

Biomimicry Lessons on Collaboration From Mushrooms!

Fungi are decomposers, they are ecosystem creators, they are the nurturers and mediators of consensual exchange and mutual aid between the plant and animal worlds. They can digest tar and waste and take what may look like a toxic or broken ecosystem and transform it into a rich environment that is hospitable to life! Transforming trauma and harm into healing, accountability, and equity is the point of **Transformative Justice**, so we see Fungi as a wonderful inspiration to practicing a more sustainable and root cause oriented form of justice.

What are you decomposing? What are those toxins, wastes, or harmful norms that you are working to absorb and transform?

While we may be more familiar with mushrooms - the tasty and colorful sprouts of fungi - it is mycelium that is the true power house. **Mycelium** is a network or web of strings underground that mushrooms grow out of. It has a similar look or structure to our nervous system or the internet - so it is often called the wood wide web. Mycelium shows us that much of the sustained work and relationships of an ecosystem are the underground connectors. While mycelium is made up of tiny weblike pieces, together it is so strong and flexible that it can be used to make bricks that form entire buildings, to make alternative fabrics that look and feel like leather, and even plastic alternatives.



We often perceive and talk about the beautiful and diverse mushrooms that bloom up to the surface - in this metaphor that would be the big events, books, films, or conferences like this one. And those are great! But they are only possible because of the strength and consistency of the underground network of mycelium. The ongoing relationships and networks of practice that continue beyond this conference are the foundation that makes a convening like this possible. And those big outputs - like this conference - then spread zillions of spores which are the little puffs that go out into the world. Every breath we take contains 1-10 spores. The mycelium beneath us and the spores in our air connect us. If we continue with this metaphor, spores would be the bits of wisdom, the models and ideas that you learn here and bring back out into the world with you. When those spores link up with other spores, they create hyphae which combine to make more mycelium.

How will you link up with others to translate back what you learned after this conference? How might you invest in and recognize the underground network of mutual exchange and resourcing that sustains our communities and movements?

Something really interesting we have learned about mushrooms is that they can adapt their DNA within their lifetime based on lessons they learn from other species of mushrooms - through what is called **horizontal gene transfer**. When studying the history of psychedelic mushrooms (or mushrooms with psilocybin), scientists found that there are 5 different DNA sequences that have the same ultimate effect of the presence of psilocybin or the compound that creates psychedelic mental impacts. This means that fungi independently adapted the same abilities through different means in different continents around 60-66 million years ago and then passed it to their comrade mushrooms within each of their lifetimes rather than just over generations.

How can you directly share your wisdom with peers and other groups? How can we recognize the connections between movements or ideas with different names that evolved separately but meet the same core needs?



**Learn more about Mushrooms,
Transformative Justice, & Biomimicry
through the books on our
Mycelial Learning booklist!**