

Mosaic of Solutions

Navigating from PolyCrisis to a PolySolutions Mosaic: Reflections on the CIVIS Days Public Session

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The day before the PolyCIVIS Public session during the CIVIS Days, I found myself lying in bed, overwhelmed by the constant barrage of unsettling news. There was nothing new—war in Gaza, the worsening climate crisis, floods ravaging different parts of the world, and once again, my roommate had been confronted with racism. The weight of it all felt too much, and I couldn't find any clear path forward. Then, a notification about the PolyCIVIS Public Session appeared on my phone, and I thought, "If I don't have a solution, maybe they do?"

The next day, I decided to attend. What I found was not just one solution, but rather an introduction to "PolySolutions"—an approach where multiple interconnected crises can be tackled with solutions that address several problems at once. But, it wouldn't be an academic event if there weren't as many new questions as answers. And those questions stayed with me as I reflected on how we, as students, scientists, and humans, can confront these challenges.

As I write this, I am aware of the many roles I hold. On the one hand, I am a student who designed my own Environmental Science Master's Curriculum to deepen my understanding on the complexity of environmental crises and their social implications.

I am also a former staff member at the University of Salzburg (PLUS), where I founded and contributed to establish <u>Scientists for Future</u> (S4F) in Austria, which supports the global climate movement. I also worked in the sustainability department of PLUS, organizing events,

giving lectures, and pushing for systemic change within academia. And I am, above all, a human being who is deeply aware of the multiple global crises that surround us, often overwhelmed, but determined to act, both in academic spaces, and as an activist.

If you read this, be mindful that I write with all these perspectives in mind.

Understanding the polycrisis as a mosaic

When I think of the word "Polycrisis" I imagine a mosaic: A collection of interlocking crises—none of them isolated but instead influencing each other, often making things worse. For example, the climate crisis accelerates biodiversity loss, which in turn contributes to extreme weather events like floods. These disasters then lead to further resource depletion, public health risks, and even wars. The idea of a polycrisis is not to look at these problems individually but to see how they form a larger, interconnected web.

One of the key takeaways from PolyCIVIS' public session was the idea of transforming this mosaic of problems into a mosaic of solutions. The goal isn't just to address one problem at a time but to find solutions that can tackle multiple issues simultaneously. If we can understand the complexity of the polycrisis as a whole, we might also be able to craft solutions that work across different areas. For example, by promoting renewable energy, we can also help reduce carbon emissions, provide economic stability, and support social justice by creating jobs for marginalized communities. What if, instead of simply recognizing a mosaic of challenges, we let it inspire a mosaic of solutions, where a solution to a single challenge has the potential to foster positive changes across multiple areas we are concerned with?

The Challenge of Translation

Addressing the polycrisis requires more than just an understanding of each individual crisis; it demands an ability to translate it across disciplines, cultures, and perspectives to better understand the mosaic of the interconnected crisis. This is where communication becomes vital. We not only need to translate from our native languages into academic English (or vice versa) but also between disciplines and lived experiences. Solutions to global problems must integrate knowledge from environmental science, social sciences, economics, and more, and they must account for the diverse cultural norms and realities of people living on different continents.

This means that we need to talk to each other, and more importantly, we need to practice active listening—especially to marginalized groups who are often left out of these conversations. These communities are excluded from the decision-making processes that shape solutions. Their experiences, however, are critical to understanding the full scope of the problem and crafting solutions that are just and equitable.

As scientists, we often focus on our specific field of study, but the interconnected nature of these global challenges demands that we collaborate and learn from each other. And for that, we need to become better translators. Not just in terms of scientific jargon, but also in making sure our ideas are accessible to people outside academia, especially those from diverse social and cultural backgrounds. In this sense, students and future scholars could play a critical role as "translators" of the polycrisis. With the right education, they could bridge the gap between disciplines, between academia and society, and between different cultural perspectives. They could become ambassadors capable of explaining the complexity of global crises while also presenting interdisciplinary solutions that resonate across sectors and geographies.

Teaching the polycrisis

One of the most pressing questions I asked the guest speakers was: how do we teach polycrisis? How do we convey the sheer complexity of this interconnected web of challenges to students, in a way that doesn't leave them feeling helpless, but rather empowered to act? How do we decide where to begin, and which aspects of the polycrisis are most crucial to include in an academic curriculum?

This challenge is something I've faced firsthand as a university lecturer. Teaching about climate change, I often include not only the scientific facts but also the social dimensions—racism, colonialism, and the ways these structures perpetuate environmental injustice. However, I frequently encounter resistance or confusion from students, particularly when trying to connect these seemingly disparate topics. Time constraints in a typical one-hour lecture make it difficult to fully unpack these connections, and as a result, some students struggle to see the relevance of anti-racism and decolonialism to environmental issues. The linkages remain abstract, and the potential for transformative solutions gets lost in translation.

When I was designing my own Master's Curriculum, my goal was to better equip myself to understand and communicate this complexity. I asked myself two main questions: First, what do I need to know in order to understand and communicate the interdisciplinary nature of these crises? And second, what skills do I need to effectively transfer this knowledge to others? Looking back, I think I would have placed even more emphasis on communication skills. Scientific knowledge is crucial, but the ability to translate that knowledge into actionable insights for different audiences is just as important, if not more so. In the face of the polycrisis, we need people who are fluent in multiple "languages"—the language of science, the language of policy, the language of lived experience—if we are to create meaningful change.

Moving Toward PolySolutions

Reflecting on the PolyCIVIS session and subsequent meeting, I was heartened by the diversity of perspectives represented in the room. It wasn't just European professors leading the discussion, but PolyCIVIS' African partners, students and scientists from across continents and cultural backgrounds participated as well. There was a conscious effort to bring marginalized voices into the conversation, and when gaps in understanding arose, the

people most affected by those issues were asked to speak for themselves. This inclusivity is critical if we are to build solutions that work for everyone.

Still, I believe there's more room to take this communication even further. Asking more questions, involving more perspectives, and engaging even more deeply with the diverse experiences of those affected by these crises is something that the PolyCIVIS project seems committed to pursuing. And I think that this approach could inspire other projects, universities to take action, and even encourage a broader societal change.

When I walked out of the lecture hall at the end of CIVIS Days, I was no longer overwhelmed by the polycrisis. Instead, I was inspired by the possibility of PolySolutions—and by the people working tirelessly to make them a reality. The mosaic of problems we face is daunting, but within it lies the potential for a mosaic of solutions, where each piece fits together to create a more sustainable, just, and equitable world.



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Lara Leik is pursuing a Master's in Applied Interdisciplinary Environmental Sciences at Paris Lodron University Salzburg (PLUS), with a background in nursing (University of Heidelberg) and molecular biosciences (PLUS and JKU Linz). She designed her own Master's program to bridge disciplines, enabling her to understand and translate across fields while building broad expertise in sustainability science. She is a climate activist from Tübingen, she co-founded FridaysForFuture Linz and Scientists4Future Austria. At PLUS, she worked for several years in the sustainability department and as a coordinator for S4F, fostering interdisciplinary collaboration among scientists and promoting dialogue with society. Leik has delivered numerous lectures on sustainability, climate change, and activism. Currently, she is completing her Master's thesis in environmental psychology and education, focusing on professors' motivation to teach sustainability from an interdisciplinary perspective. She also serves as an environmental advisor for the Austrian Student Union Salzburg, supports sustainability workshops in schools, and is part of the Advisory Group for the EU-funded Teacher Academy Project, as well as the Climate Change Education research group at PLUS.



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