

Being creative in a greenhouse: art and global warming

Donato Ramani

They say that artists are the “antennae of society”. For the sake of precision, this definition belongs to Marshall McLuhan, a much acclaimed Canadian sociologist who provided key insights on communication issues, old and new media of communication and the impact they have on the life individuals, communities, and of the new “global village”, in a now small world produced by new technologies.

The world has actually become a small world. Not only owing to TV, satellites and the Internet that allow us to jump from side to side of our planet in a click. We will borrow the definition of the artist from McLuhan to adapt it to another phenomenon where the word “global” has an equally important meaning. A phenomenon that evokes dry lands, devastating rains, tsunamis and hurricanes, torrid summers and melting glaciers, icebergs leaving their millenary locations to embark on a journey without return. “Global warming”, that’s its name. We have already spotted its effects here and there. Certainly we have heard of it so many times in the past few years that the apocalyptic landscape described above has now the dull flavour of a déjà-vu. We have read of it many times on newspapers, books, on the Internet. We have heard scientists, politicians, members of environmentalist associations talking. Recently, having received an Oscar and a Nobel prize for his awareness-raising work on the risks of the greenhouse effect, a nearly-elected American president has become a much acclaimed activist. But in the past few years, this debate has been seeing the voice of the artists joining the others. This should not surprise that much, also in the light of McLuhan’s words. GMOs, biotechnologies, neurosciences, robotics, electronics, privacy, health, environment. The world and the public opinion are debating on the capital scientific issues having such a large impact on our society. Artists live within this very society, becoming interpreters of it, based on their sensibility, culture, history, interests, instruments. And sometimes they even snatch the tools from the scientists’ hands, to build works of art that are also works of science. And they are, more or less consciously, works of science communication. Informal communication? Yes. Not traditional at all? No, totally outside the norms. But often effective. As demonstrated by the assortment of events, festivals, museums, scientific contests which ever more frequently host works of art.

A boom that also regards ecology and climate changes. Each artist with their personal interpretation. Some artists such as Katerina Gutierrez, Chilean, and Alessandro Ricci, Italian, paint their pictures with smog collected through filtered air in the cities or from monuments and windowsills. Some other artists use Photoshop to create new animals undergoing a hasty evolution to adapt to the deep and fast environmental changes. This is the case of the American artist Rebecca Di Domenico (www.didomenicostudio.com). There are those such as the Cape Farewell group (www.capefarewell.com) that embark on a boat to reach the Arctic. Artists, scientists and popularisers, all together for scientific and creative explorations. “We engage artists for their ability to evolve and amplify a creative language, communicating on a human scale the urgency of the global climate challenge [...] One salient image, sculpture or event can speak louder than volumes of scientific data and engage the public's imagination in an immediate way”, to quote the website of the organisation.

Hence, popularising artists are aware of their role and of the considerable communication potential of the artistic medium. This commentary and these papers will gather their voices, to understand their motivations, objectives and the perception they have of their own work. We will also investigate the origins of the change in the relation of the artists with the environment, trying to understand how in the past few decades artistic experimentation has shifted its focus “on the change in life, in the whole society and in the entire ecological context”. And we will listen to the words of the managers of organisations that constantly

deal with art and science. In some cases, such as The Canary Project (www.canary-project.org), they were created especially to investigate the artistic potential in the debate and in the communication on the green house effect.

Some may give these initiatives the cold shoulder, thinking they are an overstatement. Art may be seen, in this context, as an exotic seasoning, certainly a savoury one, but hardly anything other than “fashionable”. This is the role of art and of the artist taken to the extreme within an extremely important and serious debate, whose players move across totally different grounds. And yet, those who deal with science communication will hardly be left untouched by the words of Andrea Polli (www.andreapolli.com), an American artist, who in her contribution tells about the multi-year experience side by side with atmosphere scientists, to understand how to disseminate at best, through her works of art, information on climate and atmosphere. And she tells about her journey on the Antarctic ice, made “to find a better way to engage the public in the issues of the global warming”. Even there, among the ice of the South Pole, side by side with scientists. But with a completely new informative and communicating approach and probably aware that, as Albert Einstein once said, “You cannot solve a problem with the same thinking that caused the problem”.

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From Land art to the “global era”

Gaia Salvatori

In the globalisation era, arts have provided food for thought on “how latitudes became forms” (as anyone could see at Fondazione Sandretto in Turin in 2003), to stress again that now, at global level, one should no longer define art as a contemplation “space”, but as an “environment”, a place for experience. However, the total rejection of any hierarchic distinction between the media, between popular culture and “top-level” art, between tradition and modernity, and the rejection of alleged territorial leaderships have made their way since 1969, when Bern saw the inauguration of the historic exhibition entitled “When Attitudes became Forms”. People then realised that the problem was lying in the behaviour, in the attitude, of making arts towards the world. Basically, the formalistic concept of self-referentiality in a work of art was to be overcome, and attention was to be paid to procedures and contexts. Above all, it was a change in the point of view on reality that artistic experimentation was spurring, as demonstrated by the work by Piero Manzoni, *Socle du monde*, produced in Denmark in 1961 or by the actions of Joseph Beuys, related to the Fluxus movement.

In search of a new humanism in contact with the natural universe, Beuys believed that the change in the elements had a symbolic value, as demonstrated by the action *7000 Oaks* in Kassel in 1982 which was not only located – as the artist wrote himself – in the “necessity of the biosphere”, but it was meant to “draw attention on the change of life, of the entire society and of the entire ecological context”. Following prolific utopias, similar thoughts may have inspired also artists exploiting videos and electronic means, such as Nam June Paik, committed to “humanising” technology or Hans Haacke, of the Zero Group in Germany who, concentrated on the interaction between human and natural systems, produced since 1967 wind and water sculptures, believing the “fragile system” of art could be a natural medicine in the complex dynamics of our planet.

Even though there was someone as Pop artist Andy Warhol who, with a playful and detached attitude, in 1966 made polyester clouds filled with helium float in a gallery, nature was becoming a new artistic challenge for those who shared the new ecological awareness. Already in the late sixties in America, it was creating the need and the hope of a change in the environment, threatened by destruction after two centuries of industrial pollution. This was the direction taken by the works by Helen and Newton Harrison in California since the early seventies, committed in a research defined as “quasi scientific” that led, among other things, to the production of works on the issue of acid rain caused by atmospheric pollution.

Particularly significant experiments along this path between art and science were carried out by Juan Navarro and Gyorgy Kepes at the M.I.T. (Massachusetts Institute of Technology) and by the related Center of Advanced Visual Studies – since the late sixties –, using their force of imagination and technical skills to implement artistic projects aimed at the purification of the environment such as “water-purification plants” located in urban areas like new “public monuments turned to the future” (G. Kepes).

A M.I.T. research team was also the focus of the work by Alan Sonfist in 1973 after having presented, among other things, the Crystal Monument (1966-72): a globe containing crystals changing shape and position according to the temperature and the water currents of the surrounding atmosphere. With Pool of Earth (1973) and Sun Monument (1978), Sonfist fully implemented the idea of “natural phenomena as public monuments”. The world had already seen the international success of the Land Art in its different types of “manipulation” of the natural elements: from Long to Heizer, to the afore-mentioned Sonfist, up to the Minimal crossings by Smithson and De Maria.

Whereas the Steam Pieces by Robert Morris, since 1967, could be defined as a sort of “interface between nature and technology”, Robert Smithson, based on the dialectics “site/non-site”, rooted his research in the processes implying a change and a shift between urban contexts, geology and nature and chose as sites of his “earth art” anything that was “disrupted by industry, reckless urbanization or nature’s own devastation”. So, the 1970 Spiral Jetty is 457 metres long and made of basalt and mud blocks penetrating, mixed with salt crystals, into the Great Salt Lake in Utah, designed to be swallowed by the lake when the water level rises up. On the other hand, an artistic “event” in itself is the atmospheric event contained in Lighting Field by Walter De Maria (1974-77), a permanent “work in progress” where steel posts evenly spread at a regular distance on a surface of the plateau of New Mexico are there to capture the lightings, embodying – as someone wrote – a “weird symbiosis between the steel technology and the primordial energy of a lighting”.

Although it was mainly the American and North-European context – as explained – that inspired works linked to environmental characteristics, situations and problems, Italy also saw between the seventies and the eighties a gradual development of the awareness on this issue. First and foremost, the reference here is to some practices of Arte Povera (Italian for “Poor Art”), implemented by Mario Merz, for example, who in 1966 used neon for the series on the Fibonacci numbers, a sort of trait-d’union between nature and technology where – as the artist explained himself – “the sequence gets longer and longer but it also quickly enlarges, as does a living organism”. Following the natural processes also Giuseppe Penone, who finds his place among the “poor art” artists, dealt with the problem of decay, as did Gilberto Zorio, whose works – still in the words of the artist himself – “want to be energy in themselves [...] which becomes real in a very physical way, in terms of a chemical reaction”. Thus, his works feature changes in colours, density, etc. changing according the situation, as if they were alive.

A sort of climax of this kind of poetics, in conclusion, may be found in Autoritratto of Alighiero Boetti, presented at the Sonsbeek 93 exhibition of Arnhem, the Netherlands. A bronze casting made on the plaster mould of the artist himself holds, with his arm raised, a

tube where water flows from, falling on the bronze head heated by an electrical mechanism: the heat emanated by his figure transforms the water into steam. The sculpture dips its feet in a heap of earth and apparently it implements, through its creative energy, a process of change embodying and resuming the four elements (earth, water, air, fire), always the keepers of the mysteries of nature and, when too many interferences do not alter some deep and fragile balances, still the regulators of our life on the planet.

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Artists and now also activists to contrast global warming

Alessandra Drioli

Artists create new aesthetics to communicate new messages and new concerns. Apprehension about the climate, climate changes, global warming and a disposition to anxiously running after an ideal sustainable development are now part of the issues we all now experience daily and discuss with a certain degree of anxiety. And the highly sensitive antennae of the artists have quickly realised that, bringing it to another level, and are now committed on many fields to making their voice be heard and to raising ethical and social issues, also regarding the scientific instruments man possesses to manipulate nature. So they have now accessed the group of special interlocutors in the dialogue between science and society, playing the role of interpreters of topical issues that require a widespread awareness and the construction of a scientific citizenship able to cope with an inevitable challenge such as the implementation of a “sustainable” model of life. Evidently, artistic sensitivities and trends like that do not stem from nothing. Behind, they have a complex and multifaceted tradition being reinterpreted by the most recent artistic experimentations either as its continuation or its opposition. Thus, certainly many elements of Land Art, but also more in general of Environment art and Public Art, but even of Fluxus and Pop Art, resound more or less strongly in contemporary artistic research reflecting on the “global warming” of the planet.

Perhaps not by chance in 2006 did the USA see the establishment of two non-profit organizations - *The Canary Project* and *Precipice Alliance* – whose mission is the production of visual media, events and works of art aimed at raising awareness among the public on the climate change and at boosting research on possible solutions.

The Canary Project stems from an idea by Edward Morris and Susannah Sayler who, from New York, coordinate a quite large group of artists, scientific consultants, researchers, volunteers, sponsors. But why this name? The reference is to canaries, birds once used by miners as methane detectors to indicate when mortal levels of it were reached within mines. The works by this group are aimed at highlighting a similar risk threshold, by bearing witness of the effects and the dangers of climate changes for our own survival. Just as the image of the statue located on the banks of the river Waal, in the Netherlands, which marks the level beyond which the waters will cause a flooding in the nearby city of Zaltbommel.

Here is a quotation from the organisation website: “Art has the capacity to penetrate received notions, generate media attention and create lasting visceral and emotional impact - all of

which can be a more effective catalyst to action than mere rational apprehension and help people understand we live within nature and not beside, over, or against it.” Their goals include the spreading of correct information on climate change and mobilising the population to take more action to promote sustainable development.

Precipice Alliance, sponsored by the New York Foundation for the Arts, debuted with the work by Mary Ellen Carol. A large neon installation reading “IT IS GREEN THINKS NATURE EVEN IN THE DARK” was shining from the windows of five buildings of the American Can factory (CANCO lofts) in Jersey City, New Jersey. Whereas we still are awaiting the next project, its founders have described the reasons that have led to the creation of Precipice Alliance as follows. Artist Joel Sternfeld explained: “Like everybody, I’d been following the predictions about global warming out of the corner of my eye for the last 20 years. But after I went to the UN conference on climate change in Montreal in December 2005, I knew I had to do something. I had no idea there was so little time left to prevent irreversible catastrophic consequences”. “Public awareness is absolutely essential in creating solutions” added Donna Wingate, executive director for the project.

Aside from these two organisations there are also many artists – more or less famous – that individually carry out research in this field. Among the names of the Olympus of art there is Olafur Eliasson who, already with *Weather Project* in 2003, demonstrated a high sensibility on the climate issue, although it was with *Car Project* in 2006 that he dealt more specifically with this issue.

With *Weather Project*, the artist devised and installed in the Turbine hall of Tate Modern in London an incredible multi-sensory journey. The installation was implemented with two hundred monofrequency light bulbs placed behind a circular screen, a mirror and smoke gases. The result: above, on the background of the exhibition area, there was a huge artificial sun wrapped by steam which blurred the people’s figures. All around, a monochromatic light which – according to the air currents and temperature – could thicken in fog banks, generating clouds with unexpected shapes.

On the other hand, *In Your mobile expectations: BMW H2R Project* Eliasson has replaced a car bodywork with a thin ice layer. It is a hydrogen-propelled racing car, developed by BMW to break speed records and, at the same time, to direct its steps towards the future in terms of sustainable mobility. The work was presented within a refrigerated chamber at a temperature of ten degrees below zero. The energy used was obtained from renewable sources and the monofrequency light located within the sculpture caught the eye on the continuous process of melting and freezing. Hence, a product of the most advanced automotive technology created an art installation whose aim was to talk to the public, in lyrical and sophisticated tones, about mobility, renewable energies and the relationship between automotive manufacturing and global warming.

Olafur Eliasson believes that “by merging arts, design, social and environmental issues, you can contribute to a different way of thinking and of feeling and experiencing cars as they are and to see them against the background of the time and space we live in. After all, I don’t believe that objects exist in isolation. They are always part of a complex set of physical and mental relationships, they change according to the context and depend on the expectations and the values of their users. They include relativity and the passing of the time.”

Chris Jordan, an American photographer, has documented with his shots the devastations produced by the Katrina hurricane, to subsequently engage in the report of the disturbing fate awaiting some widespread commodities in the US. The originality of the work by Jordan lies in using the subject of statistics as a means for portrayal. Hence, as statistics say Americans consume two million plastic bottles every five minutes, Jordan put together an apocalyptic plastic sea gathering in a single picture precisely two million bottles. Indeed, not by chance last April he was selected by the National Geographic channels to celebrate the Earth Day in

Rome at the International FotoGrafia Festival. Chris Jordan believes “that these pictures may have a different impact than the numbers alone we find everyday on books and newspapers. Through very large and detailed prints, assembled with thousands of smaller pictures, the project is to emphasise the role of the individual in an ever more gigantic society, incomprehensible and overwhelming.” (http://www.arapacis.it/mostre_ed_eventi/mostre/running_the_numbers).

Whereas Sebastian Copeland with *Antarctica, The Global Warning* of 2006 (<http://www.antarcticabook.com>) reported with a series of charming yet disturbing shots on the disastrous effects caused by glaciers melting, in early 2008 Vanessa Chimera and Paolo Bertocchi installed in the Bologna Marconi Airport a huge number of open umbrellas collected on the streets after a heavy shower. Hanging above the head of passengers they had embroidery showing the diagrams from a study on the history of rainfall in the regions undergoing considerable climatic changes. They are there up above in the air, forming a dark cloud, brooding and ominous, overturned as they are bound to collect the little water coming down, yet ready to fall if Nature decides to suddenly pour streams of rain on them.

Certainly they are artists, but also and above all activists that take action to warn people against a series of dangers that are at the gates of our life using the most different instruments, styles and tones to spur us to a single task: understanding and safeguarding our planet.

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Alessandra Drioli works at the Museum of Città della Scienza in Naples since 1997. She was a member of the design group for the present museum set-up inaugurated in 2001 for which she planned the artistic references; she worked as an assistant to the Director of the museum, Manager of the Exhibition Areas and of the Special Projects, participating in European project and in the planning of several exhibitions, to which she has always contributed her personal education she received as an art historian. Furthermore, in the past few years she has carried out an interesting research activity on art & science, holding speeches at national and international conferences, lecturing in master courses, university and post-university courses, and obtaining her Doctor's degree at the Seconda Università di Napoli with a thesis on interactive art. She boasts also a long collaboration with the journal *Arte Mondadori*. E-mail: driolia@tin.it.

Creating links between art and environmental education

Robert W. Turner

Artists have used the environment as a subject forever—think of the many examples of cave art depicting animals and other features of the artists' natural environments—and there is a long history of artists whose works affect peoples' awareness of and perceptions of their natural environments. Examples related to my own scholarship on America's national park system include the Thomas Moran paintings of Yellowstone and the Ansel Adams photographs of Yosemite. If we broaden the definition of art to include literature, there is of course a long history of works important to environmental studies. But only relatively recently have other artists become part of the modern environmental movement and of efforts to educate college students and the population at large about environmental issues. Environmental studies programs need to take advantage of this increased interest on the part of artists, and global warming provides a perfect vehicle.

Art whose purpose is at least partly to promote environmental awareness and environmental education now seems to be everywhere. Examples I have recently become aware of include *Dialog:City*, an arts and cultural event inspired by the occasion of Denver hosting the Democratic national convention; *spurse*, a collective that comes up with forms of interdisciplinary research methods and practices, including the arts; the conference on art and the environment being held at the Nevada Museum of Art next month; *Avant-Guardians*, “textlets” on art and ecology written by Linda Weintraub with Skip Schuckmann; the Canary

Project, large-scale photographs of landscapes throughout the world depicting environments dramatically affected by global climate change; and, again expanding the definition of the arts to include writing projects, an online anthology called Thoreau's Legacy: American Stories about Global Warming. And this is just a small subset of all the projects going on across the country and around the world. Closer to home, we have the EcoArtTech project of Colgate's own Christine Nadir and Cary Peppermint as another great example of how art is being created about "the environmentality of modern life," as they put it.

A few academic programs in environmental studies include significant elements from the arts. But, aside from literature, most programs focus on the natural and social sciences, history, and ethics. Colgate's program fits this description as well, but in the last couple of years we have worked with faculty in the arts to take advantage of our mutual interests. Last year we co-sponsored along with the art and art history department a year-long series of events called Creative Solutions for Sustainable Futures, a forum that creatively explored issues of global warming and sustainability through interdisciplinary approaches that merged the sciences and new media art technologies. Events included symposia, performances, and exhibitions, with tie-ins to classes in art and also in environmental studies. Colgate's new Ho Science Center features large-scale photographs from the Canary Project. Students have worked on digital art and video projects related to environmental activism and environmental studies. In this year's senior seminar in environmental studies, jointly taught by professors of biology and English, students will write about their sense of place and also do digital storytelling, producing audio and video projects. The environmental studies program is inviting musicians and artists as part of its regular speaker series, and the art and art history department is inviting members of spurse to talk about their work. We are working together to find curricular connections as well. The most promising option for us seems to be linked courses: students simultaneously take courses in environmental studies and in art, and the professors work together to link the material of the two courses in meaningful ways.

Other environmental studies programs will find their own ways to bring art into the curriculum. What works best will depend on the interests of the particular faculty members and students at each school. But every program needs to find some way of including links between art and environmental education.

The issue of global climate change provides a wonderful opportunity. When discussed in terms of global mean temperature, meteorological patterns, and even sea level rise, global warming can seem remote and abstract. Visual images, like those of the Canary Project or the images of polar bears in the Arctic that have been so prevalent recently, bring home the problem much more viscerally. Personal stories, like those in Thoreau's Legacy, complement the more abstract analysis of most natural and social scientists.

As academia has become more cognizant of the multiple ways in which people learn, environmental studies programs need to take advantage of the expertise in visual learning of the artistic community. Luckily, the artistic community is very interested and there are so many ways to make the connection that every program should be able to find one appropriate to their local situation.

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Ruminations on the role of artists in a world of science

Edward Morris, Susannah Saylor

These days a lot of people seem to be wondering about possible correspondences between art and activism and art and science. To get at that we have some business to take care of, namely answering the vexing question: What is art?

The definition of a word is its use. People get confused about this and it causes a lot of problems. Most often the question “What is Art?” arises in a critical context. In such a context we ought to acknowledge that Art refers more to an achievement than to a specific set of practices or objectives. That is to say: you can set out to make art; buy yourself some paints; get an easel; immerse yourself in a landscape; paint from noon to night; then show a critic what you have done and run the risk of that critic stating baldly “That is not Art.”

“That is not art” has become an increasingly fashionable rhetorical maneuver -- by both high and low practitioners of criticism. You are just as likely to hear it coming out of the mouth of a bewildered philistine glancing at a Brancusi as you are from a professional critic looking at photography by The Canary Project.

People are always tossing around definitions of Art. Here are few that come to mind, which I think actually jibe with how we use the word in the abstract way under consideration in this journal:

- “An axe to break the frozen sea inside us” (adapted from Kafka)
- “The creation of forms symbolic of human feeling.” Works that are “congruent with the dynamic forms of our direct sensuous, mental and emotional life.” (Suzanne Langer as found in Anne Spirn’s *The Language of Landscape*).
- “An emotional and intellectual complex in an instant of time.” (Ezra Pound)

These definitions are chosen somewhat at random (they happened to be either on my mind or in a book that I am currently reading), but they, like nearly any definition of art that I can imagine, have the following in common: Art, as it is generally regarded, is a product of human activity that can access regions of feeling (and thought) that otherwise would be difficult or impossible to access (either because of their subtlety, immensity or undesirability).

So, whoever utters, “This is not Art” is always right in so far as it applies to him or her. (But that person could be very wrong about the capacity of a given work to reach others.)

The main point I want to establish with all this is that Art inevitably is a form of communication (even if the artist herself intended to be uncommunicative) because Art is always received/seen/listened to and something always is conveyed in the process. Whether that communication is able to access realms of feeling (and thought) worthy of the term Art or whether it is limited to something more pedestrian is a judgment call.

So if that is Art, then what is an artist? Answer: someone who aspires to make Art. (In other words, you can be an artist and never successfully make art. And by large this is true of the vast majority of artists).

In January 2006, my wife Susannah Saylor and I set out to photograph landscapes around the world that were being transformed by global warming. We called our work The Canary Project. From the beginning, as now, we had both activist aims and artistic ambitions. These two types of motivation overlap in places and in other places feel completely distinct. As activists we initially wanted to convey the urgency of global warming (at the time, particularly in the US, there was a big problem with people even acknowledging the reality of climate change). Because many people need to see something to believe it, we felt photographs were a good method for this.

Our artistic interests, however, are more difficult to express. In a way, we were interested in what we couldn't see in the landscapes. How difficult it is to picture geological processes; how difficult it is to photograph danger; how seductive it is to capture the beautiful and have that be the focus of our energies.

We were interested too in a world without people and here the artistic aims begin to fray against the activist.

I could say a lot more about these artistic aims, but it would extend very much beyond the scope of this article. I also wish to say that while our artistic aims have deepened and evolved greatly, our activist aims have changed only slightly. People by and large are convinced that climate change is happening, but, incredibly, are by and large apathetic. Our task now is to motivate action. Part of this task is to deepen understanding of climate change so that the gravity of the situation is more truly felt; and part of this task is to energize a commitment to solutions. This is a crisis of vision. We have to show both the apocalyptic and the utopian possibilities. As artists attempting to make art, we have to show ourselves these things first. And that is not always easy.

So in answer to the question of whether we are artists or communicators? I would say both. As should be clear from the exposition of art above, we do not see "artist" and "communicator" as mutually exclusive. We hope to communicate on different levels to different people. We are also trying to communicate to ourselves. This last form of communication is exploration and is artistic intent.

We see no reason why the artist could not include "science" among the things he communicates. I doubt this function is entirely new, however. I think Freud was an artist and a scientist. I think much sculpture communicates science. But what we are talking about here is something slightly different. We are talking about artists attempting to communicate climate change or issues that are thought of as environmental. We are talking about picking up on the warning signals of science. We are talking about artists explicitly carrying forward a torch that scientists lit but which they can carry no further. This is perhaps a new role and one that I hope is embraced by more people in the art world.

It is extremely important to acknowledge that we (like most people working on this issue) have no power to corroborate or even hypothetically test the premises of climate science upon which the warnings of the IPCC and the National Science Academies are predicated. We are TRUSTING the science community to be right and we are hearing the unusual tones of urgency in the writing. We are acting on that trust.

In that sense, our work is necessarily a translation of science. We would not know what to look for in the landscapes without scientists telling us. Our response to climate change is predicated on the overwhelming but difficult-to-hear voice of the climate science community (particularly the IPCC and National Science Academies).

Scientists cannot gracefully become advocates or activists. It is mutually contradictory to their field. I am arguing that is not mutually contradictory to the field of artists, who are by nature communicators, even if they are complex communicators. ("Tell the truth, but tell it slant" says Emily Dickinson). Therefore, it is our responsibility to translate this work of scientists into an affective mode.

(By the way, we would very much like to work with a scientist on a pure collaboration. Thus far we have worked with scientists as informants and guides, but no scientist thus far has taken a real interest in helping us shape our work, to produce a work together. I hope this changes.)

So does that mean that the artist has a "social" role today? Not inherently, but that role is certainly available. In choosing to have a social role the artist ensures that his or her work will have value beyond its merits as Art.

The artist may also find that the social function serves as a block to some people in appreciating whatever unique emotional/intellectual access that work has to offer. In other words the social function may ensure that the work's character as Art is obscured to some or to all, temporally or permanently. That is a bit sad for the artist, and a test of his or her commitment to the social function in question. Yet, it is disingenuous, and actually I think a bit reprehensible, privately to harbor intent for a social function but to disclaim that intent publicly. Nonetheless many artists do this for the benefit of their careers. They do this because they fear the "This is Not Art" critique, which is always justified for the individual making it, but nonetheless sometimes wrong and the product of elitism or other forms of closed-mindedness.

In fact, we believe that if you are an artist specifically engaged in an issue like the degradation of landscape from climate change and resource mismanagement (like Edward Burtnysky, for example), and you decide not to acknowledge your social function, that is tantamount to Nihilism. We are categorically opposed to Nihilism (despite the beguiling films of Werner Herzog).

Authors

Edward Morris co-founded The Canary Project in 2006 with his wife Susannah Sayler and assumed a director role in 2007. Morris was formerly a partner at the James Mintz Group, an international investigative firm. In 2004, he was one of the lead investigators in the impeachment inquiry of Connecticut Governor John Rowland and has managed investigations in a variety of complex litigation matters including, a multi-billion dollar antitrust case; defense of toxic tort claims; and patent infringement cases. Morris received a MA in Regional Studies: East Asia from Harvard University and a BA from Wesleyan University. Morris became interested in gathering visual evidence of global warming after reading a series of articles on the subject by Elizabeth Kolbert. This interest became a passion after seeing the massive retreat of the Pasterze Glacier in Austria. He is currently a Loeb Fellow at the Harvard University Graduate School of Design. E-mail: edward@canary-project.org.

Susannah Sayler's images of global warming have been exhibited in major art and science museums, galleries, public venues as well as in print media. As a travel photographer, Sayler has photographed for numerous guidebooks and magazines in the U.S., Europe and Asia. As an artist, she has exhibited her work throughout the U.S. and had her first show in Spain in 2005. In recent years Sayler has been increasingly drawn to landscapes. She is interested in the way landscapes can be photographed to convey complex and subtle emotional content, not usually associated with nature photography - emotions like isolation, vulnerability or elation. As a teen, Sayler made a project of measuring the acidity in lakes and ponds near her house after hearing about the threat of acid rain. That impulse has recently been reawakened and combined with her technical interest in how to photograph landscapes. Sayler has an MFA in Photography and Related Media from the School of Visual Arts. More of her work and a cv can be found at: www.saylerphotography.com. She is currently a Loeb Fellow at the Harvard University Graduate School of Design. E-mail: susannah@saylerphotography.com.

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JCOM is an open access journal on science communication. Since the world of communication and the scientific community are now undergoing a rapid and uncertain transition, JCOM wants to provide some theoretical guidelines both for scholars and practitioners in the field of public communication of science and technology.

Why "science communication"? Because we want to challenge and dialogue with the world of social studies of science, stressing the importance of communicative processes into science's development and the dynamics of contemporary knowledge societies. We chose this privileged point of view even though we know that we are still looking for deep theoretical reflection, strong methodological tools and a clear identity.

JCOM wants to contribute to this identity by adopting a free circulation of information and non-eurocentric perspectives, encompassing heterogeneous visions such as gender studies, social history, action-research. Furthermore, JCOM is a platform where distant communities can meet: academic scholars, journalists, museum operators, and scientists who live and work in fields where theoretical reflection and concrete action are strongly intertwined.

So JCOM investigates the needs of communication between science and citizens and within the scientific community itself; the problems that are to be faced when models for theoretical analysis or practical means to popularize science are used; the changing relation between science and social institutions; and the informative, pedagogical, interpretative and political dimensions of science communication.

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