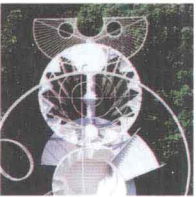


Mary Stewart

3D



Launching  
the Imagination

# Launching the Imagination

Three-Dimensional Design

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first edition

Mary Stewart

# McGraw-Hill Higher Education

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## LAUNCHING THE IMAGINATION: VOLUME 2: THREE-DIMENSIONAL DESIGN

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**Mary Stewart** is currently an Associate Professor and the Foundation Coordinator in the Northern Illinois University School of Art. She also serves as the Regional Coordinator Advisor for Foundations in Art: Theory and Education, a professional organization devoted to excellence in college-level teaching. A long-time member of the Syracuse University Foundation Program, she has taught Two-Dimensional Design, Three-Dimensional Design, and Drawing for over twenty-five years. As an artist, Stewart uses the dialogs of Plato as a beginning point for visual narratives using drawing, visual books, and computer graphics.

## The Design Continuum

My fascination with design dates back to 1980, the year I taught my first two-dimensional design course. As a graduate student at Indiana University, I had been teaching drawing since 1977. The transformation of perceptual reality into effective illusion was the main concern in basic drawing, and I knew many ways to accomplish this goal. It was far more difficult to determine either the form or the content for a course in design. In researching the subject, I discovered a dizzying array of skills to master and concepts to explore.

Auditing the courses of two master teachers raised even more questions. The first, taught by Professor William Itter, was derived from the approach developed by his teacher, Joseph Albers. Professor Itter's course was methodical, systematic, and highly analytical. The second course, taught by Professor David Hornung, offered a thorough investigation of unity and variety through an exploration of patterns in art and life. His approach was exuberant, synthetic, and often irreverent. Despite significant differences in their assignments, both teachers presented substantial design information effectively.

In developing my own course, I concluded that a comprehensive approach to design required exuberance as well as analysis and that rambunctiousness was the natural partner to rigor. Design is equally a noun and a verb. It offers a problem-solving process as well as a well-crafted product. Because the ideas and approaches to design are ever-changing, the educational possibilities are infinite. Thus, when McGraw-Hill invited me to write a new design book, I was determined to present substantial information in the liveliest possible way.

## A Flexible Framework

*Launching the Imagination: Three-Dimensional Design* offers a clear, concise, and comprehensive overview of the elements, principles, and problem-solving processes of three-dimensional design. The book covers all of the topics common to foundations courses and found in other textbooks; however, I have attempted to refine, distill, and update the presentation of this core material. Additionally, *Launching* includes sections devoted to Plane, Volume, and Mass, often missing from other books currently available. Over two hundred and fifty images from a wide variety of



sources illustrate these points in a clear and engaging manner. A special effort has been made to include the broadest possible range of images, including examples from industrial design, ceramics, and metalsmithing, as well as traditional fine arts. *Launching the Imagination* showcases contemporary art, so that first-year students (many of whom are concurrently studying art history) have a fuller view of the art world they will be entering. The stylistic range is broad and the examples are drawn from many cultures.

This textbook also includes many unique features:

- *Launching the Imagination* is the only foundations text that includes an extensive discussion of concept development and creativity, including specific critical thinking and problem-solving strategies, time-management techniques, and a thorough discussion of critiques.
- Each chapter ends with a point-by-point summary, a list of key words, a brief list of recommended readings, and at least five key questions. These questions are designed to help students analyze their studio works in progress, rather than solely relying on a final critique for input.
- Profiles are special two-page spreads, found in every chapter, which highlight interviews with living artists and designers. Through these interviews, students learn about the working processes, career choices, obstacles overcome, and criteria for excellence of a remarkable group of masters in the field. These interviews help students see connections between basic design and professional practice while providing an introduction to potential careers.

A glossary, extensive bibliography, and comprehensive index provide further information and help readers access sections of the book of particular interest.

*Launching the Imagination: Three-Dimensional Design* is composed of the central six chapters from a larger book entitled *Launching the Imagination: A Comprehensive Guide to Basic Design*. The comprehensive text includes an additional three chapters on two-dimensional design and three chapters on four-dimensional design. A third book, *Launching the Imagination: Two-Dimensional Design*, provides a concise introduction to two-dimensional design. With three options available, teachers and students can use the book best suited to their curricular needs.

## A Pedagogical Support System

In addition to the integrated pedagogy highlighted above, each copy of *Launching the Imagination* is packaged with *Launching the Imagination's Core Concepts in Art* CD-ROM, which features over 70 interactive exercises illustrating such fundamental elements as line, shape, and color; narrated video segments on a wide range of media; study resources correlated to each chapter; a research and Internet guide; and a study skills section offering practical advice on succeeding at college.

Instead of providing extensive exercises in the text, *Launching the Imagination* is accompanied by an extensive Instructor's Manual. Advice on course construction, critique skills, and technical resources is included, along with over fifty terrific assignments.

Finally, *Launching the Imagination* is supported by a dynamic Website featuring additional studio exercises, Web-based resources for students and teachers, and interactive problems for further study.

## Acknowledgments

It has been quite a job and I've received a lot of help from my colleagues. At Northern Illinois University, School of Art Chair Adrian Tió has been relentlessly optimistic and highly supportive. From Syracuse University, I would like to thank Paul Nielsen and Sarah McCoubrey, who chaired the Art Foundation Department during this project, and were consistently helpful. Peter Forbes, Jude Lewis, Stephen Carlson, and Stan Rickel offered their encouragement and lots of help, and librarians Randall Bond and Terence Keenan provided prompt, gracious, and insightful advice on my many research questions. Mat Kelly, Ben Marra, and Akiyo Okura acted as my assistants at various points—each contributed ideas as well as energy to the book. I would particularly like to thank Jason Chin for commenting at length on many chapters, and Trisha Tripp and Cally Iden, whose critiques appear in chapter six.

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I would also like to thank the following artists and designers who contributed so generously to the Profiles which accompany each chapter:

Nancy Callahan	<i>Artist</i>
Bob Dacey	<i>Illustrator</i>
Diane Gallo	<i>Writer</i>
Heidi Lasher-Oakes	<i>Sculptor</i>
David MacDonald	<i>Ceramicist</i>
Rodger Mack	<i>Sculptor</i>
Rick Paul	<i>Sculptor</i>

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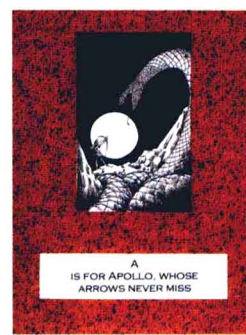
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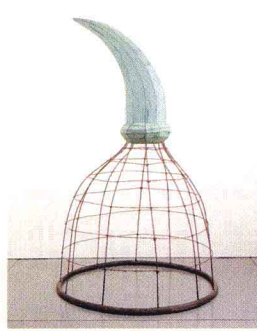
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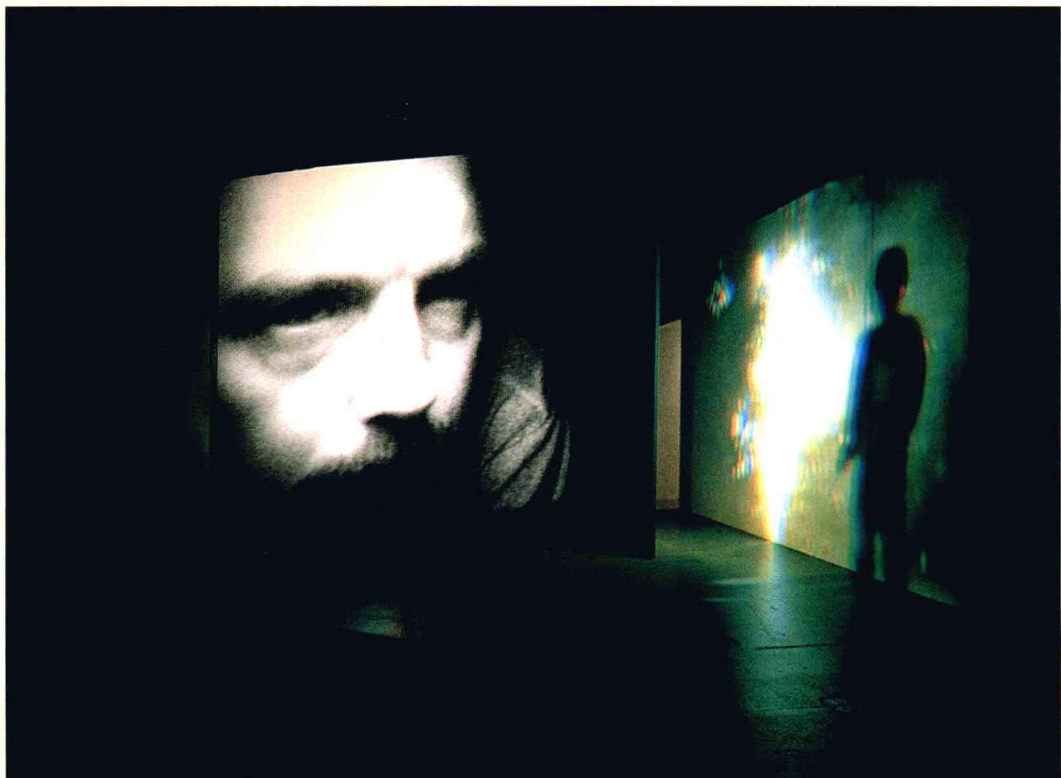
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# Introduction

## Beginner's Mind, Open Mind

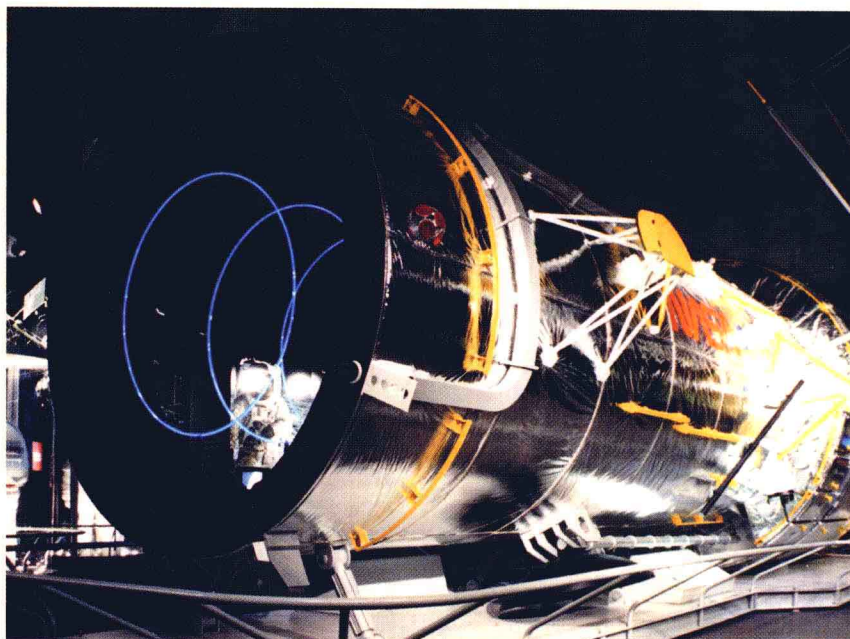
You are ready to embark on a marvelous journey. New technologies and exhibition venues offer dazzling new ways to produce, perform, and publicize visual ideas. Contemporary sculpture has expanded to include performance art and installations (i.1), and metalsmiths now use everything from plastics to precious metals to create inventive small-scale sculptures (i.2). Graphic designers develop many forms of visual communication, from shopping bags and exhibitions (i.3) to Websites, logos, and brochures. Film and video, the most popular forms of public storytelling worldwide, are becoming increasingly integrated with the Internet, which promises to extend visual communication even further (i.4). And, as a result of the extensive experimentation



i.1 Bill Viola, *Slowly Turning Narrative*, 1992. Bill Viola's *Slowly Turning Narrative* consists of a large, rotating screen onto which moving images are projected. One side of the screen is a mirror, which reflects distorted images back into the room.



i.2 Keith E. LoBue, *Where the Music Dwells*, 1993. A broken pocket watch can become an evocative artwork when images and words are added.



i.3 Bill Cannan & Co., NASA's Participating Exhibit at the 1989 Paris Air Show. To suggest the mystery of space travel and highlight individual displays, this NASA exhibition used dramatic pools of light within a mysterious dark setting.



i.4 Hans-Jürgen Syberberg, *Parsifal*, 1982. Syberberg combined live actors with oversized projections of dreamlike landscapes in his filmic interpretation of Richard Wagner's opera.





i.5 Christian Marclay, *Amplification*, 1995. The photographic images in this installation shift, fuse, and divide, depending on the position of the viewer.



with expression and abstraction in the twentieth century, the traditional arts of painting, printmaking, and photography (i.5) now offer expanded opportunities for introspective thinking and the development of a personal vision. The opportunities for exploration are endless. It is a great time to be studying art and design!

A journey of a thousand miles begins with one step. As a beginner, your first steps are especially important. Free of the preconceptions or habitual patterns that often paralyze more advanced students, beginners enter the learning experience with an open mind and an intense desire to learn. With no reputation to defend, they can more easily make the mistakes that are so essential to learning. Having taught students at all levels (from freshmen to graduate students and beyond), I have found that beginners of any age are the most courageous students by far. The open, unencumbered “beginner’s mind” is wonderfully receptive and resilient. As a result, remarkable changes occur during the first year of study.

## Defining the Basics

*Launching the Imagination* is designed to supplement and support a variety of introductory courses. These courses provide a general overview of studio art and often serve as prerequisites for many specific majors, ranging from advertising design to sculpture and video. Because it is impossible to teach the specific skills required for all these majors in one year, first-year courses focus on general knowledge and essential skills. These **foundation** classes are designed to provide the base on which more advanced study can be built.

Most schools divide this essential information into a variety of drawing and design courses. Drawing helps us develop a heightened awareness of the visual world and gives us many ways to translate our observations into images. At the foundation level, “design” refers to all other types of visual organization, from photography and collage to cardboard constructions and simple Websites. *Launching the Imagination* is devoted to all aspects of basic design.



C-2



439 Melanie - Run - Run.



440 Children (foreground against Sadie's Street) Background Bodega school with milella and 2 or 3 children



440A continuation of 440. - Melanie runs past camera

i.6 Harold Michelson, Storyboard for Alfred Hitchcock's *The Birds*. Storyboards are used to plan the sequence of events and compose the specific shots in a film. Alfred Hitchcock, who began his career as an artist, preplanned his films with exacting care.

## Defining Design

The ideas and implications of basic design are extensive and complex. The compositions created by fine artists and the designs used in the applied arts are all derived from the same raw material. As a verb, design can be defined four ways:

- To plan, delineate, or define, as in designing a building.
- To create a deliberate sequence of images or events, as in developing a film storyboard (i.6).
- To create a functional object, as in product design (i.7).
- To organize disparate parts into a coherent whole, as in composing a brochure (i.8).



i.7 Designworks/USA, Home Pro Garden Tool Line. These five gardening tools are all based on the same basic combination of handle, blades, and simple pivot. Variations in proportion determine their use.