic fungal mycelium with a host of microalgae and the formation of a lichen thallus. At the same time, you will learn about shared habitats and why we should come to terms with lichens and other biological relationships to save our atmosphere and climate. We should not respond to the offer of a mutually beneficial symbiosis from lichens by scratching them with brushes, and we should ignore the expensive promises of salvation made to us by the destroyers of green coating on tree and building surfaces. We can enjoy the varied shades of green and the ornamentally striking structures of mosses, lichens and algae without noisy high-pressure cleaners and leaf blowers, and so make a significant contribution to improving the surrounding environment without strenuous work. Most will leave LICHENLOUNGE with a new perspective on the varied green hues of the walls, no longer seeing trees as individual creatures but as communities, and if all goes very well, they will become citizen scientists who can in many ways support the work of lichenologists in the study of biodiversity and climate change.

As mentioned above, in the running project there will also be room for culinary experiments with lichens. In places where there is little vegetation, lichens serve as the main food for reindeer or moose. But butterfly larvae, snails, insects, mites and dust lice also feed on lichens. Survival guides also recommend eating lichen as an emergency food. Last year, we tried out a few recipes for drinks, -cocktails, -liqueurs and small dishes containing edible Lichen. This form of hospitality has also led to very stimulating conversations with our guests.



POSSIBILITY SPACE

EXPOSITION WHILE MEETING OF BRYOLOGISTS AND LICHENOLOGISTS IN HAVRANÍKY.





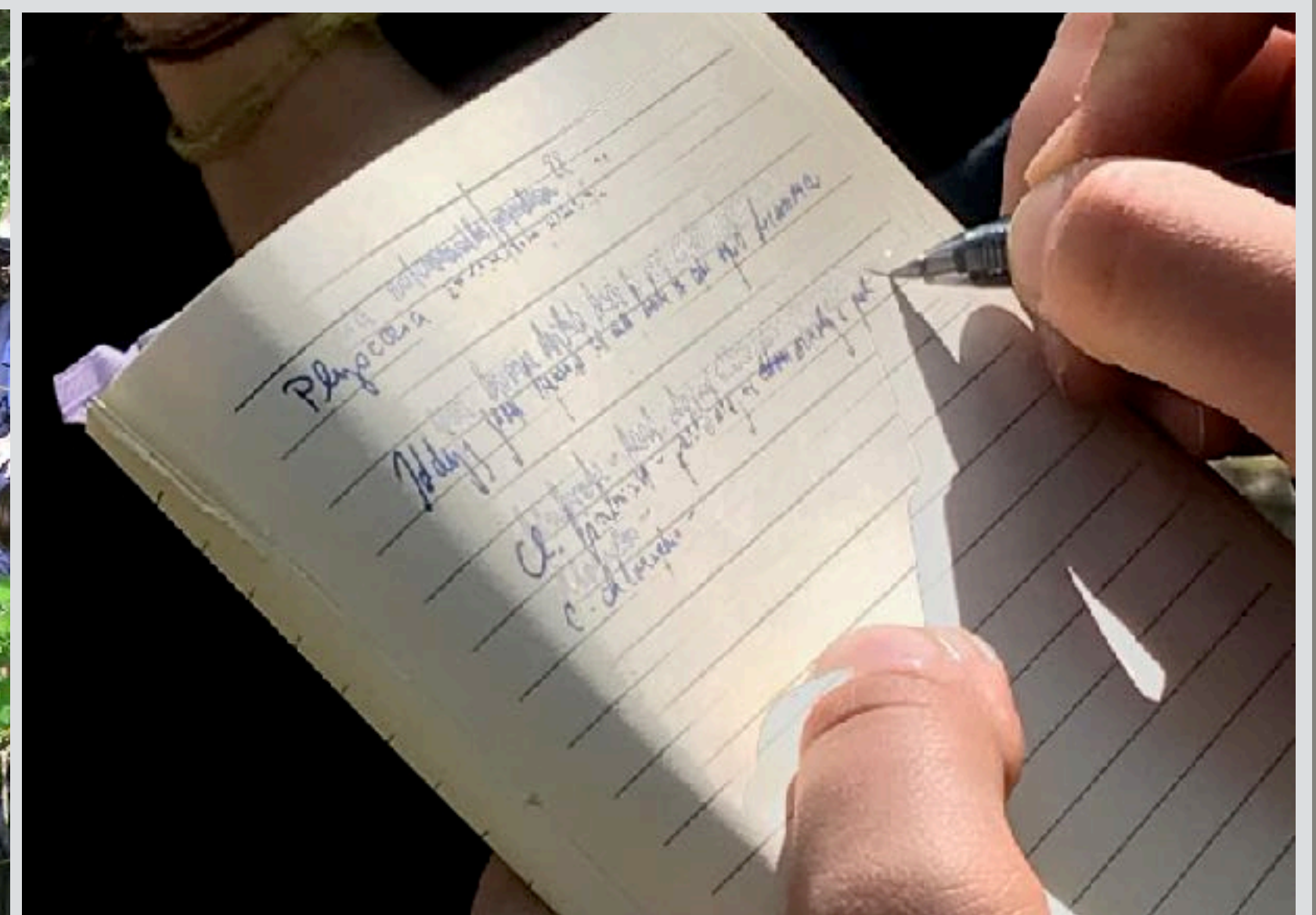
MEETING OF BRYOLOGISTS AND LICHENOLOGISTS IN HAVRANÍKY
COLLECTING, SORTING, MAPPING, TEACHING... PLAIN AIR AND IN THE LAB



MEETING OF BRYOLOGISTS AND LICHENOLOGISTS IN HAVRANÍKY
RESEARCH INTO THE RECORDING OF BIODIVERSITY, OBSERVATION AND MONITORING



MEETING OF BRYOLOGISTS AND LICHENOLOGISTS IN HAVRANÍKY
RESEARCH INTO THE RECORDING OF BIODIVERSITY: FIELDRESEARCH NEAR HAVRANÍKY



MEETING OF BRYOLOGISTS AND LICHENOLOGISTS IN HAVRANÍKY
RESEARCH INTO THE RECORDING OF BIODIVERSITY: MONITORING, FIELDRESEARCH



ARTISTIC RESEARCH AND TEACHING
BAUHAUS UNIVERSITY WEIMAR (D)



ARTISTIC RESEARCH, WORKSHOPS, EXPOSITION

2023: NON MACHINES CONFERENCE IN WEIMAR (D); ARS ELECTRONICA FESTIVAL, LINZ (A)



ARTISTIC RESEARCH, WORKSHOPS, EXPOSITION

2023: NON MACHINES CONFERENCE IN WEIMAR (D); ARS ELECTRONICA FESTIVAL, LINZ (A)

THANK YOU FOR YOUR ATTENTION

**PLEASE SUPPORT THE COLLABORATIVE WORK OF THE LICHENLOUNGE
BY YOUR IDEAS AND COMMENTS**

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