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ESSAY

Orienting attention and opening horizons: speculative fiction and sound art as promoters of desirable futures

Mathilde Schoenauer Sebag ^a and Eloïse Bodin ^b

^a Independent Researcher, artist
 ^b Researcher at Pro(to)topia, artist
 Email addresses: sound@duudinka.com and eloisebodin38@gmail.com

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Abstract

The essay explores how speculative fiction and sound art can serve as powerful tools for envisioning and promoting desirable futures. We take extractivist practices in Mozambique as a starting subject of indignation. Reflecting on how artistic mediums allow for an emotional and imaginative critique of real-world issues, such as neocolonialism and environmental exploitation. We argue that fictions shape societies and that our world is driven by dominant narratives - such as capitalism or growth metrics like GDP - that often obscure alternative ways of living and being.

By blending speculative fiction with sound art, our theater play *The Dynamic Ministry of Insubordination* aims to challenge these prevailing dystopian narratives that dominate our cultural and political landscapes. Through our theater and radiophonic play, we critique the exploitation of resources and labor, exploring the absurdity of modern practices through the lens of a postcapitalist, animist future. We call for a reclaiming of imagination to foster hope and envision utopian futures.

The work highlights the need to shift from an anthropocentric worldview and embrace a more holistic understanding of existence, where humans, nonhuman beings, and inert matter share agency. Through artistic expression, we wish to question established hierarchies and inspire paradigm shifts that promote more sustainable, equitable, and joyful futures.

1. Introduction

Listen, and you will realize that we are made not from cells or from atoms. We are made from stories.

Mia Couto (as cited in Flois, 2020, p.346)

Mia Couto is a Mozambican writer, one who not only tells stories, but also introduces you gently to a whole new way of thinking about and seeing the world. He shows you without a drop of condescendence how you can slightly tilt your senses to be able to experience a different presence of the elements. It is less about words, and their obvious limitations, than it is about images, impressions, and blurry – yet vivid - sensations. His books offer the reader the ability to reach beyond that which we see, to grasp other realities that coexist with ours. There are alternative realities, despite the widespread belief that there are none - we just need to pay attention. Thus, this is the purpose of our work and this paper: orienting attention in other directions, to reveal hidden truths on a sensory rather than rational level. We seek to reclaim the pen which writes the fictions shaping our societies.

So you came to Mozambique to make a radio documentary about the neocolonial dimension of extractivism. Okay... But out of all the places in the world where this could be studied, why would you choose Mozambique?

Mia Couto had opened a door to a country where its fables, spirits, and ways extend into real life - it made our curiosity grow. We had the privilege to quarry this curiosity, and that's how we landed in Maputo in July 2023.

A war has been ravaging Cabo Delgado since October 2017. This Northern region of Mozambique has been deeply affected by economic, political, and social instabilities, exacerbated by extractivism and foreign economic interests (Defund TotalEnergies, n.d.). Close to its coast lies one of the largest gas reserves in the world, operated by TotalEnergies (Friends of the Earth, 2022). These conditions have created fertile ground for the rise of Islamic terrorist groups, who have carried out attacks in the past few years. Three thousand kilometers South, we are handing our microphones to journalists, experts, engineers, trying to gather elements, collecting ideas, sounds, stories and history. Drawing drafts, blabbering about patterns and power dynamics. Dancing. Wondering. *Why is it always the same humans who are extracting gas ores sapphires lithium coal coltan for the sake of some other humans, far, far up north?* Playing music. Reading. *Why don't we see the blood dripping from our smartphones and how can we make it tangible?* Meeting artists, activists, fruits, fabrics, songs. Harvesting material, mental and physical, always eager to get more, caught in an extraction process ourselves. Storing everything somewhere in our heads, cautiously. *Has colonization really ended, or is it just dressed up differently?* Constantly caught in a strange entanglement of joy, entertainment and horror. We did not really know what we were doing, we thought we were making a radio documentary in Mozambique, but in reality, we were just drifting. It was the first step of a creative process.

2. Fictions bring societies together. But who holds the pen?

Mathilde directed the radio drama *rocks also die* (2022). In this documented fiction, selected by several international radio festivals and available with English subtitles, we hear two atoms talking about extractivism. We wanted to give *rocks also die* an heir - a documentary heir - showing how mining and extraction activities could not occur without a certain world order, to which extractivism contributes.

But we are not journalists. We don't want to only document the situation. Some people are really good at it, and we are grateful that they are doing this work with passion and rigor. But as for us, we cannot stop at the border of realism - because it's simply too harsh to have to stay within its fences. There's no pleasure taken in watching a film describing an awful situation; and, on the same level, since we wanted the process to be joyful, we didn't want to only witness such a dark reality. We would have just ended up feeling disempowered and sad. We had to interfere with that material, to refine the crude. Slowly, we came to the idea that this would not become a documentary. And anyway, what is a 'pure' documentary?

In his book Capitalist Realism, the philosopher and theorist Mark Fisher (2009) argues that

some things are perceived as obvious facts, such as capitalism, but are actually only fictions we collectively believe in. They just happened to be so effective that we forgot they were just one version of what could have been. He describes how capitalist ideology has imposed itself worldwide, and became the only viable political system into (almost) everyone's minds. This is well illustrated by the famous quote by Margaret Thatcher: *"there is no alternative."* In Fisher's opinion, *"capitalist realism has successfully installed a 'business ontology' in which it is simply obvious* that everything in society, including healthcare and education, should be run as a business" (2009, p17). The rhetoric used to defend capitalism drowns us in a general amnesia: not only did this fiction become 'the only truth', but the origin of the founding myth is itself forgotten.

It's crucial to expose how assembling facts, creating meanings and causal links are intrinsically an ideologically driven process. In doing so we can critically understand, unpick and re-shape narratives - the stories we tell ourselves about the world - which are themselves contested. This is explored by William Cronon (1992/2022), an environmental historian, in his essay *A Place for Stories: Nature, History and Narrative*. Cronon analyzes two opposing historical versions that emerged after the episode of the dust bowl, in which a terrible drought struck the Great Plains in 1930. The two versions depend upon two very different statements regarding 'nature' and result in different narrations. In the first case, nature is seen as dangerous, wild, unpredictable, and the narration that unfolds describes the drought as a clear warning. Following this first narration, human beings need to negotiate and stay humble with nature. In the second narration, the drought is just an invitation to overcome, to dominate nature. The two versions are leading to completely different narratives of this historical episode. The questions to ask, therefore, concern who gets to hold the pen and who does each different interpretation serve.

Our world is ruled by imagination. Fictions bring societies together. But the pen is unfortunately not held by 8 billion people. Certain fingers are bigger than others.

Even realms which appear to be governed by facts and the precision of science are dominated by fiction and narrative. The discourse surrounding economic growth serves as an illustration of this reality. Gross Domestic Product (GDP) is a measure that was conceived during the Bretton Woods Conference in 1944, an era when the world sought a new economic order in the aftermath of war. Originally, GDP was intended as a practical tool to quantify national economic activity, yet even its creators acknowledged its limitations as a measure of well-being or societal success (Kuznets, 1934). Despite these known imperfections, GDP has endured as the predominant indicator of economic success, a numeric gospel that nations strive to increase, believing it to be synonymous with the happiness and prosperity of their citizens. This persistence of GDP as a metric not only underscores the power of narrative over empirical truth, but also highlights how deeply embedded fictions shape the political and economic landscapes, driving policies and perceptions alike.

The manufacture of the historical narrative follows examples that all converge in one direction: our world is a busted boat made of fictions, with a solid crew firmly holding the fiction-helm towards havoc for human society and the planet.

It's time to get a grip on the havoc. To join the mutiny, and change the course of the boat from its deleterious trajectory. Our mutiny elaborates the alternatives that have been erased from collective imagination, it reclaims those desirable futures that were taken away from us. We leave the shipping lane, and we set sail towards a shivering glimmer.

Ideas, we all know, are not born in people's heads. They begin somewhere out there, loose wisps of smoke swirling directionless in their search for a befitting mind. Mia Couto (1992/2006, p. 39)

But which navigation tool should we use? How to use them? How to access what's behind reality, or beyond it? How to find its cracks?

We snuck out of reality. We wandered in its grooves, until we reached its borders, where the cracks get bigger. We threw a shy string through a crack, into the emptiness, into everything that is beyond it. That other space is the kingdom of dreams, of utopias, dystopias, fictions, and alternative realities. That is how fictions can embed themselves within the shell of reality: these fictions start in certain minds, and 200 years later, they have become the predominant reality.

Our playground is not reality. We are dreamers, artists, optimists, activists, we have visions, and we want to see them become true. And so, starting from a documentary, we changed track and decided to write a play, called *The Dynamic Ministry of Insubordination*.

Alternatives are not lacking in the world. What is indeed missing is an alternative thinking of alternatives.

Boaventura de Sousa Santos (2016, p. 20)

3. Dystopia Everywhere, Dreams Nowhere

Looking at the future from the present is a fertile exercise and there is a real stake to spread 'futures literacy'. A good thing about the future is that possibilities, explorations, fantasies, speculations are almost infinite. "Everyone anticipates, but most people are not aware of how they do it," says Riel Miller (BrusselAVenir et al., 2024, p. 4), who is at the origin of the concept. It has become essential for us to get educated on how we can anticipate it, to learn how to appropriate the tools of projections.

So how to become future literate? How to choose the path to walk on? The stories set in the future are mostly dystopias. And that's not necessarily surprising, given the current state of the world. Crime, war, marital drama, rape, torture, thriller: if an alien tried to get an idea of what fiction is by visiting the radio fiction section of Prix Europa in 2023,¹ they'd come away with a tiny glimpse and a nagging depression. Beyond the theme, several of the films selected kept the listener in a toxic relationship with the piece: where only listening could relieve the discomfort it engendered. The omnipresence of the dramatic genre at this festival seems in keeping with the current tendency of social networks and the fiction

¹ This international audiovisual festival honors and rewards European production in radio and television. Mathilde's piece was selected in 2023.

industry to direct our attention towards the 'always worse': a well-referenced strategy when it comes to capturing and trapping attention on YouTube. An analysis of its algorithm presented by Bryant illustrates how "the filter bubble effect² [...] pushes users into a loop that reinforces radicalism instead of level-headed factual resources" (2020, p.85), consequently dramatising (or rather artificially reconstructing) one's view of reality.

A Yale article mentioned that platforms like Facebook and Twitter are effectively engineered to trigger moral outrage, and this draws people in, leading to an addiction to high drama (Hathaway, 2021). Emotional contagion on social media is real, with negative emotions spreading more quickly than positive ones (Lewis et al., 2017). This strategy is effectively used by far-right movements, amongst others, to spread negative fictions, fake news or fear-based narratives on social media. These groups are particularly skilled at creating viral content that plays on emotions, such as fear and anger, often using misinformation or selective framing to present a distorted view of reality (Dehghani et al., 2017). They treat fiction as a market with products (the content), consumers (audience), resources (attention), and financial stakes. The profit is directly proportional to the attention consumers grant to the content. This is the so-called 'attention economy' and in order to maximize the gain, different strategies can be implemented (Simon, 1971).

Researchers from the Department of Psychology of Cornell University analyzed over 160 English-language films made between 1935 and 2010 and found out that, over time, shot length has gotten shorter but motion and movement use got greater. The authors hypothesize that these choices are shaped by the will of filmmakers to incrementally "exercise more control over the attention of filmgoers" (Cutting et al., 2011, p. 569). Alain Damasio has referred to this phenomenon as a 'predatory economy of desire', which establishes a hold on our consciousness and ability to critically appraise visions of the future (Müller, 2023).

² The term 'filter bubble' was introduced by Eli Pariser, an internet activist, to describe how search algorithms reinforce one's view by showing them similar-minded content, instead of opposing views (Bryant, 2020).

The 'economy of the attention' is not only useful to understand the shot lengths' evolution, but also the content itself. Let's move away from the film industry and dive into the information mill. A study published in the International Society of Political Psychology relates how "the exposure to the dramatic news stories significantly decreased subjects' recall of the information and reduces the complexity with which individuals thought about the events" (Milburn & McGrail, 1992, p. 613).

When applied to information delivery, we see how the increase of dramatization becomes problematic. In the fiction mill, the tragic form - which we nonetheless appreciate, and whose artistic or political value can remain high - poses related problems aside from the potential for widespread depression (Rasmi, 2023). In particular, tragedy, as argued by Joseph Meeker (1997), is a genre informed by the assumption of a natural, passive world set against an extraordinary human subject - the hero. This idea is also defended by Ursula Le Guin (1986) in her *Carrier Bag Theory of Fiction*. Le Guin advocates for a fiction that shifts focus away from the heroes - the mammoths killers - and instead gears it towards what contains the food - the bags full of berries - and who is holding them, arguing that they played a more significant role in humanity's evolution.

Before you know it, the men and women in the wild-oat patch and their kids and the skills of the makers and the thoughts of the thoughtful and the songs of the singers are all part of it, have all been pressed into service in the tale of the Hero. But it isn't their story. It's his. **Ursula Le Guin (1986, p 166)**

It's easy to connect the construction of this fictional binary opposition and the climate crisis. For instance, this fiction promotes a view and approach to nature of the kind that Cronon (1992/2022) described as a dangerous, wild thing which should be controlled (and dominated) by human beings. Orienting attention towards fictions that are not promoting this binarity is one of the goals achieved by the refreshing book *Habiter et raconter en*

*solastalgie,*³ written by Frederique Müller (2023). By analyzing contemporary mainstream and underground films, Müller gives an overview of the omnipresence of certain patterns, and how certain themes are biased and follow a political agenda (space conquest, technology, individualist survivalism). Equally, she points to the possibility of other options.

Aligning ourselves with these 'other options', we had decided that we wanted to write fiction, but now we also had to avoid the rabbit hole of a tragic dystopia. We had to drag ourselves out of the 'great attractors' of fiction.

How do we add one little grain of sand on the side of hope, how do we invert power ratios and reclaim the pen writing the fictions our societies are made of, and explore a wider range of possibilities, including positive ones? We did not know, so we wandered, we imagined, created, got inspired, read, dreamed. We became children and played the 'what if' game until a whole universe finally was born. We just had to share it.

The Oracle. What's a utopia, Lou? It's a point in space-time. A suspended, isolated point. Nobody has a map to get there. And besides, there are no roads leading to it. From where we are, we can't even see it. It's beyond the horizon. But don't you think we're even less likely to pass through a point that doesn't exist? So it costs nothing to draw it.

Lou. Yes, it does. Pretend. Avoid realism.

The Oracle. The future is already an escape from the now. There are only futures that "pretend." But most of the futures we imagine today feed already powerful attractors, black holes of narrative. Dystopias that stick to us, that alert, frighten and immobilize. These futures simply end up haunting us, freezing us. They make us slimy. And we let ourselves sink into these deep furrows traced by others. "It's them against us." "The glorious thirty, what a fantastic era." "Public debt is bad." "Technology will save us." "Man is a wolf to man." These stories are written for us by the biggest fiction industries there are. They act like magnets,

³ Not available in English. The title can be translated to *Lives and Narrations in Solastalgia*. Solastalgia could be described as the nostalgia of soon-to-be-destroyed landscapes, due to climate change.

eventually becoming prophecy.

Lou. These stories are the most probable, the most pragmatic! Unless there's some big revolution or global thing that brings the whole thing crashing down...

The Oracle. The Great Revolution, the Collapse, the Tipping Point, that we're impatiently waiting for like the messiah to deliver us from evil, it's not what you think. It's not a deflagration, a cosmic tear condensed into a single point. It's not a compact sphere that implodes in the final act with deafening noise. It's all the little bells out of sync, all the little blisters under the snake's skin. Look around, instead of looking ahead. Look at the possible, at least as much as the probable. And blow into it. Blow it up. The futures we crave are already much more present than they seem, we just need to disembowel them, peel them away from our inside walls. Unveil and activate what's in the blind spot of our bodies, there, just within arm's reach. We place, move and replace points on maps. We redraw the Past, and sketch Elsewheres. Places we'd like to go. Far away. Unrealistic, far-fetched. But just seeing that dot in the distance opens our eyes.

Lou. What if the dot isn't on the map?

The Oracle. Then, maybe the paper will unfold to reach it.

Excerpt from the fourth episode of *Lou and the Mystery of the Delicate Program*, Mathilde's radio drama on useless washing machine programs (Schoenauer Sebag, 2024, 13'58).

4. The Dynamic Ministry of Insubordination

Our play takes place in 660 after the honey strike, in an era called the *flegmocene*. The radio set of the program *Feet on the Table*, is presented by the charismatic mineral Calypso, whose show guest is Luisa - a rigorous and enthusiastic human *anthropolichinelle*.⁴ Luisa is

⁴ A French game of word made of anthropologist and polichinelle, referring to Puclinella, a character from la commedia dell' arte.

attached to *the Dynamic Ministry of Insubordination:* a transdisciplinary research laboratory whose mission is to maintain a solid connection to unsubordinated practices. Luisa has come to present her team's latest hypotheses concerning the previous geological era, the *dualocene*, which is our current time. The geological pieces that "brought themselves with her"⁵ are sound *anarchives*. They sketch the outlines of a strange ancient binary world through hypothesis and dicey conjecture.

The narrative unfolds through a series of dialogues and *anarchives* which reveal how the people of the *dualocene* used technology to optimize their lives and reduce the inconveniences or the dead times. For instance, one of the *anarchives* introduces the "Kawa Zaki," a coffee machine that boasts the ability to brew coffee at unprecedented speeds, symbolizing the era's obsession with saving time. As a very naive and literal answer to this observation, the characters wonder "what would they do with this time they had spared?"

Another key symbol of the *dualocene* is the extensive use of pipelines to transport some "oil" that seems to fuel this fast-paced way of life. From the perspective of a post fossil fuel era, the most plausible hypothesis is that it must have been moringa oil. The scientific rigorous methodology the ministry applies to the *anarchives*, and the relatively surrealistics hypothesis that the researchers come up with, contrasts with what the spectators know. This gap allows a kind of humor to emerge, while distancing the spectator from the absurdity of its current world, using other references to describe a familiar reality.

Throughout the revelation of this localized attempt to domesticate time and matter, the characters end up realizing that most relationships in the northern part of the world were actually characterized by the subordination of human beings over other forms of beings. By highlighting the absurdity of past behaviors and mindsets, the play underlines the arbitrary dimension of the hierarchical and exploitative practices that we know to have led to ecological and social crises. It thus serves as an alerting and documenting tale for the

⁵ Instead of "the pieces she brought," the active language form is often used in our play to emphasize the agentivity of objects.

present, but through disbelief more than guilt or sorrow.

As the play progresses, it becomes clear that the *flegmocene* represents a deliberate shift away from the values of the *dualocene*. This era values slowness, reflection, and a deep connection with the other reigns (vegetal, animal, funghis, mineral), as well as it acknowledges the agency of other ways of being. Luisa and Calypso being surprised when they hear that people of the *dualocene* did not ask for help when they run out of time, is a clear demonstration of the fundamental solidarity of any relationships in the *flegmocene*.

The play ends on a dissolution of the narrative thread, and becomes a sort of prophetic myth, based on Greek mythology patterns, which describes how the *dualocene* pushed itself on the brink of implosion. Yet, amid the ruins, a glimmer of hope emerges. The honey strike promises to lead to a new order of the world.

5. Future archeology: distancing the present, fantasizing the future

By looking at our present from the future, it is easy to magnify some of its features - to make it grotesque, to put it at a distance, to criticize it or have fun with its incongruities. This is at the heart of 'future design', a practice and concept developed by Tatsuyoshi Saijo (Kamijo et al., 2017), which speculates about how some comments sent to the present from the future could orient our decisions.

We designed the *flegmocene* as a predominantly animist future, where more-than-human beings have agentivity, microphones can decide to stop diffusing some sound if they wish to, trees have complementary information to enlighten the debate, and there's a fluidity between genres, reigns, and categories. In the *flegmocene*, every research team is composed of beings from at least the four reigns. Most beings are hybrid, somewhat queer (Tsing, 2015).

In 2024, we spent two weeks in writing residence in France, building the *flegmocene* up. Some informal performances came out of it. Playing in and thinking about this desirable future truly transformed us, and after the first week, we already started to feel differently. Before one presentation, our printer refused to work, and instead of yelling, we were amused (even though worried) of the situation, which could also be analyzed as a simple refusal from this printer to collaborate together.

This collaborative relationship to object and time is something we projected from our observations of daily human/non-human interactions in Maputo, Mozambique during summer 2023. Even though this is probably not desired nor intellectualised, there seemed to be fewer attempts to bend the material world to human will - less effort made to subordinate time and matter, more possibilities to collaborate and work *together*.

The *flegmocene* and its construction were also partly inspired by the queerness and fluidity of *Digitalia*, a microsociety described in *Neptune Frost*, a film by Saul Williams and Anisia Uzeymane (2021). In this film, digital elements are blended with distorted traditions. Soundwise, a particular attention is paid to electronic modifications of traditional sounds, allowing us to project ourselves into a future where mountains of electronic waste have been transformed into jackets, musical devices, and hacking infrastructures. This blend and entanglement of digital and traditional practices is 100 miles away from the usual representation of technology in the future.

Neptune Frost is a strong piece of art because it operates both on the semantic/rational level, and on the symbolic one. It elaborates a complex and clear criticism of extractivism, in the frame of today's geopolitical relations and numeric transition. But the film is before all an incredible aesthetic proposition. Its artistic direction is strongly dominated by an oniric and queer aesthetic. The photography, sound, costume, everything makes us escape our reality, in order to send us into a parallel one. In reality, semantic and symbolic levels are mixed in the same way that 'words' and 'flow' are the two sides of the same coin in a good freestyle, one reinforcing if not complementing the other.

This is the kind of imagination that art activates, and it's probably how artistic work is different from other types of politically engaged content: as listeners, as readers, as

spectators, something in us is triggered. Some hidden mechanism inside starts ticking, and makes us move a little step on the side. First those steps are in our heads, and remain invisible from the outside. But slowly, as those steps conjugate with other ones, they end up resulting in bigger steps, they become almost graspable. We cannot precisely describe and verbalize how a movie, a piece, a performance acts on us, but it moves something.

In this research of activation, efficiency is our enemy. Pieces that are shouting at people, because of a deluge of anger, sadness, injustice, are also very important, but might be more on the side of prosecution than suggestion; they might be looking for results, whereas we are looking for joy and excitement. Vincent Gerber (2024) argues in his book *Imagination in Power. Politics, Science Fiction and Utopias* that creation should be guided by practice rather than theory, and that it should be embedded in a bigger frame implying movements and actions, in order to avoid pure fantasy, because culture does not work like a political tract. Art is more indirect than civil disobedience, it acts at different time scales, has different impacts, all unmeasurable.

So we wrote a fiction. Yes. A utopia. Yes. The question remained: which body should our ideologies inhabit? Here is the last choice we had to make. Image? Sound? Plastic art? And why?

Calypso. Do you think Annick [CEO of Tatol] also had short breaks for quick coffees?

Luisa. More than likely. So in the Dualocene there were potentially different degrees of more or less severe time appetence. But to designate people like Annick, particularly in view of the rhythm of her verbal flow, a salamander colleague of mine suggested the term "time precarious."

Calypso. Time precarious? But why didn't she simply ask those around her for help?

Luisa. That's a good question... You know, the hominids of the time didn't live like we do. So it's possible that she didn't have anyone to turn to for help.

Calypso. It really hurts me to hear you say that.

Long pause.[...]

Luisa. We've been working a lot with our therolinguistic⁶ colleagues to try and get to the bottom of this, and now we're really getting to the heart of the Dualocene. You'll see how the notion of subordination and its geospatial distribution are really the main spice of this era. Tatol was a major oil company at the end of the Dualocene, not long before the honey strike. The term that interested our team was "pipeline".⁷ This name refers to a type of pipe used to carry oil. In this case, the oil was extracted from the heart of "Africa" and exported to "Europe". Given the vegetation present in Africa at the time, it's a safe bet that it was mainly moringa oil, although our team of hymenopterans is leaning more towards palm oil...

Calypso. I can well imagine the heated debates that must have animated the Ministry's anarcho-botanists! But what do pipelines have to do with subordination?

Luisa. Well, it would seem that, while they initially transported oils, these lines soon carried other materials. In particular, those used to make coffee machines.

Calypso. In these same pipes?

Luisa. In these same pipes, yes. Pipes of a certain diameter, often in the ground...

Calypso. Don't tell me the soils were ...

Luisa. No, Calypso, most probably hominids didn't listen at all to what the soil had to say. These pipes carried all sorts of materials. It was the existence of these pipelines, and the systematic and unilaterally profitable swallowing, driven by a few hominids, that allowed us to conclude that there was subordination.

⁶ This term was invented by Ursula Le Guin in her novel *The Telling* (2020) and spread in the francophone literature world by Vinciane Despret in her *Autobiography of an Octopus* (2021). It refers to the domain of linguistics of more-than-humans beings.

⁷ In French, pipeline can be translated to *oleoduc*, whose etymology comes from *oleum*, which refers to any type of oil.

Calypso. I imagine that other testimonies attest to the existence of these lines.

Luisa. Yes, of course. Notably, and I wasn't sure we'd listen to it, but a recording insisted on coming with me. It's the account of a fellow whale, Brunaé, you'll see, she tells me about the arrival of these pipelines in the areas through which her species transited at the time.

Excerpt from The Dynamic Ministry of Insubordination (Bodin and Schoenauer Sebag, 2024)

6. Theater and radiophonic art at the service of a transformation

In the *Ministry*, we listen to whales, to trees, we try to extend our understanding of what it means to be an atomic assembly, and what it implies to be sharing space and time with such different ways of being one. Visually, objects might not catch our attention. They stand still, familiar, sometimes uninteresting. We think we know them. Light can be oriented in their direction, they can be filmed, made bigger, but the spectator remains an external observer. Whereas sound allows the listener to get connected to matter in an usual and intimate way. It gives an illusion of being inside, it grants objects some consideration, some sensitivity. By amplifying chairs creaking, boards bending, transistors sizzling, and how objects reply when they're manipulated, we give them room to express themselves, we magnify their existences, we open the door to the world as they perceive it. This is one of the exciting approaches that sound ecology explores. During a sound ecology class given by Antoine Freychet in 2020 at Université Sorbonne, in which Mathilde gave a presentation of her work, she was given the chance to participate in a thought exercise: what would a yeast in a glass of water hear? Given her size and lifetime, what would the explosion of a bubble be like? How would a human being talking next to her sound? (Freychet, 2022; Galand, 2017).

On stage, apart from the amplification, there are several technical tricks we can activate in order to operate a shift of the point of listening, such as acoustic filters. If the voice of a human talking next to glass containing yeasts is all of the sudden muffled, the listener can understand that the focus is now inside the glass. Maybe for a second, they're the yeast (or the human projection of what being a yeast would be). A light from above would put the

focus on the glass, whereas with such easy sound devices, we easily place the focus *in* the glass. This is a way to enlarge the existences and personalities of more-than-human beings, and decentralize the attention from human existences.

This is somewhat close to anthropologist Eduardo Viveiros de Castro's perspectivist approach, who describes "the world as composed of a multiplicity of points of view. Every being is a center of intentionality apprehending other beings according to their respective characteristics and powers" (2009/2014, p. 54). This decentralised and animist perspective is characterized in the script by constant concern towards what the other form of beings must feel. For instance, Luisa and Calypso wonder about the whales' reactions when the pipelines were built across the ocean they would swim in. In that sense, and we could easily be accused of anthropomorphism, we are close to what Jakob von Uexküll (1909) described as 'umwelt': the world is different for every being, and in the same environment, each organism has a different experience. In our writing, we speculate and wander in those 'unknowable worlds'. We can only make attempts to orient our public's attention towards these other ways of being in this world, as non-humans, but also as post-capitalist humans.

In addition to this sound design work, the sound creation consists of acoustic music played by accordion and mbira: a traditional Mozambican instrument. Some field recordings taken in Mozambique are also integrated in the sound creation as we move away from the traditional radio show and dive into the most dreamy part. This field recording covers both urban environments (streets, parks, restaurants, markets) and non-urban environments (parks, water, wind, non-human animals...). Some of these recordings are slightly modified and mixed to blur the boundary between our constructed notions of the 'natural' and the 'cultural' domains. A sample of a monkey, for example, can be modified and placed in the middle of a supermarket, to create a kind of improbable and fantastic soundscape, eerie even. The interest lies in this confusion it creates: is the animal really in the market? Do the samples found by the *anthropolichinelle* really correspond to a real situation, or is its uncanniness simply related to the hypothetical nature of their assertions? We oscillate between content serious enough to be believable, but in ways subtle enough to indulge daydreaming, fantasy and speculation. Sound enables us to put our present at a distance, to listen with fresh ears, which is necessary for any reflection and paradigm shift. The narrative tricks we use in our script are thus reinforced by the effect that sound creation can create in the sensory dimension.

But if our play is meant to be recorded and broadcasted as it is, it remains above all a play that we wish to perform in public and *with* the public. During the play, we often break the fourth wall and invite people to participate. The play starts with a deliberately chaotic situation: Luisa is in deep conversation with a toaster. She needs a few more minutes before Calypso and her can start the show, so Calypso climbs off stage to the public and asks what is a waste of time for them. Implicating the public comes with a certain amount of risk, which we very much enjoy and have pleasure doing, and it is a direct demonstration of how phlegmatic and informal things are in the *flegmocene*. The public, as well as the insects,⁸ trees, lights or any spontaneous element that would invite themselves to the show are treated as integral parts of it. We aim at immersing the audience in the world we have created, not only by talking about it, but also by offering an hour to experience living in it.

During the days following the performance, we heard several people using some of the codes from the play. We heard them asking, "are you sure you have this stone's consent to crush it the way you are?" or "this is such a dualocenian thing to do," when some parks were forbidden to dogs.

Fiction? Reality? The borders of the world we created are definitely blurred, as proven by these integrations of certain fictive concepts in everyday life. And we believe it's precisely on this blurred perceptual wasteland that the plants that could lead us out of the ecological impasse could grow.

Modern science, a child of the Enlightenment, has done a great deal of harm to living things and the beauty they conceal, by bending the edges to fit objects into well-defined categories with precise contours and producing authoritative definitions. "Disorienting a being in order

⁸ We played in outdoor vegetal places twice.

to produce intelligibility," as the philosopher Isabelle Stengers (2019, p.49) so aptly puts it. These are all ways of intoxicating our minds and rendering them sterile.

In our saddlebag, we carry many tools to hi-jack this ship and steer it away from its harmful course, and among them, art and imagination. These have the power to shift our focus, reminding us that the path we're on is just one of many. Even if the odds don't currently favor a change that benefits life on this planet, we can still catch the wind and redirect the journey. Speculative fiction is a playful tool that reveals all the games that humans and non-humans are playing, and by doing so, it can free objects from the categories they've been bound to, and open up our perception towards all the other ways of being to this world.

By nurturing other scenarios other than the ones we live in, we make them grow. By closing the gap between fictional fantasies and reality it strengthens our collective resolve to fight for a habitable earth, as a planetary inter-reign community.

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References

Bodin, E. and Schoenauer Sebag, M. (Authors). (2024). *The Dynamic Ministry of Insubordination* [Chateau Pergaud, Alex, France, 12th of May 2024].

BrusselAVenir, Plurality University, & YouthWatch. (2024). *What is future literacy and why it's so important for youngsters*. <u>https://brusselavenir.be/app/uploads/2024/10/What-is-futures-literacy-and-why-is-it-important-for-youngsters.pdf</u>

Bryant, L. (2020). The YouTube Algorithm and the Alt-Right Filter Bubble. *Open Information Science*, *4*(1), 85-90.

Cronon, W. (2022). A Place for Stories: Nature, History, and Narrative. In W. R. Burnside, A. Pulver, K. J.
 Fiorella, M. L. Avolio, & S. M. Alexander (Eds.), *Foundations of Socio-Environmental Research: Legacy Readings with Commentaries* (pp. 588-617). Cambridge University Press. (Reprinted from "A Place for Stories: Nature, History, and Narrative," 1992, The Journal of American History, 74[8], 1347-1376).

Couto, M. (2006). *Sleepwalking Land*. Serpent's Tail. (Original work published 1992). Cutting, J. E., Brunick, K. L., DeLong, J. E., Iricinschi, C., & Candan, A. (2011). Quicker, faster, darker: Changes in

Hollywood film over 75 years. *i-Perception, 2*(6), 569–576. https://doi.org/10.1068/i0441aap

de Sousa Santos, B. (2014). Epistemologies of the South: Justice Against Epistemicide. Paradigm Publishers.

Defund TotalEnergies. (n.d.). *Mozambique LNG: Une méga-bombe carbone au Mozambique* [Mozambique LNG: A mega-carbon bomb in Mozambique]. <u>https://defundtotalenergies.org/mozambique-lng</u>

Dehghani, M., Johnson, K. M., Garten, J., Boghrati, R., Hoover, J., & Iliev, R. (2017). Purity homophily in social networks. *Nature Human Behaviour, 1*(7), 1-5.

Despret, V. (2021). Autobiographie d'un poulpe [Autobiography of an octopus]. Actes Sud.

Fisher, M. (2009). Capitalism Realism: is there no alternative? Zero Books.

- Flois, C. A. (2020). Contextualizações estéticas e históricas em mulheres de cinzas de mia couto [Aesthetic and historical contextualization in women of mia couto]. *Travessias*, *14*(1), pp. 332-353.
- Friends of the Earth. (2022). Fuelling the crisis in Mozambique: How Export Credit Agencies contribute to climate change and humanitarian disaster. <u>https://friendsoftheearth.eu/wp-</u>content/uploads/2022/05/Fuelling-the-Crisis-in-Mozambique.pdf

Freychet, A. (2022). *Démarches artistiques et préoccupations écologiques: l'écoute dans l'écologie sonore* [Artistic Approaches and Ecological Concerns: Listening in Sound Ecology]. L'Harmattan.

- Galand, F. (2017). Écouter dans les ruines du capitalisme: enregistrements de terrain en formes de vie [Listening in the ruins of capitalism: Field Recordings and Forms of Life]. *Audimat, 10*(2), pp. 139-171.
- Gerber, V. (2024). *L'imaginaire au pouvoir: Science-fiction politique et utopies* [Imagination in Power. Politics, Science Fiction and Utopias]. Le Passager Clandestin.
- Hathaway, B. (2021, August 13). 'Likes' and 'shares' teach people to express more outrage online. Yale News. https://news.yale.edu/2021/08/13/likes-and-shares-teach-people-express-more-outrage-online

Kamijo, Y., Komiya, A., Mifune, N., & Saijo, T. (2017). Negotiating with the future: incorporating imaginary future generations into negotiations. <u>Sustainability Science</u>, 12(3), 1-12.

Kuznets, S. (1934). National Income, 1929–1932. National Bureau of Economic Research.

Le Guin, U. (2000). The telling. Thompsons Learning.

Le Guin, U. (1986). The carrier bag theory of fiction. Grove Press.

Lewis, R., & Marwick, A. (2017). Media manipulation and disinformation online. *Data & Society Research Institute*. <u>https://datasociety.net/library/media-manipulation-and-disinfo-online/</u>

Meeker, J. (1997). The Comedy of Survival: Literary Ecology and a Play Ethic. University of Arizona Press.

Milburn, M. A., & McGrail, A. B. (1992). The dramatic presentation of news and its effects on cognitive

complexity. Political Psychology, 13(4), pp. 613-632.

- Müller, F. (2023). *Habiter et raconter en solastalgie* [Lives and narrations in solastalgia]. Médiathèque Nouvelle.
- Rasmi, J. (2023, December 15). Sans comique, nos futurs s'effondrent [Without comedy our futures collapse].
 AOC. <u>https://aoc.media/opinion/2023/12/14/sans-comique-nos-futurs-seffondrent/</u>
- Schoenauer Sebag, M. (Director). (2022). rock also die les cailloux meurent aussi [Radio Drama]. Transcultures Production.

https://videos.domainepublic.net/w/vWgCTi3UCziXennabqp5WM

- Schoenauer Sebag, M. (2024). Lou et le mystère du cycle doux Episode 4 À tambour battant [Lou and the mystery of delicate program Episode 4 At a drum pace]. [Radio Drama]. Transcultures and Utopiana. <u>https://soundcloud.com/duudinka/lou-et-le-mystere-du-cycle-doux-episode-4-a-tambour-battant</u>
- Simon, H. A. (1971). Designing organizations for an information-rich world. In M. Greenberger (Ed.),

Computers, communications, and the public interest (pp. 37-72). The John Hopkins Press.

Stengers, I. (2019). Résister au désastre [Resisting Disaster]. Wildprojects Editions.

Tsing, A. (2015) The mushroom at the end of the world. Princeton University Press.

- Viveiros de Castro, E. (2014). Cannibal metaphysics. Polity Press. (Original work published 2009).
- von Uexkuell, J. J. (1909). *Umwelt und Innenwelt der Tier* [External and internal world of the animal]. J. Springer.

Williams, S. & Uzeyman, A. (2021). Neptune Frost. [Film]. Kino Lorber.

The authors

The authors are Mathilde Schoenauer Sebag and Eloïse Bodin.

After a Ph.-D. in Material Science at ESPCI in Paris, Mathilde Schoenauer Sebag swapped her lab coat for a synth and a couple of microphones. She went from an academic approach to address global warming to a sensitive and an artistic one. Her sound research first evolved around concrete, improvised and experimental music, before she explored sound creation for radio. She quickly discovered the field of sound ecology, and slowly her domains of interests converged again: in her first radio drama *rock also die* we can hear atoms talking about extractivism. It has received international interest (selected in 2023 for the Prix Nova, Bucarest and the Prix Europa, Berlin, and third price for fiction at UKRDIF, Canterbury). Today, she is based in Brussels and balances her work as a writer at the border between fiction and essay, a high school science teacher, and a sound artist.

Eloïse Bodin strives to make a meaningful impact on the planet and its people with 7 years of experience in policy-making, strategic planning and research work. She has worked for political institutions such as the French Parliament and the European Commission, as well as various NGOs to conduct field and research work. She also has strong experience in project management and managed Think2030, a platform fostering collective thinking on the future of sustainability policy in the EU. Additionally, Eloïse directs podcasts and artwork shedding light on environmental struggles, amplifying voices of the movements she encounters during her journeys in different parts of the world. Her podcast "Gouttes de Luttes – Fleuve de Résistance" on the struggle of Chilean women for access to water will be released in January 2025 and she recently published an article on gas extraction in Mozambique. She graduated from Business School and holds a Master degree in Political Economy of Europe from the London School of Economics and Political Science.