

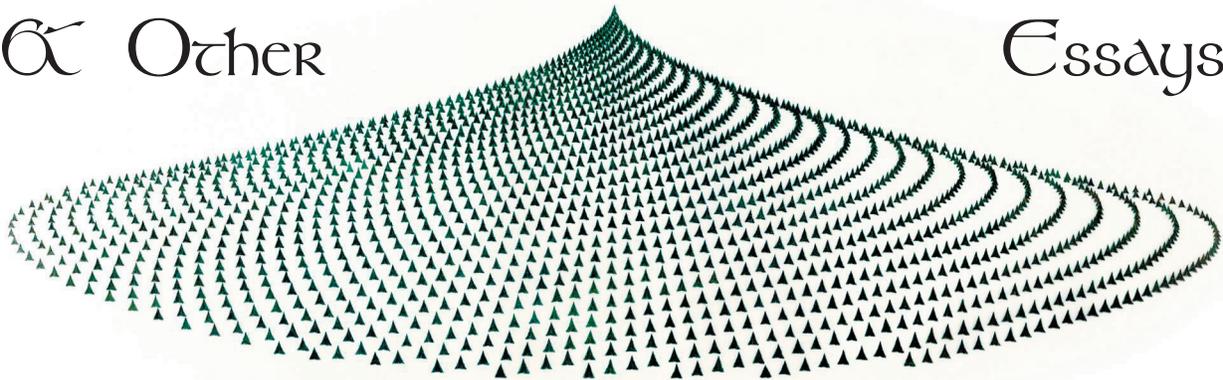
Manifesto, Mathematics in My Work
& Other Essays

by Agnes Denes

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HYPERION:
ON THE FUTURE OF AESTHETICS

Manifesto,
Mathematics in My Work
& Other Essays



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INTRODUCTION

It is a pleasure and an honor to have the opportunity to publish a second installment of the writings of Agnes Denes, one of the premier visual artists not only of our moment but of the last decades of the twentieth century. The several essays that appear in this issue of *Hyperion* are just a small portion of her voluminous and insightful literary efforts, much of which has never been in publication or has been available only momentarily, distributed at her many art exhibitions and public projects. Denes's writings present her views on the purposes of her art and the responsibilities of art in itself and of the intellect at our time in history. Her literary accomplishments demonstrate not only the extraordinary range of intellectual disciplines that are marshaled in her art and her thinking but also the clarity of coherent and unified philosophical objective that has driven the wide range of her work.

In particular, it is a pleasure for us to present the essays included here, for unlike her essay "Notes on a Visual Philosophy," which appeared in *Hyperion*, volume 1, issue 3, October 2006, as a republication of a work long out of print, all but one of the works in the present issue here have never seen broad publication. It is a privilege for *Hyperion* to have the chance to place them into the public discourse for the first time.

These works find an appropriate home in *Hyperion* for they speak at some length about Denes's use of mathematics and the role and value of mathematics in art—a subject that has been broached several times previously in this publication. In many ways, Denes is the model of the kind of mathematically oriented and directed artist analyzed in this journal, and her thoughts on the ways in which mathematics can be employed to achieve incisive and recognizably aesthetic objectives is in complete accord with the views we have presented in past issues.

Four essays are included here:

Manifesto

This brief work is a statement of purpose from the beginning of Denes's career, laying out the goals to which she intended to dedicate her art. They have guided her artistic and literary efforts ever since—they are the node points of the life of her mind.

Mathematics in My Work: Perfection and Beauty

This is a recent statement that presents comprehensively Denes's understanding of the role of mathematics in art. It identifies many of the most significant and compelling mathematically directed works of art she has created over the course of her career and makes clear the intended purposes of each. In particular, the essay examines mathematics as the point of intersection for and the guiding principles for integrating "the human intellect with the majesty of nature."

Artist Statement: for Poetry Walk

Poetry Walk is a project executed at the University of Virginia in the year 2000. Characterized by Denes as "A Project for the Millennium," *Poetry Walk* consists of 20 granite stones, each one approximately four feet by five feet, which have been incised with poetry and quotations by writers from the canon and embedded in the university lawn. The artist statement distributed at the opening of the project goes well beyond a presentation of the ideas behind *Poetry Walk*—it is a meditation on the intellectual and ecological purposes of art, of the needed balance of "thinking globally and acting independently," of integrating "individual creation and social consciousness."

What it Means to Plant a Forest

This essay is a statement written for a 1983 environmental project: *Tree Mountain*. *Tree Mountain* consists of 10,000 fir trees planted on a mountain in the Pinziö gravel pits in Ylöjärvi, Finland. The trees are arranged in an intricate elliptical pattern derived from a complex mathematical formula, realizing on a geographical scale Denes's objective of integrating art with nature in such a way as to create an intellectually coherent ecological vision.

For those who are unaware of Denes and her contributions to contemporary art and thought, we can do little better than repeat a portion of the introductory statement that accompanied Denes's first appearance in *Hyperion*:



Agnes Denes has been one of the noted innovators in contemporary art over the past several decades, and she has been and is one of the most prominent philosophical forces in the field. Her work assembles a stunning array of intellectual disciplines and puts them in service of an aesthetic ambition that challenges the viewer's ability to comprehend the depth of her learning and the power of her imaginative transformation of her materials.

Throughout her career, Denes has reset the boundaries of artistic practice. Consistently, she has been ahead of her time, and, in many areas, remains to this day unrivalled among contemporary artists in her use of sophisticated materials of imaginative thought. She is one of the earliest of the Conceptual Artists, initiating many of the strategies that have become standard artistic practice, and a pioneer of ecological art. She has been an innovator in the use in art of serial imagery, linguistic analysis, and Deconstructive tactics, and, perhaps above all, in the artistic approach to philosophical issues, mathematics, and advanced theories of physical science.

As an added benefit from the point of view of this journal, Denes's thinking demonstrates a distinctly Nietzschean orientation. In these essays, as well as throughout her art and her writings, she speaks against weakness, sentimentality, and sheer conventionality of thought and for strength of mind, of imagination, of artistic creation, of compassion and responsibility, and of moral courage.

There have been few contemporary artists as courageous as Agnes Denes.

—*Mark Daniel Cohen*

MANIFESTO

working with a paradox

defining the elusive

visualizing the invisible

communicating the incommunicable

not accepting the limitations society has accepted

seeing in new ways

living for a fraction of a second and penetrating light years

using intellect and instinct to achieve intuition

achieving total self-consciousness and self-awareness

being creatively obsessive

questioning, reasoning, analyzing, dissecting and re-examining

**understanding the finitude of human existence and still striving to
create**

beauty and provocative reasoning

finding new concepts, recognizing new patterns

desiring to know the importance or insignificance of existence

seeing reality and still being able to dream

persisting in the eternal search

© 1970 Agnes Denes

Mathematics in My Work

Perfection and Beauty

I use mathematics in my work to base my images on a non-erratic additional language, another dimension: malleable, unemotional and perfect. I can use it as canvas that I stretch and pull in any direction, wrap around my concepts in a multitude of ways, yet they remain perfect in any form I give them. I can use it to build future cities in the shape of flying bird pyramids and build underwater cities and space stations with self-repairing units to sustain humanity when living on Earth becomes difficult or no longer an option. I use it to visualize philosophical concepts I call *Visual Philosophy* that go back to the seventies. These works are actually visual mathematics. They appear in my early *Philosophical Drawings* as symbolic logic in *The Human Argument*, and as theoretical crystallography in *Thought Complex*. I create a form, then take it apart, tug at it, fragment it, and put it together in a different shape. I create and undo, re-create and transform.

I very often use fragmentations and distortions in order to see things from a multitude of perspectives, as space as well as concepts, yet even then, the images are “perfect” because they are based on mathematics. I want to see what makes something what it is, from inside out from beginning to end. It is like witnessing the birth of form, the formation of form, creativity at its purest.

Perfection is not an end by itself, it is a moment of truth, a fresh breeze that quickly sinks into the fabric of reality.

The *Pyramid Series* that runs through my work for the past thirty years, adopts an abstract mathematical theory of probability to create a variety of structures, *The Perfect Pyramids*. They embody human knowledge and the paradoxes of existence to serve as complex metaphors for our time, vehicles through which analytical propositions can be visualized.

The Perfect Pyramids combine visual art with future architecture to depict a civilization undergoing major transformations to overcome its mistakes. These forms represent our era, social complexities and offer future travel in space and survival on earth. They extend their wisdom (perfection), to help save humanity. They are unique in that through them, philosophy and mathematics becomes visual.

In addition to perfection, *The Pyramids* are ethical structures that deal with social reality, thus represent fate where the individual’s dilemma is superseded by the predicament of the species. Their “perfection” is the language of logic and mathematics while they communicate ideal measures of principles and

values with great simplicity and visual beauty.

Similarly, my earlier series the *Map Projections* visualize the changing aspects of reality and involve distortions of perspective, probability and space relations. The *Map Projections* were witty transformations of our globe into various trigonometric shapes: doughnuts, dodecahedrons, eggs, cubes, pyramids lemons and hot dogs.

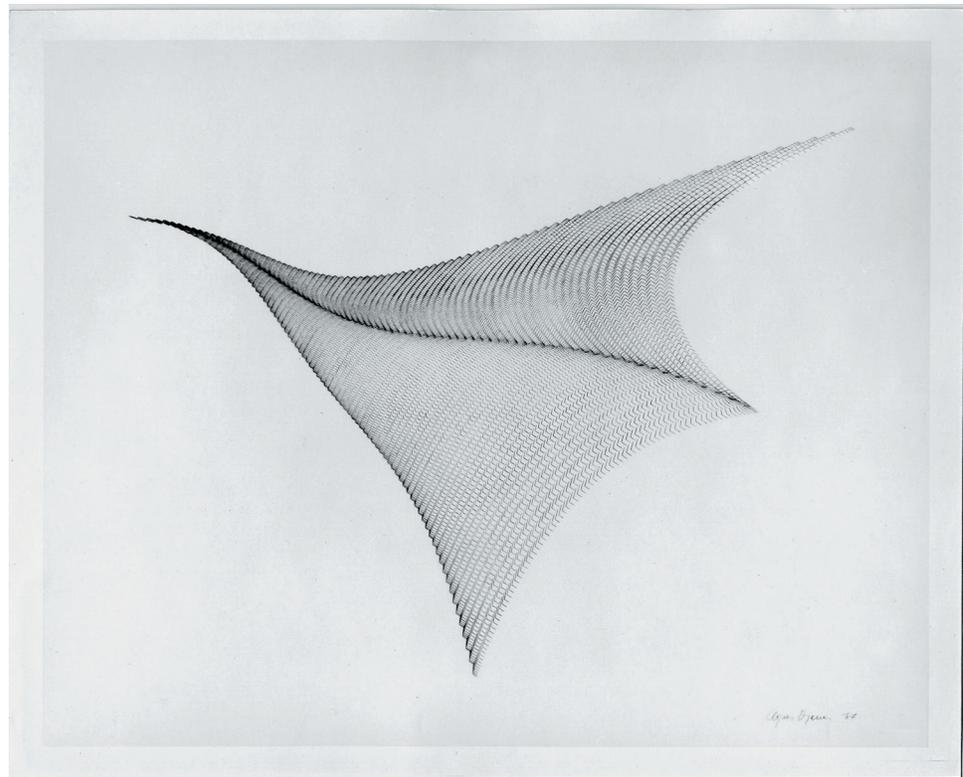
They are funny, even adorable, yet they are still maps of our Earth. The projections are all accurate because I used mathematics to create them.

I apply mathematics to plant forests in Europe and Australia, planting the trees into complex mathematical patterns. My reason here is to unite the human intellect with the majesty of nature. The trees are still themselves, created by nature, but the forest is planted according to an intricate mathematical pattern.

I love mathematics because I could humanize it, and in turn it gave me perfection and beauty.

© 2005 Agnes Denes

Agnes Denes, *Bird Pyramid*, 1984
Pencil on vellum, 34 x 41 inches
© 1984 Agnes Denes



Artist Statement

for *Poetry Walk*

I believe that the new role of the artist is to create an art that questions the status quo and the direction life has taken, the endless contradictions we accept and approve, offering intelligent alternatives.

My work ranges between individual creation and social consciousness. It addresses the challenges of global survival and is often monumental in scale.

I plant forests on abused land to be kept alive for centuries and fields of grain in the heart of megacities. This work goes beyond just planting a field or a forest, or creating long-range masterplans for large territories in need of restructuring. It is benign problem solving and shaping, structuring the future: an egoless art form that calls attention to social concerns and involves people from all walks of life. It builds pride and self esteem in people and benefits future generations with a meaningful legacy.

This new art form goes beyond the self and the ego without being selfless. It assumes the difficult task of maintaining a delicate balance between thinking globally and acting independently, for the ego must remain intact to allow the self to act fearlessly, with the certainty and confidence necessary for true creation, while the ego must be relinquished in order to think universally, and for the good of others.

In a time when meaningful global communication and intelligent restructuring of our environment is imperative, art can assume an important role. It can offer skillful and benign problem solving and communicate expressions of human values through its metaphors.

Designing space is complicated. We can go inward into inner space and out into the universe. The distance is about the same. In order to understand the space around us both of these journeys are necessary. Some of my work deals with this inner space, visualizing invisible processes such as mathematics, logic, thinking processes, evolution, and so on. Sometimes the philosophy involved in these works is complex, not allowing us to discuss them at length in this writing.

Other works are dealing with very large spaces, large by necessity in order to rebuild our environment and make a difference. As difficult as it is to realize these works, I think it is absolutely necessary to make them happen all over the world as examples of what needs to be done to restore landfills, or destroyed, barren land where resource extraction has taken its toll, and on

deforested soil to stop erosion, purify the air, protect fresh groundwater and provide home for wildlife; and in the nervous tension of cities, to give people a chance to stay in touch with nature.

And in works like *Poetry Walk*, the essence of great minds and ideas are rescued from sinking into dusty memory by being brought into present relevance and fruitful use. Human values expressed with a passion create a lasting impact, they enlighten, motivate and inspire. By uniting different times and disciplines separated by specialization, a new powerful overview appears and young minds are given a chance to see and think. The writers I have selected for *Poetry Walk* speak my words, lament my laments and dream my dreams. They are there forever to speak to us all.

I believe that artistic vision, image and metaphor are powerful tools of communication that can become expressions of human values with profound impact on our consciousness and collective destiny.

© 2000 Agnes Denes



What it Means to Plant a Forest

What it means to plant a forest as a work of art—well, many things. For one, it is taking art out of the museum or gallery and changing its preciousness and collectibility but not its beauty or meaning. It is creating something limitless, unbound and timeless, although the works have borders (boundaries) and use four dimensions clearly defined.

Just taking the art out of the machinery of the art world is a joy by itself.

The fact that a forest planted for the future is also a good thing, adds to the disobedience of its also being beautiful in its intricate patterning—different from the garden, landscape, architecture or even nature in its natural naked form. Beauty is frowned upon right now in art -isms, which of course means nothing because it can come back any time through a clever article by some critic claiming it is now time again for beauty.

So in a sense, planting a forest as art is a taboo. It is beautiful and it is a good thing, ecologically sane land restoration and calling to account in the face of industrial expansion, aggression and exploitation. In art language, a taboo. If art, it should not be benign, it should be a little malignant. Beauty is the sure bearer of sentimentality and weakness, and usefulness is deadly (fatal). Art should be above all that, it should nauseate, disturb, arouse, be cool and removed. Okay, why not, but I feel that beauty can also be so brilliant and breathtaking that it disturbs. And art can be useful in an ailing world and natural, not artificial and still be great art. Plato, Plato. Mirror. Mirror.

Planting a forest is opening up the earth to receive the seeds or seedlings like the canvas is prepared, gessoed and the ground sketch applied. There is no border here, no edge of the canvas, and thus no restrictions. The forest is patterned but spills over its boundaries in time as in space and concept; it means re-establishing disturbed and destroyed land, creating roots to hold eroding land and keeping global warming down, photosynthesis up, clean ground water and a million things trees do besides grow and become beautiful. In spite of all this, my forests are not just restoration or re-forestation, the fee corporations must pay for destroying fully grown forests for profit. In addition to helping the environment, my forests are serious aesthetics to become serious forests. The trees are planted according to complex mathematical formulas so that the intervention of the human intellect with nature is not hidden but pointed out, revealed, calling attention to their perfect blending until the hybrid is established. Yet the trees are still nature's bounty, natural and real. This kind of paradox is at the bottom of my work at its best.

And my forests are not landscaping either, where the trees are put there for contrast among paths and bushes to decorate a park or garden.

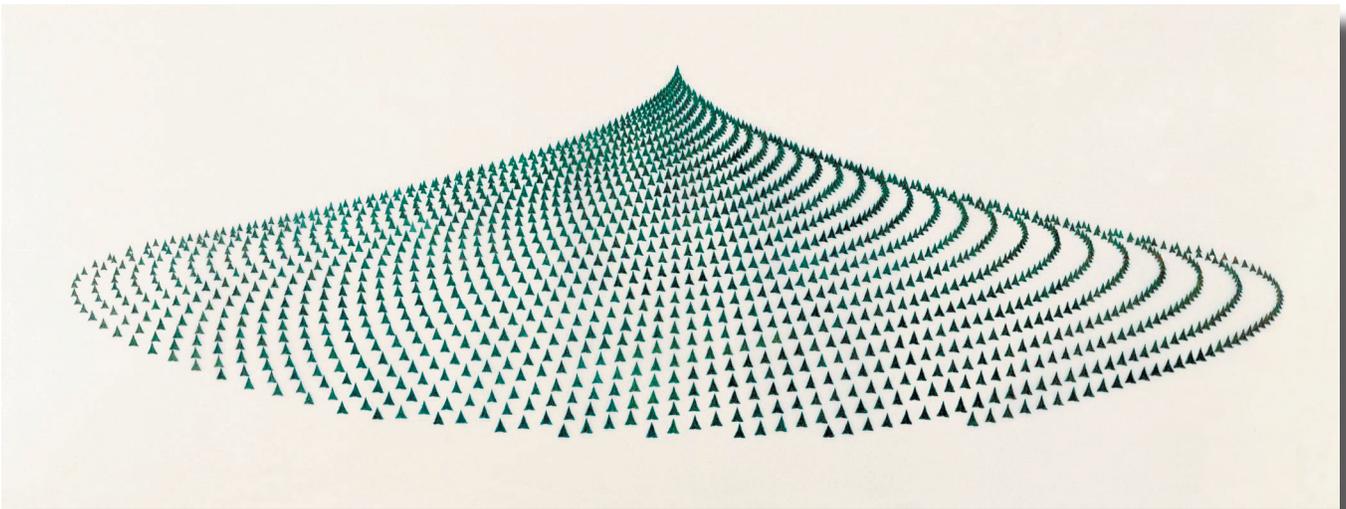
Agnes Denes
Tree Mountain—Proposal for a Forest—1.5 x .15 miles—10,000 Trees, 1983
Metallic ink and gouache on mylar, 34 1/4 x 95 inches
© 1983 Agnes Denes

Trees see so much history, they sway and whisper, hibernate and turn to blossoms.

A serious forest means business, not cutting business for profit, but demanding attention, respect, awe even if beautiful and mysterious. Patterning and mathematics mixed with nature, the human intellect pitted against and positioned with nature's intelligence not to win but to unite instinct with intellect, process with pattern, back to a state and forward to a hybrid. Unite the state of the art processes of the mind on the edge of knowledge and let it blend with nature. Don't be afraid, it won't disturb either. The hybrid will be a new state of existence, a new form of art. That it is also a gift to future generations, is added attraction, that it is land reclamation may be a plus, but first of all it is a forest and it is art. The human intellect blending with the majesty of nature.

I am an artist in the truest sense of the word: I live, think and create art all my life and my creativity is all consuming and never ebbs. It is a lush forest that grows in often barren land.

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