

Ken Rinaldo

1. As an artist working on biological and ecological themes, how often do you take into account your own carbon footprint?

All the time when I purchase a product I think about the plastic use. When I travel, I think about the oil economy and how much I am using. When I ship I am concerned with how. When I use the Internet I think about where the power is coming from. I try to ride my bike whenever I can to pickup things I need and I try and recycle and reuse materials in my studio, that I already have. I also will forage for living materials as well as electronic materials. I refuse plastic at stores and when I shower try and use non-plastic based containers for soap and shampoo.

As a living systems artist I think about these things daily in order to reduce my carbon footprint. Since living systems inspire much of my art, it felt ironic the artwork was also damaging to the life, I was studying and celebrating.

2. When did you decide to cut back air travel? Was there an 'aha moment' or an inspiration for the decision?

Nine years ago, I was invited to participate in an exhibition in Sao Paulo, Brazil, at the Itau Cultural, with the six Fusiform Polyphony (Face Music) robots created originally for Nuit Blanche in Toronto. International shows were rolling in at this time, and to do the show, I needed to ship the installation of six robots and the heavy aluminium supporting structures. The crates were not built, so the museum offered to send a truck to ship the works to New York, to build the crates.

To my surprise, a massive 18 wheeler showed up to the back of my studio — belching black smoke from two decorative exhaust pipes above the cab. When they opened the truck the driver said I was in good company, as two Picasso paintings and one Matisse painting was within. Somehow I felt like my work riding next to these great artists meant, I had somehow made it.

Though, why was the truck nearly empty?

I felt so guilty with an 18-wheeler truck driving to New York, mostly empty with its nasty carbon footprint just to build crates. I knew later my flights to and from São Paulo where my studio assistant and I, were also offensive contributors to my nasty carbon feet.

I think it hit home more deeply, when seeing Greta Thunberg speaking about our selfish consumption, robbing her and future generations of their right to inhabit a liveable planet.

3. How do you think that affects your career as an artist? Have you had any negative push-back from not wanting to travel somewhere?

Yes, it seems some exhibitions want the presence of the artist at the show. In a recent presentation in Taiwan where the Continuous War Train was commissioned, the curator was very kind and felt it essential that I attend the opening, so I agreed and took my studio assistant as well. Still, the reason I produced the animation, besides its political anti-military-industrial-complex message, was the desire not to have to fly.

In another invitation I had received to deliver a keynote address at UC Irvine on robotic art, I offered to build a kind of avatar robot, to read my paper. However, the curator would not have it, so I withdrew from the conference.

Recently when I was invited to exhibit *Borderless Bacteria / Colonialist Cash* at Ars Electronica for their 40th-anniversary exhibition, I was honoured. When I asked if they could produce the work at Ars they said sure; they have a bio lab. I was thrilled and said I did not need to travel. They seemed a bit surprised, though later offered a ticket and honorarium and said it was important to attend, given past winners celebrating the big 40th anniversary.

Near to the time to order the ticket, I was dis-invited as they said they had run out of funds. At that point, given the importance of Ars Electronica as a world stage, I offered to produce the works myself, and have it delivered to Ars. They did not agree to this plan, which led to more questions.

When I looked more closely at my text surrounding the work *Borderless Bacteria / Colonialist Cash*, I had made a statement about accepting bacteria and microbes as we should accept migrants. After some investigation, I realized Austria was one of the countries with the most stringent access for migrants. I believe perhaps the text I submitted for the catalogue may have been subtly embarrassing to Ars Electronica, or possibly challenging their city, state, and corporate sponsors? This was not intended though perhaps a poor choice of my words.

Additionally, it would have been more expensive for Ars Electronica, given their large scale to have to produce the work in their labs. Still, I was happy that at first Ars Electronica would consider doing the work in their lab, and I think this points to a distinct possible future for such exhibitions, wishing for greener alternatives.

4. For the last 25 years or so, a lot of importance has been given to the 'artist as nomad'. Artist residencies, global exhibitions, festivals, and biennales seem to put forward the artist as a 'global figure,' but that means a lot of air travel. In a heating planet, is it possible to find alternatives to the status quo?

I think it certainly is possible to find alternatives. Art Laboratory Berlin taking the protocol as instruction set, similar to the way John Baldessari or Sol LeWitt's works were produced, where the idea is perhaps the most crucial thing was fantastic. As a neo-conceptualist artist, I feel it is perfectly fine to send instructions, and help frame both the production and presentation of the work.

That the team at Art Laboratory Berlin was willing to engage this process, feels like a real evolution. Our communication has been excellent and quick and has allowed a sense of the artist's presence and mind to exist in the end product, in this exhibition. Not needing to use air travel or expensive shipping to move the work from place to place is fantastic.

When many artists do not necessarily even construct their own works, it seems logical that to build work remotely rather than shipping work, can also benefit local communities vs. supporting a dying carbon-based economy.

I am also often struck with how much of a show budget is expended with international travel and shipping. Given the large-scale nature of some of my works, 90% or more of a budget can be expended with just shipping alone. This also feels very sad, as the artist tends to receive minimal funds, and often the art funds go toward shipping companies, airlines, and customs fees.

While so many artists like the status of having an international practice, I think we all must learn alternatives to this stance. It is promoted in so many areas, such as in education. One becomes a full professor by having an international practice vs. a national or local practice, where you may only be an associate or assistant professor.

Since these realizations, I have been trying as much as possible, given the nature of my practice, to find ways of exhibiting my work internationally without needing to fly. This is challenging, as my work is generally large interactive robotic exhibitions.

I have had some luck with this, especially with works that are animation based, or digitally based. Recently I did an exhibition in Toronto called the *Digital Animalities*, where the curators invited my *Seed Series Prints*. Fortunately, the exhibition curators were willing to print the works in Toronto to my specifications. They then received the works into the University collection, which made me happy.

For me, perhaps doing so much international travel, I started to think of new ways of redesigning my practice that would allow the work to travel virtually. At this point, when I receive an international exhibition invitation, my first thought is how I can do the exhibition and still participate, and reduce my carbon footprint?

5. What is your ideal balance as an artist living in the third decade of the 21st century?

Well, most art seems to now be viewed online in some way. At first, my mind goes to virtual reality. Still, recently I have read that the most massive coal-fired machine on the planet is, in fact, the World Wide Web. This makes me sad, given I also keep and maintain a significant web presence.

In the ideal world, we would find alternative ways of powering the web, Solar, or microbial-based. The energy is there, though the infrastructure is not there, yet. I find great hope in electric planes and believe this will happen eventually. Still, so much of capitalistic practice is based on extractivist philosophies, where we just decimate natural environments for metal and minerals. I believe there have also been some early models of art that heals the planet, and thinking of the artwork as a living system, that helps to improve local sites such as the works of Wolfgang Laib, Agnes Dennis, Mel Chin, or Helen and Newton Harrison.

I think the perfect balance would be artworks that, in some way, instantiated action and offered a kind of healing moment for the planet. This may have to happen locally, spread ideational, and in other ways, act as a seed to future generations.

I can imagine artists having living avatars and find great humour in artists such as Maurizio Cattelan that, for years had a stand-in for him, since he did not want to go to all his openings. Perhaps every city should have artist avatar businesses, where avatars show up on behalf of the artist. Artists like Banksy have also managed to create tremendous excitement and mystery surrounding not knowing who they are.

As I study and research living systems theory, the interconnection of our brains also require proper cooling. Still, when the body dies, the brain only partially dies, as we leave behind ideas and information, or works of art we hope to persist in some way. If these ideas could be stored and in low carbon ways, then they could allow us as humans, to pass on what we have learned to future generations, without the massive carbon footprint.

I know there are experiments, for example, to store information in DNA, or in inert quartz crystals. In the end, perhaps the art I am most interested in, is living, and does not last forever. Like life it may have a cycle of birth, life, death, and degradation.

I am now obsessed with Fungi as an art material, after seeing the *Fantastic Fungi* film featuring Paul Stamets a few weeks ago.

6. Festivals implicitly combine the global with the local, which usually means flying a lot of people into a location. How could that be done differently? What would a low carbon or carbon-free festival be like?

A low-carbon festival for me would exist in a city where there is lots of bicycle infrastructure. It would not necessarily allow flights or massive crates to be shipped. While the spectacle is important, I think works that amplify the subtlety of life and instead try to slow the experience

down, and help people to see the beauty inherent in the local would be preferable. Projection mapping has tremendous theatrics, if that is necessary, and can also amplify the small and slow moving.

I have been much more excited about local exhibitions in my City within short 2 to 3-hour distances. Even these require cars, and at times I have delivered my artworks on my bicycle. I am also excited by cargo bikes, where human power can be used to produce works of art.

I think transmitting video and film digitally is another excellent example of art that can be experienced at a distance or sent at a distance, and have a local influence on ideas.

7. Could you imagine any of these ideas affecting how you produce your artworks?

Yes, it has already impacted my ideas and affected how I produce my artworks. My most recent piece called *Scatter Surge; Holobiome* is one such example. Because it uses Maple wood from a falling tree next door to my studio, I was able to create mobiles of this tree with natural rocks and recycled plastic. By reusing material, honouring this ancient tree that was twice my age, was part of the intent and thinking about the cycles of life and death.

It's primarily constructed of materials, which WILL degrade, I see future artworks that will be much more based on fungi growth and degradation as the main focus of future works of a life affirming art.

Still, I am obsessed with machines and their emergent properties. I feel they are part of our evolution as a species. As the hammer and drill are an amplification of a muscle, the algorithm is an amplification of our minds. They will not go away. We must find better ways of powering them. I think this is a critical moment for our human species, and if we can get it right, we may become an emergent being.

Though as a human on dying planet, I also feel I must take responsibility, as much as I possibly can, by using less carbon in the process of creating, making, and distributing my ideas and artworks.

8. What would you wish or hope for the next generation of artists in dealing with these questions?

I feel the next generation already can see the challenges of our environment. It is often young people who seem to recognize we have been a part of a long trajectory of these damaging consumption and consumerist waste cycles. All are dark behaviours spurred on by capitalistic practices, and the recent fires in Australia are just one example of these environmental calamities. If one billion humans had died as a result of an international weather related calamity, we would be far more concerned, than the one billion animals that died in those fires.

I think many are realizing that we don't all need 3000 square foot (278 Sq m.) homes, and micro homes are all the rage now. This is part of the realization that material wealth is not as satisfying, as the time we have to develop our beings and individual voices, hopefully through art and free expression, allowing us to connect with others.

Stuff does not define us, though ideas have wings allowing them to spread in myriad ways globally. Great musicians and composers are an exquisite example of that.

They have sent their music through time, as a structure for future orchestras to play. I wish to send my ideas through to the future, as visual, aural and organizational artworks, that others may enjoy. Information Arts can be poetic when we have galleries and museums willing to engage in these greener practices.

Saša Spačal

1. As an artist working on ecological themes, how often do you take into account your own carbon footprint?

I think about my carbon footprint of my travels and my artworks all the time. For three years now I have been researching and applying different strategies how to lower it: less flying, considering sustainability of materials for my artworks and how the artworks are produced, transported etc.

2. For the last 25 years or so a lot of importance has been given to the 'artist as nomad'. Artist residencies, global exhibitions, festivals and biennials seem to put forward the artist as a 'global figure,' but that means a lot of air travel. In a heating planet is it possible to find alternatives to the status quo?

Yes, for events in Europe it is especially easy to switch to train, car or bus travel. I found these alternatives also less stressful, healthier and more enjoyable, not to mention productive. Train travel is perfect writing, reading, thinking time for me.

3. What is your ideal balance as an artist living in the third decade of the 21st century?

An option would be to send my work with instructions for technicians to set up the work, so my travel would not add to my carbon footprint.

4. Festivals implicitly combine the global with the local, which usually means flying a lot of people into a location. How could that be done differently? What would a low carbon or carbon free festival be like?

Some festivals and exhibitions are already asking artists and audiences to travel on land. I also noticed some initiatives to organize group land travel for the audiences from major cities in Europe. I think this is the way to go.

5. Could you imagine any of these ideas affecting how you produce your artworks?

At the moment I think a lot about sustainability of my artworks in terms of how to plan their life after the exhibition(s), what kind of materials to use etc. It makes the process much more complex of course but also a very interesting research at the same time.

Kat Austen

1. As an artist working on ecological themes, how often do you take into account your own carbon footprint?

Constantly.

2. When did you decide to cut back air travel? Was there an 'aha moment' or an inspiration for the decision.

In 2018 I completed a project on the consequences of the climate crisis in the Arctic. It is called *The Matter of the Soul*, and centres around an experimental music symphony and sculptural installation. That year I also flew to two other continents and commuted by plane to deliver a lecture course and fulfil a fellowship in the UK. I premiered *The Matter of the Soul | Symphony* at Howard Assembly Rooms in Opera North in the UK in October, just as the IPCC released a critical report that announced that we must make drastic changes to all aspects of our lives in order to limit warming below 1.5 degrees*. Dire consequences are predicted if warming beyond 1.5 degrees occurs.

I decided to assess the impact of my own travel. While it was undoubtedly allowing me to carry out work, I could not argue that the impact of the work would be any greater in far flung locations than carried out nearer to home. I was not convinced that my individual carbon footprint was going to be offset by the consequences of my travelling for work, even though my work aims to address the climate crisis. So, I decided to trial not flying for a year in 2019. I have had to make some tough decisions and turn down work. But many collaborators and producers have been incredibly supportive of it, and I was busier last year than ever – and all closer to home. At the turn of 2020, I decided to continue to limit my travel in general, and not to fly.

3. How do you think that affects your career as an artist? Have you had any negative push-back from not wanting to travel somewhere?

On the whole, I have received very good feedback on the decision itself – I have never had anyone say it's the wrong decision but have often heard people say they couldn't do it themselves. I have had to turn down work, and some collaborators and producers have struggled to accommodate the additional cost or travel time requirements. Yet many more have been very supportive and have facilitated my involvement through other means. There is one crucial point that outweighs everything. My art is entirely an expression of my being, a synthesis of what I experience. I could not continue to make work if I was living with a discordant hypocrisy at the heart of myself.

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Yes, but it requires a culture change. It's coming. Rosie Braidotti said of digital nomads a few years ago in a lecture in Berlin: "get a life": belong somewhere, have a life in a place that means something to you. I think it's good advice – how can we really understand without being invested at a local level? It is no longer the universal sign of success to travel and exhaust yourself – the tide has changed and this is no longer revered. We see "flight shame" becoming more and more prevalent. While the pull of networking and being seen in the right places is still important, it is unsustainable and as such it must be replaced. Listen to the really young people – they know. Listen to the climate scientists – they know. There's no choice but to change. If we don't

do it voluntarily, the world's systems will morph to force us to.

5. What is your ideal balance as an artist living in the third decade of the 21st century?

My ideal balance is to continue to be able to make meaningful work that speaks to people, to be able to construct the reality that I see. I would dearly like to be able to see a reality where we begin to live with greater care for each other, for more-than-human others, for the future. This is something that we all have to achieve together.

6. Festivals implicitly combine the global with the local, which usually means flying a lot of people into a location. How could that be done differently? What would a low carbon or carbon free festival be like?

The OSCE days coordinate a multi-nodal festival, occurring at the same time in different locations and sharing knowledge. While there are limits to this approach, it seems a good starting point. Of course, we have to also consider the carbon footprint, and the resource extraction implicit in an online presence, just as we would have to consider that some artworks cannot be shared through online media. Nevertheless, it seems like a good place to start.

7. Could you imagine any of these ideas affecting how you produce your artworks?

They already do. My decisions on media, delivery and location are all directed by a balance between predicted environmental impact and artistic / aesthetic impact.

8. What would you wish or hope for the next generation of artists in dealing with these questions?

I hope they have to fight fewer battles to be able to progress as artists and live within planetary boundaries. Or a solar-powered flying condor to get around, like in Les Mystérieuses Cités d'Or. But they'd all be too young to remember that.

** Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*

Margherita Pevere

1. As an artist working on ecological themes, how often do you take into account your own carbon footprint?

My interest in how we, humans of the global North, traverse ecosystems draws back to the early 2000s. Today, it is an underlying theme of my research.

The first time I addressed the topic was for my BA in political sciences. For my research, I addressed how the tension between the Venetian landscape – a topic in the works of European artists such as Giorgione and Goethe – and the local industrial growth of the late 20th Century, which disrupted such landscape in change of a glaring economic growth.

Today, my artistic work builds on themes of ecological complexity. Sometimes it explicitly addresses environmental disruption; sometimes the reference is less explicit. There is a trajectory that connects the theoretical approach of my BA research, fifteen years ago, to the radical interest for material imbrication and agency of my artworks.

The idea carbon footprint is a useful conceptual tool. However, I think we should not take it as a universal reference for how we impact the ecosystem. Sometimes, one may need a lot of resources to make something meaningful – which may be the case of art.

2. For the last 25 years or so a lot of importance has been given to the 'artist as nomad'. Artist residencies, global exhibitions, festivals and biennales seem to put forward the artist as a 'global figure,' but that means a lot of air travel. In a heating planet is it possible to find alternatives to the status quo?

We have to! It's time we develop new paradigms. We need to be bold. The idea of the 'artist as nomad' is powerful and fascinating, but I think it retains some 20th Century narrations we need to overcome. It retains traces of what I consider obsolete idea of freedom, where all choices are available with virtually no consequences. The best example for this is digital technology, which allowed a more-connected world: what is the true material weight of every email? Of every picture we share? Even replying to these questions – a dialogue opportunity I am grateful to you for – involves material rearrangements, toxic waste, rare earth mining at some nodes of the chain.

I am an artist and scholar. Both arts and academia involve traveling extensively in name of knowledge exchange. This experience has been significant, for me, for understanding better today's ecological complexity: there is little black and white, most of our choices embrace vast portions of the colour spectrum.

Artists are existential nomads, not geographical.

3. What is your ideal balance as an artist living in the third decade of the 21st century?

I wish slowing down was more accessible. We live in a time of constant updates, fast consumption of information and objects; things get old so fast. This affects the way we work. I quit social media also for this reason.

4. Festivals implicitly combine the global with the local, which usually means flying a lot of people into a location. How could that be done differently? What would a low carbon or carbon free festival be like?

I would ban duct tape as first thing. Duct tape is a versatile tool, but its use is temporary, and it's a non recyclable waste. As second thing, I would lower music volume, unless a certain loudness is necessary for the artist's intention. These two examples might sound like jokes, but to me they suggest how so many of the common festival features are invisibly tied with the ecological problem.

Another thing is how artists, curators, and scholars travel. I admired an initiative by Kone Foundation, the funding body that supports my PhD. Last year, Kone Foundation launched a specific call to cover train travel costs. My travel plans did not meet the call time frame: I did not apply, but found the initiative exemplary.

5. Could you imagine any of these ideas affecting how you produce your artworks?

They have already been affecting my artworks. I work very carefully with materials – not in terms of quantity, but *how of they act* and *what they mean*. But there is still a lot I hope to learn. I plan to work less with installations in the future – but for multiple reasons. I will continue negotiate decent fees, which hopefully would allow me travel less. Beside this, I will continue to be inspired from ecological complexity, and pursue radical artistic practice.

6. What would you wish or hope for the next generation of artists in dealing with these questions?

I wish bold artworks that are not afraid to embrace complexity and manifest it.

Sarah Hermanutz

1. As an artist working on ecological themes, how often do you take into account your own carbon footprint?

In my life and artwork, I'm always trying to better understand and take responsibility for the impact I'm having on the world around me (with varying success). The blurring of personal and professional is especially relevant when we are dealing with resource consumption and carbon footprint – the foods we eat, the materials we consume, the trips we take, all add up regardless of how much artistic value they may or may not produce.

2. For the last 25 years or so a lot of importance has been given to the 'artist as nomad'. Artist residencies, global exhibitions, festivals and biennials seem to put forward the artist as a 'global figure,' but that means a lot of air travel. In a heating planet is it possible to find alternatives to the status quo?

Being internationally connected (both physically and digitally) as an artist is important for understanding better the global scope of the problems we are facing, and maintaining solidarity across borders. However the intense pace and schedule of international events, and the expectation of physical presence for artists and audiences, is absurdly unsustainable. Lots of artists are wearing themselves thin with constant (high carbon output) air travel. Alternative travel methods – like trains – when available are a good option. But the answer isn't just lower impact travel, it's less travel, period.

There are lots of alternatives already emerging, such as virtually attending events and conferences, and remote-producing artworks, as Ken has done for this show. I think that what is even more important, though, is to reduce the expected pace of production and attendance – to do more with fewer trips, quality over quantity.

3. Could you imagine any of these ideas affecting how you produce your artworks?

This already has affected my artistic practice and production a great deal, and more so every year. Increasingly I create site-specific artworks with materials available near the site of their production and presentation, and that can be either returned to their natural sources or reused in future artworks. Creating static physical artworks that must be shipped around for display seems less and less artistically justifiable for me. And the movement of the materials and participants in my projects are an important part of the works' conception and presentations. These changing methods are my way of trying to create a less destructive and negatively impactful artistic practice, and to honestly confront the ways in which I am still coming up short and failing in that goal.

4. What would you wish or hope for the next generation of artists in dealing with these questions?

Much of the next generation of artists seem already far more aware of the ecological stakes of the ways we create and travel for our artwork. The kinds of 'choices' that artists can make currently will likely become less an option and more a default constraint. I hope that they are able to maintain globally-minding connections while living, creating, and consuming at a much slower, calmer, and moderate pace together.