

SOLAR ARTWORKS

Nacho Zamora

Solar artworks combines art, architecture, design, science, and a common objective: how to make our cities more sustainable through public art. In this conference we will see some of the most interesting examples of solar artworks studied in the frame of The Solar Artworks Project to date, in particular how different the projects can be, and why they have been created.



The Solar Artworks Project. <http://www.solarartworks.com>

Introduction

The Solar Artworks Project arises as an answer to this question: What can public art do to give something back to public in the context of the XXI Century urban landscape.

Solar artworks are an illustrative example of how far could go the relationship between art, architecture and the new technologies related to renewable energies, in this particular case, solar power.

These artworks provide an aesthetic attraction to the place where are constructed and, at the same time, they use their capability to produce solar power and employ it.

Almost all solar artworks designers have a common objective: how to make our cities more sustainable through public art. We can find designers from different parts of the world, and they are generally multi-disciplinary groups of specialists.

In this conference, I would like to talk about several examples of solar artworks that I have studied within this research project. We are going to see how different the projects can be, and the opinion of their designers about key aspects of these artworks.

Solar Sail, by The Solarsail Society, created in 1998 in Müsingen (Switzerland), was the first solar artwork that I found, when I was searching for information about these projects.

I was very impressed, because this kind of work was completely different from the public artworks that I had studied before in my career.

Solar Sail improved the aesthetic conditions of its location and, at the same time, this work provides clean energy for a building.

Stephan Kormann, from The Solar Sail Society, describes the advantages of this artwork:

“The elegant shape of the sail is a metaphor for movement and lightness. It stands as a symbol for the sympathetic treatment of the fundamentals of our lives.” [1]

Since then, I have been collecting information about these works and their designers, shaping the Solar Artworks Project.

I’m going to talk about several examples of solar artworks, classified according to, in my opinion, their most relevant contribution to the public spaces where they have been built.

New aesthetic proposals

We can see physical characteristics which make them different from “traditional” public art.

I consider these qualities as a new aesthetic kind of proposal.

The temporary project *The Verdant Walk* by the Canadian The North Design Office, created in the United States, offered another point of view on a city place at night.

This work reminds us of the industrial origins of the city of Cleveland, and the strong promotion of renewable energies by the local government.

In addition to the sculptures, *The Verdant Walk* restored a large space, called Mall B, recuperating native grasses from different parts of local landscapes in the area.

Alissa North, one of the designers, say about the reaction of the people with this work:

“Visitors were attracted to the forms, children and adults, wanting to come up to them and touch them. People were intrigued by the solar aspect, and were interested to understand this component of the project.” [2]

Interaction

Perhaps the interactive factor is the next step to explore within public art. Solar artworks offer a great opportunity to research and develop participative ideas, involving citizens within the creative process.

Solar Collector, by Gorbet Design, is completely interactive with the public.

Located in a traffic island in Cambridge, Ontario, Canada, this work provides citizens with the possibility to interact with the sculpture, giving them the opportunity to change the look of the lights and create their own performance each night, by using simple computer commands at the sculpture's website.

Matt Gorbet, one of the creators of *Solar Collector* said:

"By collecting the creative output of people during the day along with the sun's energy, and combining them into a graceful nightly performance, the piece connects people to the power and beauty of nature."[3]

Educational intention

One other objective that almost all these works have is an educational intention. In this sense, solar artworks invite us to learn, to be curious, and concerned about the environment.

Rein Triefeldt has been developing solar artworks for more than a decade. Triefeldt's work is an example of how art can be a good way to impart knowledge about the qualities of the renewable energies for new generations. This artist has provided workshops for students regarding art and sustainability projects.

He thinks that:

"Solar artworks can generate public dialogue, addressing and even resolving community problems." [4]

Triefeldt is founder of the *Solar Tree Project*, an educational proposal in which they:

"seek to give participating students primary knowledge in the field of solar energy and practical experience in design and creation of fine art and sculpture." [5]

Hybrid projects

Solar Artworks are, first of all, an extensive field where their designers are looking to innovate with new materials and their applications. Architecture and art find new ways of collaboration with hybrid projects that combine the best of each other.

The New York studio SMIT, has developed the project *Solar Ivy*.

Inspired by the Ivy leaf, this work can be adapted to almost any kind of vertical structure. Each leaf is an independent solar power sensor, and the total energy produced depends on the quantity of leaves in

the installation. This work offers many possibilities of configuration, design, functionality and adaptability, mixed into a product that is currently available today.

Samuel Cochran, one of the founders of SMIT, says about their work:

“Solar Ivy is functional in its purpose and artistic in its drive to change the connotation of what a solar panel can be.” [6]

Message of Solidarity

As we have already seen, solar artworks can be used in many different applications. We have also recognized the objective of solar artworks’ designers, to spread a sustainable message.

The work of Alexandre Dang, maybe is an exception within this group of artworks, closer to a temporary installation than a piece of public art. Dang has created many different versions of *The Dang’cing Flowers* around the world.

In common with all the particular characteristics of his installations, this work presents a whimsical vision of the necessity to incorporate renewables energies within our lives.

However, *The Dang’cing Flowers* have a strong power of attraction for everyone who sees them in motion, having an hypnotic effect on the public.

The meaning of Dang’s work, and the initiative that he represents, *Solar Solidarity International*, are looking for a better future in which the use of new green technologies, are synonymous with sustainable development.

Organizations

We can find several interesting organizations that are dedicated to research, promotion and some even produce projects which could be considered solar artworks. However, it’s difficult to find an initiative more committed to this issue than *The Land Art Generator*.

The Land Art Generator Initiative is, today, the perfect example of the public art research centre of the future. This project, created by Elizabeth Monoian and Robert Ferry, has become a reference for all those who want to learn about the possibilities of combining public art, architecture and renewable energies.

This organization is also a platform for artists, architects and designers who want to innovate with their work, by providing them with an exclusive space on the Internet.

The competition which *The Land Art Generator* organizes, held in 2010 in Dubai and to be held next January 2011 in New York City, is an opportunity, not only because of the innovative projects that we can expect to find, but also because the events take place in large public spaces, aiming to transform them into:

“a symbol of renewal and an expression of how our society can restore balance to its landscape.” [7]

Some Conclusions

With these examples of solar artworks, we have seen that, although these works are in an early stages of their existence, we can anticipate spectacular projects in the coming years.

The evolution of solar artworks will be determined by the artistic vision of their designers as well as by the advances that we expect in the field of solar power technology.

In addition, we can extract some final conclusions:

Solar artworks are a completely new artistic product. Far removed from the public art that we have seen before.

There is an international artistic movement of artists, architects and designers, whose artworks are being planned for some of the most emblematic places of modern architecture.

Solar artworks are an excellent means for governments to increase public awareness about the value of renewable energies.

These works are functional, original and technologically advanced models of self-sufficiency within the urban landscape.

Solar artworks remind the observer of the compromise with and respect for our environment.

Although we can say that solar artworks remain great unknowns, It is certain that, step by step, these works will become part of the urban landscape in our cities.

Solar artworks offer a wide range of possibilities and attractions that should be taken into account by governments when they invest in the public art of the XXI century.

You can find all the most interesting information about this research project on the project's website: www.solarartworks.com

References and Notes:

1. Stephan Kormann, "Energy Extra 3.04 Report," June, 2004, <http://solarsail.ch/publikationen/> (accessed August 1, 2011).
2. Alissa North, "Interview for The Solar Artworks Project," April, 2011, http://www.solarartworks.com/index.php?option=com_content&view=article&id=83&Itemid=120&lang=en (accessed August 1, 2011).
3. Matt Gorbet, "Interview for The Solar Artworks Project," November, 2009, http://www.solarartworks.com/index.php?option=com_content&view=article&id=84&Itemid=131&lang=en (accessed August 1, 2011).
4. Rein Triefeldt, "Interview for The Solar Artworks Project," November, 2010, http://www.solarartworks.com/index.php?option=com_content&view=article&id=73&Itemid=123&lang=en (accessed August 1, 2011).
5. Rein Triefeldt, "Interview for The Solar Artworks Project," November, 2010, http://www.solarartworks.com/index.php?option=com_content&view=article&id=73&Itemid=123&lang=en (accessed August 1, 2011).
6. Samuel Cochran, "Interview for The Solar Artworks Project," February, 2011, http://www.solarartworks.com/index.php?option=com_content&view=article&id=76&Itemid=119&lang=en (accessed August 1, 2011).
7. Extracted from the Land Art Generator Initiative Web Site, "Competition Section," August, 2011, <http://www.landartgenerator.org/competition.html> (accessed August 1, 2011).