The Seeds of Sustainability
An Interactive CD Rom Exploring the Role of
Architects, Planners and Designers in Achieving a Sustainable Future


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[ABSTRACT]


The generally accepted definition of the term sustainability is: meeting the needs of the present
without compromising the needs of future generations to meet their own needs.  While that def-
inition helps to provide a general framework within which to understand the term, it does not
begin to explain the more specific initiatives, ideas, strategies and design concepts necessary for
an architect, designer and planner to contribute to the process of achieving a sustainable future.
As a result, the term sustainability is often misunderstood or even mistrusted within the design
professions.  The goal of this thesis is to begin the process of generating a comprehensive
understanding of the term sustainability within the design community.  It asks the question:
what does it mean, specifically, and in terms of concrete design strategies for architects, design-
ers and planners to design for sustainability?  In that sense the final product is intended to be
educational and is designed to communicate information in a visual format that the design com-
munity can not only relate to, but be engaged by.  The information is presented in a non-linear
structure to allow dynamic connections between related pieces of information and between
design strategies that solve problems within seemingly different areas.  Ultimately, the final
product is intended to become a CD rom with dynamic links between information within the
presentation and to the Internet.

Dedication

This project is dedicated To my wife Nica
for all her patience and support during a very long process.

Author's Acknowledgments

I would like to acknowledge Chris Zelov of the Ecologic Design project for graciously allowing me to use video clips from his wonderful video entitled Inventing the Future.

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# List of Multimedia Objects

**The Seeds of Sustainability**

**Introduction**

The thesis project you are about to explore resulted in part as a result of a 2 year search to discover an effective theory for making good design.  The first part of the project involved completing a studio design project entitled: A Monastery for the Next Millennium.  During that project many questions about how we, as a culture, make architecture came to the forefront.  Many of those questions revolved around the dilemma of our environmental decline and the inability of contemporary architects to address the issue.  In order to answer this question, considerable time was spent investigating the origins of our society's perception of nature.  Part of that focus included studying the early Modern master architects [Frank Lloyd Wright and Le Corbusier] to understand their response to nature and perhaps to discover some "seeds" by which a new and perhaps enlightened design philosophy could emerge.  Some remnants of that process appear in the CD rom presentation.  At the same time, concurrent research was undertaken to understand the contemporary term "Sustainability" from a design perspective.  The thought was that this relatively new phenomena might represent this "enlightened" view of nature that was sought and possessed many design manifestations and strategies.  The amount of information and its interdependence precluded a comprehensive academic paper [This would have to be a book].  It was at this time that the committee chair suggested an interactive CD rom as the medium by which the information could be presented.

The second part of the thesis which is really the third part overall [counting the studio project] was the design of the CD rom itself.  The main challenge of this part of the project was developing a structure by which two things could occur: Any design professional, design student or the lay person unfamiliar with the term Sustainability could easily and quickly understand the general concepts as well as their interconnection; and two, to design an interface that would allow a logical and dynamic movement through the information.

As a support for the structure of the CD rom, numerous examples of each concept were provided including original designs and drawings by the author and also examples from current buildings and designers.  Because of the sheer amount of possible examples, the geographic location and climate of the examples shown are primarily located in the Northeastern United States.  This allowed a consistency of climate so that compare and contrasts as well as cross referencing could be made.

**The Seeds of Sustainability**

**About the CD Rom**

The CD rom represents the finished product of the thesis.  It was made with a variety of software including Adobe Photoshop [image editing],  Adobe Premier [video editing] and Macromedia Director [interactive design].  Because the project is intended to be an interactive CD rom, results may vary greatly when using this program over the Internet.  Those people with good internet connections [T1 or better] should have no problem, but those with only a phone connection will most likely find this program impossible to use.

It should be noted that some parts of the CD are developed to a much higher level than others.  In some cases you may encounter a button that does not work or sends you into oblivion.  If this is the case, simply type the *Apple* key and *Q* key to quit the program.  You can then reload it and start again, making sure to avoid the troubled area.

This project was completed solely for the Apple Macintosh environment.  The reasons for this are simple.  Because of the large learning curve for software needed to create this project, little time was left to explore the option of producing a cross platform product.

**Some specific information** [for the dedicated user of this project]

Any time you see blue text next to a diagram, you can click and hold the mouse to reveal an image which supports the text.  In the body text, underlined words are clickable and will also reveal images.  There was an intention to include numerous audio clips with each screen, but due to some bad recording, only a few actually work.  You will also see small icons at the bottom of some screens.  These are the so called "spirit guides" of the project.  They offer words or images of support to a variety of information presented.  sometimes the connection is obtuse and sometimes more direct.  This was my way of including some of my earlier research into the CD rom.

# The Seeds of Sustainability

An Interactive Primer Exploring the Role of Architects, Planners and Designers

in Achieving a Sustainable Future
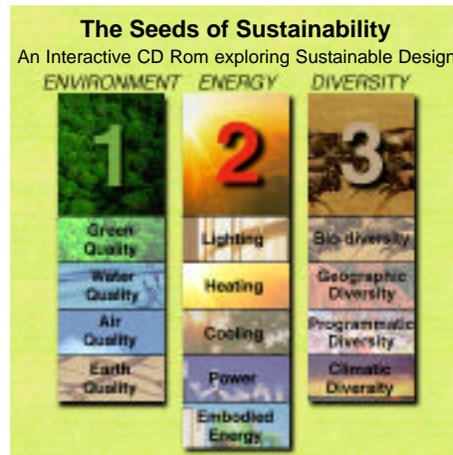


**Fig 3.1**
Macromedia Director 5.0 Projector File
with associated videos and sounds [379MB]


Click icon above to launch
NOTE: Use *Apple & Q* keys to Quit Program
[Apple Macintosh Compatible ONLY]

Curriculum Vitae


Robert M. Fleming


Rob Fleming Graduated from Temple University in 1987 with a Bachelor of Architecture degree.  He then went on to work for seven years at Francis Cauffman Foley Hoffmann Architects in Philadelphia, Pennsylvania and received his architectural registration in 1992. The year before attending Virginia Tech, he taught in the design foundation at Temple University's summer workshop and a senior interior design studio at the Philadelphia College of Textiles and Science.  At Virginia Tech at the Washington Alexandria Architecture Consortium, Rob was a Graduate Teaching Assistant with primary responsibilities in the library. During his stay there he was awarded the "student ombudsman" award for raising the level of critical dialogue at the center.  While studying at Virginia Tech, Rob taught at The Catholic University of America's Summer Architecture Discovery Program.  Rob continued  his master's thesis in Philadelphia where he began teaching full time as a visiting assistant professor at the Philadelphia College of Textiles and Science.  His primary focus was the coordination and design of all the computer aided design courses and coordination of the third year architecture studios.  He eventually redesigned the third year studio to include a focus on designing for sustainability.  Rob was recently promoted to a tenure track position at the College beginning in the Fall of 1997.