What if We Cancel the Apocalypse?

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Futuristic concept of cities in the middle of the ocean (Camillo Pasquali, aka millisworlds)

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In the popular imagination, the future as we know it is currently occupied by various apocalyptic scenarios, as we see in the ongoing predominance of blockbuster movies along these lines. The doom and gloom that is so common on social media (bringing us the term "doomscrolling") seem to be stuck in a repetitive loop that provides no way out. It is indeed a very common recurrence on social media to see reports on global warming followed by statements such as "we are doomed" or "I can't handle this anymore."

What if, instead, we cancel the apocalypse?

Enter Solarpunk. By its simplest definition, Solarpunk is a literary and art movement which imagines what the future could look like if the human species were actually to succeed in solving the major challenges associated with global warming, from reducing global emissions to overcoming capitalist economic growth as the primary motor of human society. These seemingly titanic tasks are actually pragmatic necessities dictated by scientific knowledge. We know, for example, that it is simply impossible to have infinite economic growth on a finite planet. And yet, this impossibility is exactly where we are still heading towards as a species.

We know, in other words, that we need to move towards a situation in which there is some kind of equilibrium between our species and the rest of the natural world. Some popular films already do this — think of Marvel's Wakanda in "Black Panther" or Hayao Miyazaki's films. But what is often missing — the gap that Solarpunk is trying to fill — is a positive futurism grounded in our present world. This is why Solarpunk emphasizes community-building and mutual aid. Its imagined futures lie at the intersection of both positive and negative scenarios, all of which are possible, incorporating everything from degrowth or postgrowth to Indigenous rights, feminism, racial justice and decolonization.

Solarpunk is therefore highly pragmatic, while maintaining a utopian spirit. That is, its utopias are not rooted in a desire to avoid dealing with the hardships of the modern world. On the contrary: Solarpunk is a recognition that the modern world is oversaturated with despair and helplessness, and in that context hope can be a radical act. This is what motivated Gerson Lodi-Ribeiro, the Brazilian editor of the first (as far as I can tell) anthology on Solarpunk, published in Portuguese in 2012. When asked by Sarena Ulibarri, who wrote the preface to his edited collection "Solarpunk: Ecological and Fantastical Stories in a Sustainable World," why he chose Solarpunk instead of the more established Cyberpunk, he replied that Brazil's "fantastic literature biosphere," as he called it, was already "polluted" with coal and petroleum. In other words, we are already highly familiar with dystopian and post-apocalyptic futures, and it seems like they have run their course — or at least should have.

This reflects a problem climate scientists have been facing, namely: How do we, as a species, actually effect the change we know is needed? And why is it so difficult to imagine alternatives in the first place? This is what motivated a recent public discussion I had with the climate scientist Julia Steinberger, a lead author on one of the Intergovernmental Panel on Climate Change's (IPCC) assessment reports. As a climate scientist, Steinberger knows firsthand that there is a serious rift between what we should be doing as a species to reduce the dangers of global warming and what we are actually doing. It is why she suggested to the Théâtre Vidy-Lausanne in Switzerland to hold this discussion on the theme of "from the IPCC to Solarpunk."

In our conversation, Steinberger emphasized that we currently have "an incredible amount of knowledge about our situation and where we're heading." This knowledge has been mostly obscured by decades of lobbying by the fossil fuel industry, as well as the politicians and media personalities who saw it in their best interest to deny or downplay the urgency of global warming. This has led to two parallel worlds: on the one hand, the world of climate scientists and other experts, as well as climate activists, who are painfully aware of the ever-growing presence of global warming; and, on the other, the consumerist world, where it is still considered "normal" to, at best, treat global warming as a long-term concern rather than one deserving urgent action in the present. This is a world where we continue to destroy rainforests to make way for livestock and oil exploration, where flying everywhere for leisure is still considered ethical, and where vegans are the exceptions rather than the norm. In other words, if we accept the science, the only conclusion is that there is a strong disconnect between what is and what should be considered "normal."

The idea of a "normal" is what Solarpunk can challenge, by means of such actions as strikes, protests, campaigning and so much more. Take, for example, "The Boston Hearth Project," a short story by T.X. Watson featured in "Sunvault: Stories of Solarpunk and Eco-Speculation" (edited by Phoebe Wagner and Brontë Christopher Wieland), published in 2017 and set in 2022. The protagonist, Andie Freeman, is applying to a university and has to answer the following essay question: "When have you worked well as part of a team?" Instead of the usual answers — working in an NGO or a private company, for example — Andie tells the story of how a group of people took over a building in Boston to shelter homeless people and protect them from the winter. The context is set at the start of the story: Climate change has made weather patterns more erratic, which in

Boston has translated into homeless people dying from exposure to the cold. Rather than dealing with the issue, the city of Boston opted to build a "custom-engineered closed system" called the Hale Center, where rich people could go to avoid dealing with the misery of the outside world.

The Hale Center is a "smart building," meaning it functions as a self-sustaining ecosystem with water filters, oxygen scrubbers, carefully-controlled algae population and so on. It has huge triple gates that can slam the building shut to "manage its climate internally in extreme weather." This is meant to keep "undesirable" people out — the homeless, in this case — but the activists used that technology against its intended purpose, i.e., for the homeless and against the police and government.

The plan was to occupy it, take over system control, let homeless people in and fight off the cops who would inevitably seek to take back the occupied building. The story shares similarities with popular movies and series like "Ocean's Eleven" and "Casa de Papel" ("Money Heist" in English). The differences, however, are crucial. First, climate change is the problem that the protagonists are trying to tackle. Second, rather than stealing money to enrich themselves, the activists are taking a taxpayer-funded building being used for exclusive purposes and converting it into a functioning public space.

After successfully entering the building and kicking the guard out, they let in 200-odd homeless people to find shelter from the cold. When the police inevitably arrive, the activists trap them between two of the gates and use the building's heating control to increase the temperature to 115 F (46 C). This forces the cops to remove their armor or risk heatstroke. At that moment, ten activists who were waiting in a different, cooler room, allow the cops to enter in small numbers at a time, disarm them, destroy and throw their weapons away, then let them go out in nothing but T-shirts and underwear. The irony of the situation is hard to miss: In the Boston winter cold, the cops cannot survive without going back to their homes, a right denied to the homeless. Only through direct confrontation was that made apparent.

The Solarpunk element of the story is the idea that climate-related challenges are going to increase, yet by thinking and organizing together we are able to arrive at concrete solutions to specific problems. Unlike the more common climate-related apocalyptic stories we're all familiar with, agency is given back to humans who, when sufficiently organized, are able to change their living conditions. Another important Solarpunk feature is the fact that Andie is disabled and a wheelchair user, which in no way prevented them from achieving their goal of creating a better society. Rather than being referred to in a passive way as someone devoid of agency, Andie is one of the leaders of the operation, using Augmented Reality to guide in teammate Juniper before three other organizers pick them and their equipment up to follow Juniper into the building.

The group successfully withstands a 49-day siege by the police, partly thanks to a social media team that was able to build popular support and bring the city to the negotiation table. After the siege, the Boston Hearth Project is officially recognized by the city and renamed the Boston Hearth Homeless Shelter. New York and Portland followed suit, turning over building projects to activists to avoid similar hostile takeovers. As the building was designed to protect the indoors against the outdoors elements, the Boston Hearth Project led to a 92% decline in deaths by exposure in winter. Andie finishes their university application by saying they hope this experience in team-building makes them a great candidate.

The story is an example of why Solarpunk came out of, and was a response to, Cyberpunk. Unlike Cyberpunk futures, famously defined by the author Bruce Sterling as a "combination of lowlife and high tech," Solarpunk futures are stubbornly positive visions of a world of "highlife," where tech is neither necessarily high nor low, but rather adapted to the needs of humankind and the natural

world. In "The Boston Hearth Project," "high tech" such as Augmented Reality and the "smart" building are used as tools needed to fight for a greater good, but they are just as important as the "low tech" equipment such as Andie's wheelchair. Solarpunk refuses to accept that Cyberpunk futures are the only ones capable of motivating change in the present. There are only so many ways one can be told that the future is going to be dark. At some point, there has to be concrete imaginaries readily available for anyone who wishes to cancel the apocalypse. Solarpunk can provide a much-needed critique of the hegemony of apocalyptic visions of the future.

This does not mean that we should pretend everything is fine. The growing awareness of terms such as "climate anxiety," "climate grief" and "ecoanxiety," usefully explained by the French Green politician Melanie Vogel as the result of experiencing the climate crisis yet simultaneously seeing nothing done to tackle it, is a good indication that everything is not fine. Rather, Solarpunk is merely the conclusion that daily anxiety and grief are simply not sufficient. They more often than not lead to paralysis, which in turn can lead to a learned helplessness and despair and render us unable to handle the realities of an increasingly warming world. With global warming already making so much of our world worse, recognizing what we have and what we can build is a must. As Kevin Kahakula'akea John Fong writes in a different context, "Finding joy in the struggle requires us to look, hear, feel, and receive deeply ... to hold onto them, and let them be a salve of comfort and respite as we struggle to fill the void left by the loss of loved ones, of work, school, our connections with family and friends, our daily routines, our communities, and even life as we once knew it." The worse the suffering and pain caused by climate change get, the more Fong's words ring true.

While a blog post titled "from steampunk to solarpunk," notably published amidst the 2007-2008 financial crash, may mark the first use of the term, it also seems to have been coined independently in many other places and in different languages at different times. This is likely owing to the widespread understanding of the term cyberpunk, and a subsequent need to respond to it with something positive and seemingly sustainable. Indeed, in these spaces, sibling genres such as ecopunk, greenpunk, hopepunk, eco-speculation and others are also imagined, written, drawn and talked about, and they are sometimes used interchangeably with Solarpunk. It is only in recent years that the term Solarpunk has become a way for people to self-identify. Clearly, all these terms, and the many ways and places where they have arisen, reflect a desire expressed by many around the globe to, as it were, cancel the apocalypse.

Andrew Dana Hudson's book "Our Shared Storm: A Novel of Five Climate Futures" is an example of a book that is not Solarpunk, but serves a similar purpose. (Hudson has also written Solarpunk stories as well as an analysis of the political dimensions of the genre.) The book consists of five different stories set in Buenos Aires, 2056, during yet another round of the UN climate negotiations known as "the Conference of the Parties," or COP. Each of Hudson's stories adapts one of the IPCC's five Shared Socioeconomic Pathways (or SSPs), scenarios of projected socioeconomic global changes up to the year 2100, better known as SSP1 through to SSP5. We can simply think of them as different scenarios of what our world could look like in the coming decades based on the different actions we do or do not take today and in subsequent years. Though climate scientists have questioned the usefulness of SSPs in terms of accuracy, what Andrew Dana Hudson does in the book is a helpful exercise in thinking through future possibilities.

Each of the five SSPs requires certain actions to be taken for it to become more likely. For example, SSP1 projects a world of sustainability-focused growth and equality, while SSP3 projects a fragmented world of "resurgent nationalism" and SSP5 a world of rapid and unconstrained growth in economic output and energy use. The SSPs alone, however, don't say much. They are just projections, after all, which depend on actions taken in the present and near-future. But achieving the better scenarios rather than the worse ones requires a vision of the future which is able to encompass the required complexities. In other words, we have to actually have some idea, or

multiple ideas, of what it is we are trying to build, not just in terms of wishing for a more just world in a broad sense, but also in terms of visualizing the textures, colors, smells, sounds and emotions of this future world we need and want. What does housing look like in a greener city that is oriented towards the commons and which allows and even encourages its inhabitants to live in dignity? Is there room for rewilding projects in cities? Are people generally happier in this future? If so, why? What has changed in their material reality that makes such happiness more reachable?

This is one reason why we need a multiplicity of genres, as Solarpunk alone cannot supply the entire human species with enough stories and imaginaries to tackle a problem as multilayered and complex as global warming. Our Shared Storm shows how a certain Solarpunk "spirit" can permeate non-Solarpunk stories and serve the same purposes. The goal is similar but the paths taken can be different. As Solarpunk stories are meant to find ways to cancel the apocalypse, being able to picture that apocalypse and its various permutations is obviously useful.

Similarly, Solarpunk is in conversation with and can encompass Afro, Indigenous, disability and queer futurisms, feminism, anarchism and other anti-authoritarian leftwing currents, decolonial practices, and any movement or school of thought which seeks to better our living conditions while respecting planetary boundaries. In an article titled, "In Search of Afro-Solarpunk," Rob Cameron argues that neither the "arc of history" (to quote Barack Obama's adaptation of Dr. Martin Luther King Jr.) nor science fiction naturally bend towards justice, which is why "both must be bent."

"There is no just future," he continues, "built atop (or buried under) the dystopian wreckage of an environment in freefall." In other words, canceling the apocalypse can only be done with the acknowledgment that justice can only be achieved through human action, and such action can be informed by Solarpunk futures.

For that reason, it is normal to see conversations around Solarpunk stories turn into mutual aid tips, self and collective care, unionizing and so on, reflecting "a fundamentally DIY impulse." One example is "permablitzing" guides. The Trinidadian YouTuber Andrewism, who incidentally also has a "What is Solarpunk?" video, has a useful guide to the basics of permablitzing and how to do it. Essentially, permablitzing is an informal gathering of two or more people dedicated to learning how to grow edible gardens, share skills regarding permaculture and sustainable living, and create communities in the process.

In a Solarpunk world, it is not enough to learn how to garden alone, even though it can be a healthy and meditative process in itself. Instead, knowledge should be shared with the intent of building community and the commons, thereby posing a challenge to the aforementioned combination of "lowlife and high tech" that already saturates current imaginaries of the future. Permablitzing is a form of Solarpunk in action. It is not sufficient to tackle global warming, but it can help provide a space for empowering individuals to see the future as their own, something to be acted upon and shaped. Those who cannot, for various reasons, take part in the act of gardening itself can still participate in a permablitzing through conversation, assistance or moral support. They can help design the garden, pick which vegetables to grow, spread the word, bring in funds and so on. There is always a role to play regardless of one's abilities.

This is why I say that Solarpunk is both pragmatic and utopian. It has to incorporate the latter because that allows us to push the boundaries of what is considered possible. At the same time, being pragmatic is a way of bringing back the reader (or listener) to the present after temporarily escaping into a Solarpunk story. For example, a Solarpunk story set in Gaza in the year 2040 could imagine climate change-related challenges that the Palestinians there would be facing then, and imagine ways of solving them. This would be told in a story in a setting with its own specificity which differs from, say, a story set in Paris in that same year. A Solarpunk story set in Gaza 2040 would

therefore have to respect the specific history of that city while also trying to imagine what it could look like free of colonialism, apartheid, patriarchy and other forms of oppression. In that world, are there still two nation-states (Israel and Egypt) restricting the freedom of movement of Palestinians in Gaza? What is the access to resources such as water like? Could permablitzing be one tool against societal atomization brought about by an oppressive state? What are the heatwaves like? Are they dealing with droughts? Is the Mediterranean a source of recreation and abundance, or an intimidating body of water rendered more dangerous by global warming? How are relations with their neighbors?

I chose a less usual example to argue that Solarpunk should — and, to some extent, already does — challenge the centrality of cities such as London, Paris, New York and so on, simply because those cities already receive a lot of attention in our collective imagination. Think of how frequently stories are set in those cities versus a Kinshasa, a Tripoli, a Cuzco or a Port Moresby. Global warming is already affecting our world, and we know the impacts are being felt disproportionately on the peripheries, in the Global South. The Middle East is already the world's most water-short region, while states like Qatar and Saudi Arabia remain among the world's most prolific producers of global warming-inducing fossil fuels. The region's water supply has shrunk to a quarter of its 1960 level and there are real risks that the area historically known as the Fertile Crescent (from Iraq to Israel-Palestine, taking in Lebanon, Syria and Jordan) will, according to the Arab Forum for Environment and Development (AFED), "lose all signs of fertility if the situation continues as it is."

As the challenges won't be the same, neither can the Solarpunk stories aiming to provide different frameworks for those wishing to affect the present. The myriad of futures require a myriad of imaginaries able to deal with them. Solarpunk both tracks and guides our responses to climate change, giving us a way out of apocalyptic despair which only hampers our ability to deal with what is, after all, already an emergency.