Mycorrhizal Movements: A Conversation with Giuliana Furci

By Giuliana Furci, Elspeth Mitchell, Lenka Vráblíková, and Xalli Zúñiga

Abstract:
In this multifaceted conversation, field mycologist and *Fungi Foundation* founder Giuliana Furci reflects on the political, ethical, and spiritual dimensions of fungal life. Speaking from decades of grassroots activism and fieldwork, Furci discusses the importance of language, relational ethics, and ancestral knowledge in mycological and ethnomycological research. She shares insights into the development of the world's first ethnomycological ethical guidelines, the recovery and stewardship of the *Historias y Memorias Mazatecas* archive, and the role of fungi in deconstructing colonial and anthropocentric epistemologies. Touching on themes of rotting, symbiosis, identity, and the metaphysics of decomposition, Furci offers a visionary account of fungal co-existence, one that foregrounds discipline, reverence, and long-term, multispecies commitment to planetary care.

Keywords: fungi, mycorrhizal thinking, decolonial feminism, multispecies care, science, gender, ecological epistemologies, mycology, decomposition

Please note that this conversation took place in May 2023, and some references may not reflect the most current projects or positions of the Fungi Foundation, given the evolving nature of fungal research and advocacy.

Lenka Vráblíková: Our first question is about language. We have noticed a particular care and attention you pay to language in many areas of your work, from campaigning for mycologically inclusive language to using terms such as "coinciding" when finding a species. I find that very interesting. Another example is the care you take in using terms like "fungal pathogens" or in choosing to speak of "queendoms" instead of "kingdoms." And of course, you also work within and between Spanish and English. I wanted to ask you if you can tell us more about the place and meaning of language in your work.

Giuliana Furci: Oh, that's such a good question. Language creates reality, and we are living in an era in which diversity, equity, and inclusion is in the spotlight when talking about humans. For me, there's no big difference between humans and non-human beings, so I take inclusive language and diversity, equity, and inclusion as seriously for humans as for non-humans. I campaign and I work for biological diversity, equality and inclusion (DEI). I do not use the term "kingdom". I prefer "kindom" without the G. If we are going to use "kindom," then why not "queendom?" In this scenario of language creating reality and working for a kindom of life that has been traditionally neglected, the first step to educating myself and people in general was to find the correct phrasing around working for the fungi and working with them, and all that together with being brought up in five languages and having a feminist mother. So yes, language is very important in my house and in my life.

Elspeth Mitchell: That is a really interesting context. We are particularly interested in the work of the Fungi Foundation, especially its efforts to catalog ancestral uses of fungi around the world. Could you tell us more about the work and its broader significance? We've also been interested in the ethical frameworks that you have set up within the foundation, of the role of spirituality in that work, and the emphasis on oral histories and storytelling as part of it.

Giuliana Furci: For the past two or three years, the *Fungi Foundation* has been working focused on four programmatic areas: expeditions, where we go and visit places where nobody has ever been before to document or to coincide with the funga that is found there. “Funga” is a term that colleagues and I delimited to refer to the diversity of fungi of a given place. Another program is the education program, where we believe that as much should be taught about fungi in schools as is taught about plants and animals, at the very least. Then we have the conservation program, which is quite heavy on the public policy side. And then the elders program, which is a beautiful programmatic area where we've taken on the task to unveil ancestral and traditional relationships between humanity and fungi.

Those relationships are mostly known through edible courtship and relationships between fungi and humans, but we do not really go there that much. We do not talk about edibility. So many people are focused on that. We do focus a lot on medicinal uses or relationships, ceremonial relationships between humanity and fungi, and then some more on material relationships, which might have to do with weaving, dyeing, making clothes, etc.

All this happened when the COVID-19 pandemic had just struck our world, and a lot of people started really diving deep into the notion of nature-based solutions and looking to biotechnology as a way forward. But that biotechnology was being framed as something that had to be created or that hadn't yet been created.

When you work for fungi and you have been in a relationship with them for as long as I have, you realize that we have culturally co-evolved with fungi for millennia. That cultural co-evolution holds relationships and kinships that are key to all the problems being discussed, then—and still today. These connections come up often in current conversations around so-called nature-based solutions. So no, it was not dear Stella McCartney who invented mycelium leathers. I commend that for all her incredible work, but this was developed by people hundreds of years ago in Eastern Europe. The use of lichens and fungi to make tweed wasn’t the first time fungi were used to dye wool. That is something people have been doing for millennia in different parts of the world.

We took on the task of unveiling that. However, during the process of compiling and collating data from peer-reviewed manuscripts, general publications, and oral history, we identified a significant risk of disseminating information collected without consent. The fact that something has been published in a peer-reviewed journal does not mean that the holders of that knowledge, traditional or Indigenous knowledge, gave consent for that to be published. It was a really, really heavy learning process for the whole team at the *Fungi*

Foundation to understand that in that process of unveiling, we could be accomplices to furthering a practice that we do not think is either legal or appropriate.

So we developed ethical guidelines, and these are the first ethnomycological ethical guidelines. We did it without consulting Indigenous peoples, and that's why we're also very cautious about talking about them. This was internal with a group of ethnobotanists, such as our board member Nancy Turner, who's a very well-renowned ethnobotanist and elder in different communities in northern North America. We realized that we had the threat of doing what had been done, for example, to the Quechua people with quinoa, where they cannot afford quinoa anymore, or what happened in Huautla de Jiménez when the practice of using psilocybin was shown to the world and the villages were forever changed. We decided we would never go down that route.

So at the moment, what we have is a wonderful catalog of relationships and ethical guidelines developed internally. And the certainty that we can't publish that because most of the older documented knowledge was not documented with consent.

Elspeth Mitchell: I wonder, are there any stories of the use of fungi that you have unveiled that you can share with us?

Giuliana Furci: Yes, there are many. There are some that were documented hundreds of years ago that have seemed to have disappeared, and there are others that are still used all around the world. For example, you can travel, and this is documented in different parts of the world, but, for example, in Chile, puffballs and the spores of puffballs are used to heal wounds in animals and in humans. So if you're in southern Chile and you find a shepherd in the mountains, he'll be carrying a bag filled with puffball spores in case animals have a wound and he needs to heal them.

You see in many, many places of the world a cultural co-evolution of humans with puffballs. Not only for healing wounds, but also for protecting skin and for making fire. The base of puffballs were used by people in Tierra del Fuego as tinder. Not only conks were used as tinder fungus, but also giant puffballs. And they are just fascinating. They are the most incredible group of fungi. For me, they are just astonishing. Certainly the place of spirituality is extremely important. People tend to overlook the intimate relationship between humanity and fungi in ceremonial uses. It is funny that people will be denying or paganizing that use, while they are having a beer on Sunday lunch after they have just come back from taking communion with bread and wine, which are all based on fungi. So there is just this very shocking ignorance in different cultures that the vehicles to attend the macrocosmos from the microcosmos or the celestial from the terrestrial. In most cultures it is through the use of fungi, whether you know it or not, or whether you like it or not.

Xalli Zúñiga: That is so amazing. Thank you so much for everything you are sharing. It is incredibly exciting to listen and learn from you. I wanted to ask something, especially in light of your comments about the pandemic. I recently listened to Vandana Shiva speak about how

the persecution of healers—through witch hunts, for example—is deeply connected to the kinds of pandemics we are experiencing today. There's been a severing, a disconnection from traditional knowledge, and it is rooted in violent historical forces. I am very aware of the extractive histories that all of our territories share. Of course, the specifics vary—some places experienced settler colonialism, while others have endured more targeted forms of resource extraction—but that legacy of violence and disconnection is something we all contend with.

And going back to what you were saying about ethical frameworks—this is something that resonates deeply with me as a Mexican researcher and artist. I take it to heart. It is incredibly difficult to navigate these questions when we're mestizx, or shaped by processes of whitening and all the complexities that come with our layered identities.

In light of these histories of extraction, I wanted to ask specifically about the archive you've been building for María Sabina. I'm so grateful for that work—personally and politically. I'm currently working with communities in central Mexico, in places like Amealco, where relationships with fungi take different forms. But the healing aspect is still central. María Sabina was such a renowned healer, and her knowledge was so deeply extracted. Thinking about that legacy—the loss, the erasure, and the continued relevance of her work—I just wanted to thank you. And maybe ask: could you share a bit about your experience of opening the archive, getting to know the people involved, and spending time in Mexico? I'd love to hear what those fungal worlds opened up for you.

Giuliana Furci: Before I dive into that, I wanted to share an anecdote related to what you were saying about being possibly mestizo/mestiza. It is about how we navigate working with Indigenous knowledge when we are not Indigenous or don't feel Indigenous, and so on. When I opened the foundation in the US, Paul Stamets and I invited a Peruvian Australian actress called Nat Kelley to be on the board. I met Nat in a Zoom meeting where we were talking about our heritage. She told me she came from a Quechua family and then asked about my own background. I mentioned my father was Italian, and my grandparents were from Calabria. They didn't know how to read or write, and they were just *contadini*, so subsistence farmers. And she said also, "You are Indigenous-Italian." I was like, "Wait, is that possible?" It was just a shift in my head. I had never really thought about it. My grandparents only spoke dialect.

Over time, that conversation stayed with me. Eventually, I did one of those well-known genetic tests, and it showed that I'm about 55% Italian—specifically from that region in southern Italy. The results pointed to strong Calabrian ancestry, with traces of Greek and North African influence. It was remarkably specific. That's when I began thinking: maybe I am Indigenously southern Italian. It raised all these questions—where do we draw those lines? Is "Indigenous" a term reserved only for people outside of Europe? Why is that? It is something I still have not fully resolved. But in so many ways, everything you might associate with Indigenous identity—subsistence farming, land-based knowledge, linguistic marginalization—applies to my family in southern Italy. And yet, no one would ever call them Indigenous. So I've been reflecting on how we place these concepts, who they apply to,

and whether or not we feel we have a right to engage with them—especially as mixed people. I think it is a rich and complicated space to think through.

With Mexico, it was completely a calling. I visited Oaxaca, Mexico in 2013, I think it was, or 2014. I was very burnt out, and I went on a solo trip. I just went on a pilgrimage and laid a flower at María Sabina's grave. Nothing more, nothing less, I spent less than 24 hours in Huautla, actually. I had just got a bus up the Sierra.

In that passage through Huautla, a member of María Sabina's family received me and said, "We were expecting you." He came to the door and said, "Are you the mushroom woman coming from the south?" I said, "No, I'm Juliana. I'm here to lay a flower, and I'm bringing these gifts." He said, "But are you the mushroom woman who's coming from the south?" I said, "Well, I work for mushrooms. I'm coming from the Southern Hemisphere. I don't know. I'm just here." And then he said, "We've been expecting you," and invited me into what was María Sabina's house. There was a short dialogue there and a request for help, and the acknowledgement that emerged during a ceremony: they knew that I was coming. All that was very unexpected, and it didn't really change my plans at that moment. I left them some gifts I had taken, then went to the cemetery to lay some flowers and spend some time at Maria Sabina's grave. And then I left.

Seven or eight years later, I got a message from Huautla with this knowledge of, "We were told that you were the mushroom woman who came from the south, and we need help. We have an archive that is going moldy. Itis being eaten by termites." It was that everything was decomposing. That request for help really hit me. It all made sense why I had gone to Huautla for 18 hours or something, and had that encounter. It was with Inti García Flores, who is the guardian of the archive. His father, Renato García Dorantes, was the archivist. He was the photographer and videographer of the town of Huautla, and he built an archive over four decades. And his son, Inti, is the guardian of that archive and the person who requested my presence, just companionship, and help..

It has been a couple of years of just the most beautiful symbiosis where we have been cleaning everything that is there. We have built a new facility. In my case, I have been able to really support him in raising the funds and helping plan how to preserve that knowledge so it is not lost. It is for the Mazatec people, or at least a Mazatec family, to decide what to do with what their family member has compiled. But it is not deliberate. It was not sought after. It is actually not very public at all. It has been years of work. It is just a calling, just a beautiful calling.

Xalli Zúñiga: That is so beautiful. Thank you so much—for listening to the calling. Many of us often say that we do not really choose to work with fungi—they choose us. They draw us in, and suddenly life starts to make sense in an entirely different way. I really resonate with what you are saying. In academia, we are so used to presenting—talking at people. But in this space, we are opening our processes, our hearts. We are saying, "These are the challenges

we're facing, but this is the kind of work we know we are called to do." It is collaborative in that way. And sometimes, to do this work, we have to think beyond identity. I think about partnerships like those between a rhizome and a fungus—radically different beings that still find a way to relate, to consent to each other's presence. That is something beyond the human. For me, that kind of model really speaks to what we are trying to do here.

And then, thinking about critiques by Indigenous scholars who point out that even the term Indigenous can be a modern imposition—that it objectifies people, that it is a label placed on them rather than something they necessarily identify with—it raises important questions. You do not feel Indigenous; it is a term that has been externally imposed. So really grappling with that complexity feels essential, especially if we are going to build meaningful collaborations. None of us can escape conditions of precarity alone—not when we are up against these structural forces. In that sense, I want to thank you again. In the communities I am working with, there is a shared understanding that we need each other. It is not about saying, "Can you come help out on Saturdays?" It is about building something rooted and lasting. And that is exactly what you have done with your foundation. It is deeply inspiring.

Giuliana Furci: It is the long vision, long term. We are in a world where just the immediacy of everything is overwhelming. News lasts maybe an hour at most, and there is just this ability to be distracted constantly. I think the key to any long-term commitment is concentration and discipline, and in facing things. You cannot just swipe over things or swipe up or swipe down or swipe one way or swipe the other. Give attention, dedication, and a lot of time to one thing. If something takes a long time, it does not mean that there is something wrong with it. It does not mean that it is not modern.

Lenka Vráblíková: To build on this question—and on what you were saying about indigeneity and the idea of purity in categories—I think it is important to reflect on how much we have inherited from Western Enlightenment thinking and white heteropatriarchy, which conditions us to think in binary, oppositional terms. But fungi seem to completely disrupt that. They dissolve the rigid distinctions we take for granted—between life and death, beginning and end, presence and absence. Even ideas like the individual or fixed identity, or what it means to exist, become much more complicated when we think with fungi. They shift the very terms of the conversation.

There's also another dimension I've been thinking about: how fungi challenge our understanding of the relationship between the planetary and the site-specific. Something profound happens there, too. I wonder—are these pressures and dynamics something you find yourself reflecting on in your work?

Giuliana Furci: Yes, absolutely. I think I am really happy that the mass collective level of knowledge is moving forward, and we can now start talking about the complexities of fungi, because a lot of people think fungi are one thing. Fungi are a whole group of organisms as diverse or even more diverse than plants and animals. You have unicellular fungi that reproduce through budding. You have multicellular fungi that reproduce through genetic

recombination sex, and so many thousands of ways you can reproduce and live. These are very, very profound topics of conversation among groups of friends and colleagues.

I was just very recently with a dear friend and colleague, Merlin Sheldrake, in the field, and we mentioned how there are so many ways to be a fungus. Being a fungus is not just one way, and that 'is important. It is important to acknowledge that the complexities of fungal life are way more than we can imagine. It is not all positive collaboration, positive in terms of human ethics. I do not even know if that's the right way to say it, but it is not all about, "Oh, we are all going to be better and it is all going to be smooth and it is all for humans to be really well." And all that is, I do not know how to say it without swearing, but it is all bullshit, really. Because what happens ultimately is that nothing is unilaterally just binomially related. There is always so much more complexity and so much variation in that complexity when you are talking about a kindom of life.

So nobody would really dare talk about animals in the same terms that they talk about fungi. And normally, people will ask you about something specific around insects or mammals, whereas when you are talking about fungi, the question is generic to the whole kindom of life. We need to start breaking those barriers. It is actually at the center of what my entire work is, moving the bar. I do not know if it was fortunate or unfortunate that I had the task of starting this work 25 years ago. I had to start with the basics, a sort of 101 of fungi: they're not plants, they're not animals…

And then we had to move on to create and delimit words. It has been this long haul of creating policy. But finally, we are at a place where we can say, "Okay, now let us talk about what is happening in this one group or this other group or in a mycorrhizal association where we see trade, we see competition, we see annihilation. There are battles in decomposing wood." And finally, we are at the point of being able to talk about the complexities. Thankfully, there are people as eloquent and incredible as Merlin Sheldrake, Toby Kiers or David Hibbett, and so many other mycologists, who can really put that forward and lay those layers above the cement that I have had to lay through the foundation so that people can just talk about it.

Elspeth Mitchell: Holding onto the complexity of funga, I would like to ask about methods and ways of working. So much of your work, at least to me, seems grounded in collaboration and openness—it holds a sense of plurality, of multitudes. These collaborations often span not only across nations but across species, involving different temporalities, as you've already mentioned. I imagine there are competing priorities, different ways of working, and divergent directions that do not always align neatly. Given all that, I am curious: how does working with fungi—and your deep knowledge of how fungi participate in the world—inform your own approach to collaboration and process? How have these fungal relationships shaped the way you understand your work and its direction? What have they taught you?

Giuliana Furci: For the first fifteen long years, it was a very parasitic relationship where I just had to feed off them to be able to move forward because nobody was really getting it, or very

few people. It was just the fungi and me in a way. All there was Paul Stamets's books and maybe field guides in Europe and somewhere else, but there was not much going on. You would read Lynn Margulis and things like that about symbiosis, but it is all very contemporary.

With the development of interest from humans in fungi that are not thought to just be around for humans, comes the possibility of growing together and of collaboration. Of course, collaborating, collaboration is a decision. It 'is a decision that is, in my case, really made with fungal awareness and fungal knowledge, and fungal discoveries at the center. With everything I do, there is no before-work or after-work. It is all just a continuum where the hours you need to sleep seem to be a problem. You have got to do it because otherwise you cannot move forward. But there's no big division and being a mother did not really stop that either.

With the fungal way of life there are just so many ways to be a fungus. If you need to draw strength from fungi to move forward with a mission, you can find it. In my case, I don't really need that anymore. I did at the beginning, because everyone was saying, "Why are you still talking about fungi? No one else is. What is wrong with you?" But I was so certain this was important—so certain it mattered. Honestly, I was on the edge of sanity at times. So back then, I would reach for fungal examples—penicillin, wine, bread, all that—to justify it. But now it is more of a deep compenetration. I feel intimately connected with all forms of fungal life—effortlessly, essentially. I do not really need to reach for reasons.

Xalli Zúñiga: I would love to shift a bit and talk about the artistic side of your work. It is so exciting to explore this topic from multiple angles—even from a disciplinary perspective—because it really blurs boundaries. That goes for the individual and the collective, too, as Lenka and Elspeth were saying about binaries, which we are still very much grappling with in so many ways. Thinking about the collaborations you facilitate through the Foundation, I have noticed there's a whole dimension of artistic research—almost a multiverse in itself. So I wanted to ask: how do you feel about collaborating with artists? What role does art play in your work, especially when paired with the world of fungi?

Giuliana Furci: Oh, it is so important. From the very beginnings of the foundation's life over ten years ago, and, for a couple of decades, in my work with anything mycological, art has been at the center. We have been working in biennials and exhibitions all over the world for many, many years.

There is something that is not very clear as to why, and that is actually the beauty of it, I think. Each artist and each discipline has a way of seeing the world that is different from others. I have been in encounters where I profoundly believe in those artists' vision and they believe in mine. I might not understand what they are doing, and they might not understand what I am talking about, but we believe each other, and that is at the center of many of these collaborations.

But I would say that where my personal interest lies heavily is in that for many years, I've spent a lot of time in forests, a lot of time in forests. And in the forest, you get to think about different things. And it would always have in my mind that I would need to have a state of openness to an encounter and of receptiveness when I entered the forest. It meant slowing down and being very aware of the notion that I might not find what I look for, but I will definitely see things and find things even if I am not looking for them.

And that is where I think the cross between art and science lies. Both artists and scientists need to be open to an encounter that may be different than their original hypothesis. I use this example quite a bit: an artist may set out to, to paint a hand or to sculpt a hand, and just be really focused on that hand. You might encounter several hurdles, and things will happen. Unless you are open to changing that state of receptiveness, you might miss sculpting or painting the most beautiful starfish in the world because you might set out to paint a hand or to sculpt a hand, but life may take you to create the most beautiful other form… I don't know the word in English, but you are set in doing one thing and you are not open to doing others and you miss out.

In the forest and in science, it is the same thing. You can set out with one purpose, and be say, "Really, I'm going to find a red mushroom." If your eyes are set on red and on a mushroom shape you are going to miss out the most beautiful yellow stinkhorn because you are not open to an encounter, and you are not receptive to where life takes you. So for me, that' has always been where I personally live. I live in that space. It is a fluidity of purpose in a forest. So if I feel that I must go right but the GPS is saying go left, I am going to go right. I can go back later, but I will definitely go right. And that's where I think that art, and science have a good crossing. That is where we have been working. It is in the unknown. It is by following something that will take you. You do not really know what is going to come out. It is the same with science, or with looking, searching for species.

Lenka Vráblíková: It sounds like a sense of wonder, discovery and magic you experience?

Giuliana Furci: Right, but with the discipline as well. People think that artists just are not disciplined, and it is all very relaxed and loose, but it is not really like that. I get a lot of the same with the Foundation, where most of my work is behind the desk doing stuff with tax and accountants, whatever. But you must have that and discipline alongside the materiality of how you work to give value to the time of wonder. To wonder and for that time to be given value. That, for me, is only taught through the arts where improvisation and exploration, sensorial explorations, are desired and are built into the schedule of work. I think it should be like that in everything.

Elspeth Mitchell: Thinking about desire and wonder, I was once in the woods in the UK with Lenka when she called out for a porcini— and, unbelievably, one appeared.

Lenka Vráblíková: I learned it from my grandmother—this is how she used to hunt for mushrooms in the Czechia. She would call out to them, saying things like, “Come on!” as if inviting them to appear.

Giuliana Furci: I call them too.

Elspeth Mitchell: We are summoning them.

Lenka Vráblíková: It definitely works.

Giuliana Furci: Oh, it does, definitely. I call them all the time. I'll sing. I am not sure if one counts all the times you call and they don't appear, but we definitely count the times we call and they do appear.

Lenka Vráblíková: I am going to move us to the question of rotting and letting things rot. The Fungi Foundation have a documentary about rotting. I wonder whether you could tell us more about the role of rotting in ecology and ecosystems and what it means in that context, but also, perhaps, in a broader sense, because as a feminist, when I hear about letting things rot, it also makes me think of rotting oppressive systems of power. Is there a revolutionary potential in this way of thinking, particularly in how it might relate to social issues and politics.

Giuliana Furci: We have to let everything rot. I think ideals and ideas have to rot. There is no possibility of composition without decomposition. There is no way that we can recycle anything without decomposition. For me, it is really strange that people find it weird that rot is valued. It is because we are taught that, there is a beginning with birth and there is an end with death. These ideas are heavily tainted by religions. Actually, if you look at nature, that does not exist at all. There is no beginning. You can fix a beginning at any part of a cycle. In a circle, where is the beginning, right? Where is the beginning in a circle?

So if we are going to talk about cycles, then we need to eliminate starts and ends immediately from the language we use. If we are looking at a linear process, then we can discuss if that exists or if it doesn't. But I have been brought up in a household where the belief of changing systems is absolute. My mother was a refugee, a political prisoner, and I was born during her exile. She is a woman who lost her freedom simply for fighting oppression, or the notion that there is only one way things must be taught, or one way you’re supposed to exist. And so decomposition for me is fundamental. The only way we can move forward to recompose ourselves or recompose societies is through decomposing what we now know is not a way forward.

I used to believe that there was a finite amount of energy and that transformation and recycling was the only way for X amount of something composed to then be the same X amount decomposed to then that same X amount to recompose. I have learned over the years, reading different authors, that we are not so sure that the amount of energy is finite. So my whole notion of decomposition is constantly evolving as I learn that even laws of physics

have been contested. It is not that there is always a balanced amount, but what we do know is that the building blocks of life, material, I hate the word, but the building blocks of a tree trunk or of an animal through decomposition are liberated and left available to recompose in a different form. If that is not the beginning of life, then what is? Then that is the way I see it.

I think rot, if you position yourself in rot as an initial kick starter of a process, you actually come to terms with the end of particular life forms in an easier way. I find it soothing to think that the end of my life form will give way to many other life forms instead of thinking that the end of my life form is going to be the end of everything: which is scary.

Elspeth Mitchell: Is there also the fact that the concept of rot, just thinking with rot, poses a challenge to culture and its binaries?

Giuliana Furci: Well, not really. Because if you think about penicillin, penicillin is the best example. Penicillin comes from a mold, *Penicillium*. It was first known to be used by rubbing moldy bread and moldy fruit onto wounds. It was not a problem. Look at koji. Koji is a mold. It is rotting. We are eating it. We are paying fortunes for it. We are eating cordyceps to boost our health, and it is decomposing an insect. I would contest that I think that the notion of mold and decomposition being something negative and rot being something undesired comes from some religions that believe that light, or direct sunlight, must be present for something to be virtuous. There are some cultures and religions where people do not eat fungi because they believe that they grow in the absence of light, or where fungi were looked at as something undesired because they decomposed, or maybe there are some smells and textures that are not very nice, alongside the attraction of insects and stuff like that.

But way before that, we were healing with mold, and we were eating with mold, and what we now call rot was the only way to sterilize and preserve foods. This is fundamental. How do you cure meat? You put mold around it because it is antibacterial. So there's a duality. There is a big duality that is frustrating in a way. You can be eating a koji burger or eat a lovely slice of salami, and be at the same time talking about how bad rot is, but all of that is thanks to rot.

Elspeth Mitchell: Do you think there are any limits to fungi? Fungi —and metaphors of fungi— are everywhere right now, circulating across disciplines and being taken up in all kinds of ways. But given that you have dedicated your life to working with fungi, I wonder: have you encountered any limits? What do you think are the limits there where the metaphor or thinking breaks down?

Giuliana Furci: There definitely are limits in the sense that there is a fundamentalist way of looking at things, looking at life on Earth. One can say in a mycocentric view, the limits are very clear in the sense that fungi live inside their food, and they have a physical limit to where they can expand. So, without plants and without animals and others, the symbiosis is two-way. Fungi would not be otherwise. So it is not that fungi are at the service of plants or

that plants are at the sole service of fungi, but there is, in many cases, a mutualistic relationship.

I think the fundamentalist view has been necessary. It still is necessary. I am very radical in that and I live it, but I understand that mycorrhizal fungi do not live without the plant, they just cannot. It is an exchange. But at the same time, I do contest that we think about fungi assisting the life of plants, that mycorrhiza exists for the plant. For me, a tree is nothing but a photosynthetic symbiont of a fungus, and this is equally valid. So plants are just the photosynthetic symbiont of the fungus. Depending on where you place yourself in the relationship, you can see it in a different way. But the limit is very clear. It is a relationship that doesn't exist without both of them.

Xalli Zúñiga: That's incredible. It makes me think about what we often call "shadow work"—all the behind-the-scenes labor, like doing taxes or handling logistics. It is not glamorous, it is not part of the spectacle, but it is absolutely essential. For me, that shadow side—even in a yin-yang sense, or however you want to frame it—is where so much real labor lives. And fungi, to me, are not just a metaphor for that. They are a literal example of how life sustains itself. They make life possible, and yet we rarely give them credit. It is wild to think about all that invisible work, all that support, and how often it goes unrecognized.

Giuliana Furci: Well, we have come a long way. It is really interesting to be alive and to see what has happened. I cannot believe it. I did not think that it would happen in my lifetime but I worked for it to happen in my lifetime. You are never really sure. But just the way it is happening, it is just joyful to watch. It is really, really cool to see people engaged and listening and feel that you do not have to do it all by yourself anymore. It is so good. There are other people who can talk and advocate and also have fun. It is wonderful and beautiful.

Lenka Vráblíková: It seems that your work is deeply engaged with what we might call feminist, de-colonial, anti-racist and interspecies politics and ethics. You have already mentioned how your life is shaped by these commitments, but I wonder if you could say more—about how your life and work are engaged in these issues, or how you think about them, particularly within the context of the Fungi Foundation?
Giuliana Furci: We definitely do engage with this at the Foundation, but I think I have to rewind my lineage. My mother's mother, my grandmother, was a professor of physics and mathematics when no female was a professor of mathematics and physics. My mother is a really heavy activist in many things. She is politically active. She has always been a feminist. So these are not stances or lookouts on life that I have had to reach by myself. I am a product of many women, not men. The men in my family are not feminist, or have not been feminist. But the women, especially from my mother's side, were very, very heavily embodied and empowered in radical ways for their times. So I am a continuation of that outlook on life. And so that is effortless.

In the Foundation, it is forefront in the non-acceptance of anything different. And it is at the forefront in the total acceptance of differences between people in the team and views, and

how differences are desired. Also being a product of a dictatorship, anything dictatorial is just not welcome. So there is a lot of plurality and space for people in our team to bring forward ideas and to work in different ways.

I am very proud that in my team, they call me the anti-boss because I am not going to patrol anyone. It is funny, we had a meeting just a few months ago with the team, and they were asking for evaluations. I responded, "I am not going to evaluate you. Who am I to evaluate you? What are we talking about? I can tell you have done a good job, the only person who could really evaluate you is yourself." I am constantly facing these things, and I am hitting the wall of this conventional way of one being above another. I do not really accept that. I was not brought up like that at all.

Another way that I have seen that this approach is totally embedded in myself is I have a son, and he has interests totally different from mine. He loves animals, and he actually loves living with animals and caged animals. I cannot tolerate caged animals. But he does not live with me. We live together, and that has been really important. Since he was very little, that has been his passion, I have realized that I cannot impose on another human, even my son. He is not living with me. We live together. Even when he was a baby, when he was a one-year-old, two, three, four, however old: we live together. His interests are as important as mine. My interests are in no way better than his. How I like to live does not mean that he has to live that way. I really try in every aspect of life to put that forward. I have lived with caged animals before. It is not easy, but less and less as I am very happy to say now

Xalli Zúñiga: Can I just say one last thing? Because this has been magnificent. Thank you so much for lending your time—we know you're busy and pulled in many directions. What you are saying is so important and truly inspiring. We are touching on posthuman questions here, but really it is about coexistence—not from a first-person perspective, but something deeper. A few days ago, we went into the forest with a group of students to plant baby trees, and hearing you speak just now made me realize something. The artistic part of that experience was not about making art—it was about being present, living among others. I had not framed it like that until now, but it is about decentering the human—not from a place of shame, but of openness. These structures of oppression often mirror the ego’s insistence, like me walking in the woods thinking, “I want to find the red mushroom,” and missing the bigger invitation—the open hole that is life. So thank you. Truly. The way you put it—this “invitation to rot”—it is not only fundamental, but also deeply inviting.