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Rochester Institute of Technology

A Thesis submitted to the Faculty of the
College of Imaging Arts and Sciences
in candidacy for the degree of
Master of Fine Arts

PREPARE TO BOARD!

Creating Story and Characters for Animated Features and Shorts

by Nancy Beiman

March 2, 2007

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Nancy Beiman
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Abstract

PREPARE TO BOARD! Creating Story and Characters for Animated Features and Shorts is a textbook for animators and storytellers working in time-based media. It discusses the creation of an animated concept—the heart and soul of an animated motion picture that has not been covered in previously published storyboarding books—and then describes techniques used to develop characters and storyboards simultaneously in accordance with industry practice. Exercises are included to allow readers who are not familiar with animation to progress from simple to increasingly complex projects. The text supports the visuals much in the same way that dialogue supports visuals in an animated film. Over 300 illustrations by student and professional artists are included. Three interviews with animation professionals and an extensive glossary of professional terms utilized in the text appear in separate appendixes.

A website featuring illustrations from the book and a 'commercial' parodying the old "Bouncing Ball" cartoons is online at <http://www.nancybeiman.com>

The site links to amazon.com's order page for the book.

Table of Contents

1. Introduction

- 1.1. Storyboard was learned on the job
- 1.2. Lack of suitable college textbooks
- 1.3. Story problems affect films

2. Review of the Literature

- 2.1 Published and unpublished storyboard books
- 2.2. Different media require different treatments
- 2.3. Character design books

3. Process

- 3.1. Structure and analysis
- 3.2. Supporting documents and artwork
- 3.3. Professional criticism and assistance

4. Final structure and publication

5. Peer reviews

6. Summary

7. Conclusion

8. Budget

9. Appendix (original proposal)

1. Introduction

1.1. Storyboard was learned on the job

Character animation in the USA was originally learned in a studio. Early training programs were geared toward maximizing productivity, not artistic ability. This changed when Walt Disney required his artists to study life drawing and design at the Chouinard Art Institute in Los Angeles so that they could convincingly portray the characters in SNOW WHITE AND THE SEVEN DWARFS, his first feature film. Regular art training classes were started at the Disney studio in 1934 and continue to the present day. No storyboard classes were included. Story artists were trained as animators and learned story construction on the job.

1.2. Lack of suitable college textbooks

Disney willed half his fortune to the California Institute of the Arts in 1966, and the college's Character Animation Program began in 1975. No textbooks, no magazines devoted to animation, and no peer-reviewed publications existed at the time. The American Film Institute published the first serious analysis of American animated film (AFI REPORT: ANIMATION) in 1974.

I was one of the original class members of the Character Animation Program at Cal Arts in 1975. The teachers, all veterans of the 1930s Disney Studio training program, recreated the studio's art school courses for a carefully selected group of college students. I took extensive notes, typed them up neatly, and filed them in binders. I began to tape interviews with animation people and continued the exercise after I graduated. I was invited to publish articles on animation in CARTOONIST PROfiles magazine by editor Jud Hurd. Monthly articles, usually interviews, appeared from 1982 to 1995. I used handouts based on my Cal Arts notes and interviews when teaching storyboard classes at the Savannah College of Art and Design and the Rochester Institute of Technology in the new century.

1.2.1. More films, more courses, and more books

Animated features such as THE LITTLE MERMAID, THE LION KING, and BEAUTY AND THE BEAST earned hundreds of millions of dollars in the 1990s and animation became very sexy. Other studios were set up, other character animation programs were created at other schools, and a great many how-to-animate books of varying quality sprang up like so many mushrooms. Not one of them discussed how to tell an animated story. Not many of the new films had good stories.

1.3. Story problems affect films

Animation's star began to fade. In 2002 after a series of disappointing returns from animated releases Disney CEO Michael Eisner proclaimed that '2D was dead' and shut down the entire hand drawn animation department at the Walt Disney Studio. But Disney's computer generated features (excepting Pixar films) did not do well. Others fared no better. In 2006 three studios' computer generated animated features with nearly identical concepts opened, and died, at the box office. It wasn't the medium or brilliant special effects that audiences came to see—a good, simple story told by appealing characters would ensure a film's success no matter what medium was used to produce it. Somehow this concept had gotten lost in the studios' rush to quickly convert from producing mediocre hand drawn films to producing mediocre computer generated films. Animated stories and characters had become clichéd and repetitious and the novelty of CGI had worn off. The medium was blamed, not the message.

And there were still no books in print that showed how to create an animated story.

2. Review of the Literature

2.1. Published and unpublished books on storyboard

Books about animation have emphasized technique over content since E. G. Lutz published the first how-to-animate book, *ANIMATED CARTOONS*, in 1920. Frank Thomas' and Ollie Johnston's *DISNEY ANIMATION: THE ILLUSION OF LIFE* (Abbeville Press, 1981) was a notable exception to the rule. While it excelled in describing the creation of an animated character's performance and included many storyboards for short and feature length films produced at the Walt Disney Studio over a thirty year period, their landmark work contained no discussion about the creation of original stories and very limited reference to the storyboarding process. These references were specific to the Walt Disney Studio, which assigned supervising animators Thomas and Johnston to assist in designing characters after the story had been boarded or adapted from an existing work. *THE ILLUSION OF LIFE* remains the only work that illustrates the evolution of characters and storyboards in the early days of animated feature films. Books in the "Art Of" series (such as *THE ART OF MONSTERS INCORPORATED* by Pete Docter and Mark Cotta Vaz) are outstanding collections of preproduction art for individual feature films done in a variety of media. They are coffee table books with little text. The film's story creation is not discussed. The *ART OF* books show the *HOW* but not the *WHY*.

2.1.1. The best storyboard books are out of print

John Canemaker's two history books *BEFORE THE ANIMATION BEGINS* (1996) and *PAPER DREAMS* (1999) are the best sources for examples of the Walt Disney Studio's development of visual storytelling in features and shorts, but both books are out of print and hard to find. No in-print books show how to create an animated short film or feature production using visual storytelling

methods that are common to both, but which are not used in television production.

2.1.2. The best storyboard materials are not printed

Oddly enough some of the best instruction in feature animation storyboard, preproduction and character design was not written at all. A great deal of art direction and storyboard art was included on the deluxe DVD versions of many hit animated feature films, notably SHREK and THE INCREDIBLES. SHREK contained filmed storyboard pitches for three entire sequences that were cut from the film. A viewer not already familiar with feature animation preproduction would not understand why the sequences were cut, why the characters' appearances vary widely between sequences or individual panels in a storyboard, why design concepts changed over time, or how the story and characters came to be created in the first place.

2.1.3. In-house publications

The Walt Disney Studio's story choices, as described in an in-house publication on storyboarding by Vance Gerry, reflected fairly conservative tastes. Gerry designed his book to be a technical guide for seasoned professionals at one studio, not a textbook for students or beginning story men. Examples of storyboards from unproduced Disney films were included along with boards from existing features, but Gerry did not analyze or discuss why SCRUFFY or CHANTICLEER was not considered suitable for production and why ONE HUNDRED AND ONE DALMATIANS was. Gerry's examples were chosen solely to demonstrate rendering technique or how to research a period piece. He had no opinion about the merit of the unproduced films and did not discuss story content.

2.1.4. In-house storyboard training

The Walt Disney Studio held a storyboarding class in 1998 in which story artists gave trainees weekly assignments and numerous handouts. I participated in this class and took extensive notes. The assignments were necessarily very short, and each project was discrete—there was no attempt to design each assignment as an elaboration of the previous one, or to use continuing characters to create a longer story out of the separate sequences. Simple cartoon situations were stressed over character and plot development because of the program's limited timeframe.

2.2. Different media require different treatments

Short films used to experiment with story since they could afford to take the risk. Twenty or thirty short films were turned out at the Warner Brothers cartoon studio each year from 1930 to 1962. Now-famous characters and concepts evolved over time, and some worked more successfully than others. Character interpretations changed over the years and even varied from directorial unit to unit. Bugs Bunny as directed by Chuck Jones is not the same character as a Friz Freleng-directed Bugs Bunny.

Modern short films are one-offs. There is no chance for gradual experimentation; a story and character must succeed on its first try. The apprentice system used in the great cartoon studios of the Golden Age cannot be replicated in a college classroom or in most modern animation studios. The few books that address the creation of short animated films focus on production techniques instead of story content and character development.

2.2.1. Live action storyboards

Published books on storyboarding are largely aimed at live action filmmakers. Their illustrations show human subjects boarded in realistic settings.

Only a few shots are included and there is no attempt to show character development in a continuing story.

It is much more educational to purchase actual complete storyboards from well known films on Ebay and analyze them for shot continuity and visual storytelling. The characters in live action storyboards may bear little or no resemblance to the actors who play them. They are used solely as guides for the mood and the actors' and camera's placement in each shot. A lengthy film like TITANIC has a storyboard that is only about 200 pages long, containing about 400 panels. Each panel illustrates a shot, not the acting within the shot.



Fig. 2.1 TITANIC storyboards (1997)

Two storyboard panels from TITANIC are shown in Fig. 2.1. The actors' dialogue and the timing of the scene are not indicated; the boards illustrate only the camera and character placement. TITANIC's boards are a rough guide for the director and cameraman.

2.2.2. Animated storyboards

Animated film storyboards ARE the film. The characters, their performances, and the film's editing are all created on the animated storyboard. The animated film is edited before it is shot. Camera work in animated film is only started after the artwork has been created to the specifications of the storyboard. Therefore, animated storyboards are much longer and more complex than live action boards. One sequence of an animated feature film may contain more individual story panels than the storyboard for the entire TITANIC feature.

Yet no studio save Disney produced written guides on how to make an animated storyboard. Storyboarding was learned on the job just as it had always been.



Fig. 2.2 Storyboards from A GOOFY MOVIE by Nancy Beiman. (1993)

Fig. 2.2 is a storyboard that I drew for Disney's hand-and-computer-animated A GOOFY MOVIE. Dialogue is included and the characters' actions are detailed for each of the seven scenes. The red area highlights boards that describe the action for a single scene. Animation boards concentrate on acting rather than staging, unlike the examples from TITANIC.

2.2.3. One method does not fit all media

A student who uses a live action storyboard book as a guide for their animation project will not have enough storyboards to depict the characters' acting or accurately time scenes for a story reel or animatic. There has been some overlap of live and animated preproduction technique over the years, but there are still significant differences between the two media. Storyboard is arguably the most important one.

Storyboard books that were specifically aimed at animators described the creation of an animated television series or commercials. They assumed that there was a pre-existing script, did not explain how to create an original story, and usually had drawings playing a secondary role to the dialogue. No storyboard book mentioned how character designs and models develop and change during the storyboarding process.

2.3. Character design books

Character design books were generally better than existing storyboarding books, but they tended to be monographs describing how to draw in one particular style (for example, Anime or Superhero, two entries in the famous series of 'how-to-draw' books by Christopher Hart), and how to create surface detail. These books were aimed at comic book artists and not at animators.

None attempted to place characters into a story context. The emphasis, as with storyboarding books, was on the *How* rather than the *Why*.

The story influences the character and vice versa. Character and story do not develop in isolation in animated film preproduction. Yet there were no in-print books that integrated the two. This led to my decision to submit an outline for a book on feature and short film storyboarding and character design to Focal Press' representatives when they visited RIT in April, 2005.

3. Process

3.1. Structure and analysis

Even though I'd been drawing storyboards for decades I found myself at the start of my book project in the position of the caterpillar who, when asked which foot he put forth first during a walk, found himself over-analyzing the process until he was unable to move. How do you codify something that is so instinctual? Most story men and women KNOW when something works. They don't analyze it, at least not consciously. The most important part of my book would describe how to create a film's concept and characters. It seemed prudent to start with an analysis of existing films that the reader could screen after reading the book. I made a short list of animated features and short films whose stories and characters could be analyzed in writing without depending on an associated illustration. I also had to provide negative examples. These, I determined, would appear only in illustrations drawn by me since no studio wants their work displayed as a bad example.

3.1.1 A cast of characters for the book

THE THREE BEARS and THE THREE LITTLE PIGS were chosen to be continuing characters in the book, replacing an earlier idea for a "Story Bear". I wanted to build upon stories that were familiar to the readers. The Pigs are identical characters whose appearance changes in different chapters to illustrate how character design is influenced by different costumes, moods, and settings. The Three Bears are three different characters from the same species that appear in excerpts from a highly melodramatic imaginary feature based on their original tale. Their personalities and actions vary with developments in the story.

3.2. Supporting documents and artwork

I decided that three of my interviews with animation story artists would appear in edited form in the Appendix. Ken O'Connor's, T. Hee's, and Ken Anderson's comments would supplement and verify the text since much of the book was based on material from aural or unpublished sources. Story man Ken Anderson's interview was particularly helpful and is accordingly the longest of the three. I needed varied examples of storyboards from animated television and feature films. I did not want all the illustrations and storyboards to look like they had been drawn by the same person, and I had not worked in television for a decade. Disney was so fragmented that I would have had to ask permission from three different departments to reprint examples from my boards for the ALADDIN television series.

Authentic-looking television storyboards were specially drawn for the book by board artists Doug Crane and Nelson Rhodes. Feature boards were more problematic. My storyboard work for Disney, Hahnfilm, and Warner Brothers was copyrighted by the respective studios. Dealing with Warner Brothers, I was told, was impossible; Hahnfilm used licensed characters. Disney was the best source for permission since I had highly placed contacts at the studio.

I contacted Roy Disney and Howard Green (vice president of marketing) and requested permission to reprint some Disney artwork. Both men went to extraordinary lengths to help me get the studio's permission to use character designs I drew for HERCULES and TREASURE PLANET and storyboard drawings from FANTASIA by Ken O'Connor. I used storyboards from my theatrical short film YOUR FEET TOO BIG since it was not clear that Disney would give me permission to reprint their artwork at all, and the deadline was approaching. This was a wise decision since my request for storyboards by Ken Anderson was refused. It took seven months for Disney's legal department to give me formal permission to reprint the other materials.

3.2.1. Inclusion of student artwork

My senior advisees from the class of 2006 and several students in my other classes gave me permission to use artwork from their projects. Student work is important to the success of this book. It eliminates the fear factor. Students told me they could not identify with Frank Thomas and Ollie Johnston while reading their classic book *DISNEY ANIMATION: THE ILLUSION OF LIFE* (Abbeville Press, 1981.). The students felt that 'these men never made a mistake.'

I pointed out that *ILLUSION* described a 30-year-long learning process at the Disney studio and included examples of mistakes made along the way! It appeared that Thomas and Johnston were too distant in time, and too legendary, for the students to understand that they had had to learn by trial and error like everyone else.

A casual reader who picks up a contemporary book on character design with illustrations by Glen Keane or Jack Davis may feel that they cannot possibly create something of similar quality or, worse yet, that they should imitate the artist's style. A reader who sees student work, no matter how fine, illustrating a textbook feels that he or she might be able to create something of similar quality. The intimidation factor is lower even though the RIT students worked to an extremely professional standard.

3.2.2. Illustration choices

Lastly, I requested artwork from several professional friends. I did not want the book to fall into the trap of 'draw like me' sometimes found in textbooks that exclusively contain the author's artwork. I also felt that my skills in art direction were not as strong as they could be. Independent animator Nina Paley and RIT students William Robinson and Brittney Lee provided excellent color keys and backgrounds. Other artists generously permitted me to use examples of their design and storyboard work. My photographs of Ken O'Connor and some

California Poppies, together with examples from my extensive collection of cartoon art rounded out the illustrations. The final project contained over 250 original illustrations and 50 from other sources.

3.3 Professional criticism and assistance

PREPARE TO BOARD was originally designed in two separate sections: one each for Story and Character Design. Director Yvette Kaplan reviewed my original proposal to Focal Press and suggested that I interleave the two instead since character and story developed simultaneously on a professional production. Animator/Director Tom Sito concurred and suggested additional topics that would prove suitable for the book. I received extensive feedback on my animation history and my writing style from Greg Ford and Ronnie Scheib, writers and historians at Warner Brothers Animation. Professor Mark Mayerson of Sheridan College in Toronto proofread the entire manuscript, pointed out technical errata and provided valuable information on computer animation preproduction. Brian McEntee, the art director of BEAUTY AND THE BEAST and ICE AGE, was particularly helpful in the art direction chapters and also suggested many terms for the Glossary. Professor Marla Schweppe of the Rochester Institute of Technology completed the Teaching Guide after the rough draft was finished. I modified my book's design and content to incorporate constructive suggestions from these and other professional reviewers.

The book went through two rough drafts and final corrections and additions were not completed until November 16, 2006, when the book was in page-proof form.

4. Final structure and publication

I found that it was very difficult to alternate chapters on story and character. The order of some chapters was shifted after they were written to eliminate redundancy and create better continuity. The first eight chapters are devoted to

story concept and character design. The story chapters that follow begin with technical notes on designing the frame and then analyze the storytelling process through different interpretations of the THREE BEARS story. There are two art direction chapters, one for the setting and the other for the characters; a chapter on pitching, one on maquette making, and one describing final model sheet cleanup. The final chapter lists discs, websites, and some books that will be helpful to the reader. An appendix consisting of three interviews and a glossary rounds off the text.

PREPARE TO BOARD took one year to produce. The text and illustrations were delivered to Focal Press in August, 2006. Revisions were completed in November, 2006.

I gave a presentation on the book illustrated by slides of some of my illustrations at the 2D or not 2D Animation Festival in Everett, Washington on November 18, 2006.

My animated commercial for PREPARE TO BOARD was posted at <http://www.nancybeiman.com> in February, 2007. The site linked to online book-sellers amazon.com. Animated online commercials are a relatively new way of publicizing books and this method seemed particularly appropriate for my project.

PREPARE TO BOARD! Creating Story and Characters for Animated Features and Shorts will be published by Focal Press on March 2, 2007.

5. Peer Reviews

“In the library of motion picture how-to books, one topic that has not been adequately explained is the art of storyboarding. Internationally known animator Nancy Beiman draws upon her experience to create for the first time a definitive manual for the art. Lavishly illustrated and highly readable,

it is essential reading for anyone serious about learning how to create stories, characters and storyboards for film."

~Tom Sito, director/ animator, author of *Drawing the Line: The Untold Story of the Animation Unions from Bosko to Bart Simpson*. (The University Press of Kentucky, 2006) co-director, *Osmosis Jones*

"Nancy Beiman has done an excellent job explaining the story development and boarding process, and I am certain this book will be a useful tool to all animation students and schools."

~ Brian P. McEntee, art director, *Beauty and the Beast* and *Ice Age*

"Nancy Beiman knows that storyboards are about more than continuity and cutting; they're about character and conflict. A good storyboard has the power to make things as elusive as thoughts and emotions tangible for audiences. *Prepare To Board* fulfills the promise of its title by supplying readers with solid advice and illustrated examples that will help them make successful animated films."

~ Mark Mayerson, Professor of Animation, Sheridan College

"No one knows more about designing characters and creating story for animation than Nancy Beiman. Lavishly illustrated and expertly written, she draws on all her experience as a teacher, an artist and an animation industry veteran. A must-have for anyone who wants to make an animated film."

- Jerry Beck, Animation Historian, author *The Animated Movie Guide*,
www.cartoonbrew.com

"At long last we have a comprehensive new book covering the not always fully-understood areas of the animated film production processes of story and character development, and their care and feeding. Nancy Beiman, a seasoned Producer, Writer, Teacher, Story Artist, and former Disney Animator who has worked all over the globe, has authored a book which I

predict will become a textbook in animation programs everywhere. As a member of the animation teaching industry myself, I see its use in both studios and classroom as a much-needed guide to better stories, and more creatively drawn actors to bring them to life on the screen.

In going through this book, many things jumped out at me with a “now, why hasn’t anyone else covered this in previous texts?” With my own background of training artists at Disney’s Feature Animation division, these topics in Nancy’s book, illustrate my point: an updated production flow chart that shows the newcomer to this medium all the creative departments now involved in the average studio; the emphasis on creating lists to stimulate thinking for story ideas, working up “thumbnail” drawings, and doing exhaustive research; story “beats, which clarifies a mysterious aspect in the laying-out of storyboards, and story rhythm; and “pitching a board”, a process I’ve never seen adequately explained, or suggestions offered on approaches...probably the one thing that sells or drops a story presentation.

Some other chapters covered seemingly mundane ideas on using yellow lined pads to construct characters, something I intend adding to my own classes in this area. Beiman also offers clear defining illustrations of the differences between animation and live production, and she also shows how artists working in the areas of story and character development make the transition of their talent to the new 3D technology processes.

Many other areas of production at the development stages are well described, such as Maquettes, pacing, and art direction, which support all the previous material. But, I think the reader, after going through this book cover to cover could easily come to my conclusion in which I feel that the chapter titled “Patterns In Time: Pacing Action on Rough Boards” is at the heart of the book. It includes all the elements necessary to a good story wrapped into this one chapter.

Finally, “Prepare to Board”, is well-illustrated with some of the best in the animated art field, with many reproductions of works of drawing and design that will make any reader relish looking at them. And if this isn’t enough,

Nancy has included some insightful interviews with famous industry “greats” of the past, who she counts as friends and inspirations...not just to her, but, because she’s sharing these with the reader, for new generations of animation’s future! My hat’s off to this author for sharing her insights with us.

Bill Matthews, Animation Professor, Woodbury University

“The young artist had never done professional storyboards before, but found himself in a plum position at the Walt Disney studio. Though he had been promoted to story artist, there were no bibles, handbooks or manuals explaining the job. So the young artist had to fumble and stumble his way through the process. Today’s up and coming animation artists will have no excuse because Nancy Beiman has written a new book on the storyboarding process entitled, “Prepare to Board.”

No newcomer to the business, Ms Beiman has animated feature films for Walt Disney Feature Animation and Amblin.’ Her credits also include directing, storyboarding, character design and children book illustration. Nancy brings a wealth of animation knowledge from her years of experience in the business, plus creative savvy from her colleagues. All this is wrapped up in interviews from old school Disney veterans who share their creative insights on the story development process.

If you’re a serious student of animation production, or simply a fan who loves the medium, I promise you a treasure trove of helpful information and a delightful read. Nancy Beiman’s book comes too late for the storyboard apprentice back in the sixties, but just in time for you.”

Floyd Norman, Story Artist THE JUNGLE BOOK and TOY STORY II

6. Summary

PREPARE TO BOARD is an attempt to analyze and codify storytelling methods that have been orally transmitted to artists in professional animation studios for decades. Although it was originally intended as a textbook for my own classes, it will prove useful to artists working in an industry that has forgotten some of its own principles and practices.

7. Conclusion

Writing the book was an educational experience for me. I had to review and edit class notes and interviews that were written over thirty years ago, integrate them with materials from my studio career, and update them for the new century's technology. The raw material for the book came from my personal notes and interviews with story artists since no existing books covered this topic adequately. It is my hope that my book will instruct and inspire its readers to utilize their own experiences and imagination to create animated works of art that are not constructed according to formula.

8. Production costs

8.1. Production materials

One BOXX desktop computer	\$3,500.00
One Canon PIXMA printer	\$280.00
Ink cartridges (20)	\$300.00
Tree-free paper (10 reams)	\$350.00
Computer software (Painter 9, CS 2)	\$650.00

8.1.1. Fees and other expenses

Publication rights for four copyrighted Illustrations from Walt Disney Enterprises	\$250.00
Postage	\$85.00

8.1.2. Travel and publicity

Airfare to Seattle, Washington for Book Presentation at the 2D or not 2D Animation Festival (11/17-19/06)	\$400.00
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8.1.3. Website

Domain and webhosting (http://www.nancybeiman.com)	\$290.00
Instruction in AFTER EFFECTS	\$200.00
Total costs:	\$6,305.00

Appendix

Original Thesis Proposal

PREPARE TO BOARD! Creating Story
and Characters for Animated Features
and Shorts

by Nancy Beiman

Thesis Proposal for Master of Fine Arts Degree


Rochester Institute of Technology
College of Imaging Arts and Sciences
School of Design
Computer Graphics Design

Title: Prepare to Board! Creating Story and Characters for Animated Features and Shorts

Submitted by: Nancy Beiman

Date: September 25, 2006

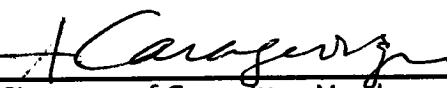
Thesis Committee Approval Marla K. Schweppe, Professor, Computer Graphics Design


Signature of Committee Chair 10-30-06
Date

Chris Jackson, Associate Professor, Computer Graphics Design


Signature of Committee Member 10-30-06
Date

Adrianne Carageorge, Associate Professor, School of Film and Animation


Signature of Committee Member 10-24-06
Date

Abstract of the thesis

PREPARE TO BOARD! CREATING STORY AND CHARACTERS FOR ANIMATED FEATURES AND SHORTS

By

Nancy Beiman

The Rochester Institute of Technology, 2006

Animated feature films have traditionally been storyboarded rather than written. Many books have been written on the technique of animation, but the few books that currently deal with storyboard and character creation are aimed at live action, television, or mass series productions that are heavily dependent on scripts. My object was to describe and analyze the preproduction of feature and short animated films from a visual artist's perspective. I interviewed artists and designers currently working in the industry to see how the storyboard process had changed with the advent of new technology.

The new information was combined with my unpublished notes and interviews with legendary animation artists which I compiled over the past 28 years. The resulting book will make this knowledge available in easily accessible form to future students of the art.

PROJECT DESCRIPTION

PREPARE TO BOARD! Creating Story and Characters for Animated Features and Shorts will be published by Focal Press in 2007 as part of their Visual Effects and Animation series of textbooks. The book is intended for the student reader but will be equally useful to professionals since a large portion of the material is not duplicated in any other published source. Since animated storyboards and characters are developed simultaneously, I revised my original plan to discuss these two disciplines in separate sections of the book. Instead, the book progresses in much the same way that an actual production does. Chapters on design alternate with chapters on storyboards.

Part One begins with a lesson in simple storytelling. My book is the only one in print that seriously analyzes concept, the most important part of any film project. A series of exercises involving free association and variations on simple situations provided in the text encourages the reader to turn stereotypical characters and situations on their heads and create original story material. Chapter Two is devoted to the difference between feature animation, television, and comic strip storyboards. This chapter could not have succeeded without the contributions of a well known graphic novelist who kindly allowed me to use several pages from his imaginatively laid-out book, and those of two experienced television

storyboard artists who provided examples of this radically different storyboard style.

The remainder of Part One is devoted to conceptual art and the beginnings of art direction. Part Two develops the storyboard in tandem with the characters with each reinforcing and supporting the other.

Part Three describes the presentation or pitching of the materials to an audience, the uses of sound and camera in the creation of the story reel and animatic, the creation of character maquettes and color keys, and ends just as the reader is ready to begin animation production. This is the point where most other animation books begin.

Approximately 50% of the book consists of illustrations since this is a visual medium. The text supports the pictures in the same way that animated dialogue supports the action on screen. This led to a potential design problem. Illustrations in many animation books are frequently printed at reduced size, which renders them effectively useless. Since the illustrations were a vital part of my book it was essential to make sure that they were printed large enough to read clearly. Fortunately my editors were extremely helpful in this matter and the illustrations will be large and clear enough so that at times the text actually appears superfluous to the image. This will prove useful in situations where animation students may not be fluent in English.

THE THREE BEARS and THE THREE LITTLE PIGS stories are cited throughout the book. The familiar characters help the reader follow the development process and concentrate their attention on story while they simultaneously develop their storyboard and design technique.

THE THREE BEARS differ greatly in age, size, and temperament even though they are the same species. The simple tale is developed and expanded to create a dramatic feature length story.

The Bears' relationships and even their physical appearance change during the course of the book. These examples show how a longer film develops from the characters' personalities, and how the characters develop and change along with the storyboard.

THE THREE LITTLE PIGS are identical characters with no distinguishing features or personalities. The Pigs play roles in everything from a Merchant Ivory picture to a film noir detective story, showing how situations, props, and costumes can create animated characters. This treatment is useful when applied to short films that have less time to develop characters than a feature length production.

About 20% of the illustrations are provided by my students in the Character Design and Storyboard courses at the Rochester Institute of Technology.

The student work is crucial to the success of the project. It is essential to include work that student readers can identify with. The inclusion of classic artwork from major feature films or famous artists (frequently found in other animation books) often results in a feeling of disassociation. A student may feel that the legendary Disney or Warner animators were *not capable* of making a mistake, and not realize that their artistic skill was only achieved after a long process of trial and error. These artists are too distant from them in time. Illustrations from contemporary student works give the reader a feeling that he or she might be able to achieve similar results.

All but three of the student illustrations were produced for my classes at RIT, so they give a graphic demonstration of the efficacy of my teaching methods.

Professional artwork by a variety of artists supplements my own illustrations in the character design chapters since I did not want prospective readers to fall into the common trap of 'drawing as I do'. Different design styles are included so that a homogenous look is avoided. In some instances the artwork is from a different medium. Examples from my extensive collection of historic cartoon art are also included.

I was offered the opportunity to provide the cover art, which is not usually the case in this series. The editors at Focal Press responded favorably to the suggestion that since I was writing about character design, it would be only logical to let me design the entire cover. If this cover does not appeal to the prospective purchaser, then the book is a failure before they've even started to read it!

The cartoon cat on the cover immediately announces that this is a *cartoon* design book. All other illustrations maintain this fanciful look.

This book will be a contrast to design and storyboard books that feature normally-proportioned human figures in 'realistic' situations.

The text is humorous and larded with little jokes and plays on words that were designed to make the book enjoyable to read. Humor helps greatly when teaching a humorous subject. It was my intention to counter the trend toward 'realistic' and human-based animation and encourage animation students (and professionals) to consider fanciful and unusual sources for animated stories and characters.

No particular medium is emphasized. Animated films in all media begin with drawn character sketches and storyboards. This book will be equally useful to the stop motion, hand drawn, or computer animator. Updates to the second edition (which is already planned) will consist of a DVD showing filmed storyboard pitches, animatics, and story reels; the basic

text will undergo relatively few changes. This book will not become dated.

A chapter listing further reading (online and in book form) ends the main portion of the book.

The Appendix consists of three interviews I conducted with Walt Disney Studio story men Ken Anderson and Ken O'Connor and designer/director T. Hee in the late 1970s. The interviews reinforce and support some of my potentially controversial statements. Two of these men were my teachers, so it is natural that this should be the case.

A lengthy glossary of animation preproduction terms is appended since these terms are frequently used in the text.

Simple and concise exercises appear in many chapters and a separate Learning Guide containing additional exercises was written to assist professors who wish to adopt the book as a textbook.



A Survey of the Literature: Storyboarding Books

Titles and authors are listed along with publication dates in the first two columns. Positive appraisals of the work appear in the third column; negative aspects appear in the fourth.

<p>STORYTELLING THROUGH ANIMATION</p> <p>Michael Wellins</p>	<p>Charles River Media, 2005</p>	<p>Mr. Wellins' book is about animation Storyboard and contains Interviews with a number of artists currently working in the profession.</p>	<p>The book is extremely poorly written, contains few illustrations and a great deal of 'historical' filler. Character design is not discussed at all.</p>
<p>THE ART OF THE STORYBOARD: Storyboarding for Film, TV, and Animation</p> <p>John Hart</p>	<p>Focal Press, 1998</p>	<p>Mr. Hart's book contains a section on animation storyboard.</p>	<p>Mr. Hart's examples are from live action and television cartoons. The artwork is weak.</p>
<p>STORYBOARDING 101: A Crash course in professional Storyboarding</p> <p>James O. Fraioli</p>	<p>Michael Wise Productions, 2000</p>	<p>Another book that is dedicated entirely to storyboard art.</p>	<p>Mr. Fraioli works only in live action and the quality of the illustrations is poor.</p>
<p>INSPIRED 3D SHORT FILM PRODUCTION</p> <p>Jeremy Cantor Pepe Valencia</p>	<p>Thomson Course Technology, 2004</p>	<p>A good all-round guide to CGI animated film production and preproduction. Cantor and Valencia cover many of the same materials that are discussed in my book but devote little space to storyboard and design since the book is more concerned with establishing a production pipeline for one particular type of animation. The book is well designed and written. Student work is utilized and the films discussed in the text are enclosed on a DVD insert.</p>	<p>The book covers every aspect of CGI preproduction and production which means none are discussed in detail. Story and character design are discussed in individual chapters which are well-written but weakly illustrated. The illustrations are much too small and often do not seem relevant to the accompanying text. The authors show individual storyboard panels from many different films so there is no opportunity to see the development of one story or film over time. No exercises are included. The authors include some inaccurate information, claiming that live action shoots are an acceptable substitute for drawn storyboards. Only CGI short films are discussed even though the methods apply to all types of animated film. There is no glossary.</p>

ANIMATION FROM SCRIPT TO SCREEN: Shamus Culhane	St. Martin's Press, 1985	beautifully about character animation. He is a director and producer with experience in feature and television production.	storyboard for commercials. There are comparatively few illustrations. More about animation than story. The technical sections are extremely dated.
STORYBOARDS: MOTION IN ART Mark Simon	Focal Press 2004, 2006	The book is devoted solely to the creation of storyboards.	The new edition (2006) claims to have all new artwork featuring examples of art from animated TV shows like THE SIMPSONS. Older editions contain live action boards only. Character design is not discussed.
DON BLUTH'S THE ART OF STORYBOARD Don Bluth	Dark Horse Press , 2004	A recognized name in animation.	He uses only examples from his own films, which do not have strong stories. Character design is not covered.
EXPLORING STORYBOARDING Wendy Tumminello	Thomson Delmar Learning, 2004	Ms. Tumminello is an instructor at the Art institute of Washington. She has made documentary films.	She has no animation industry experience. Storyboard drawings are aimed at television production or live action.
How to Draw Animation: Learn the Art of Animation from Character Design to Storyboards and Layouts Christopher Hart	Watson-Guptill Press, 1997	One of the few books to talk about character design. I contributed twelve illustrated pages to this title.	The book is aimed at a young audience. It covers a lot of ground in a short space and does not concentrate exclusively on story and design.
LAYOUT AND DESIGN MADE AMAZINGLY SIMPLE Brian LeMay,	Sheridan College, 1991	Average quality book on layout and storyboard for television production. The standard text in a very small field.	The character design section is the weakest part of the book. Story is not discussed at all. No feature style characters or storyboards are included. The production material is dated. There are obvious grammatical and technical errors.

ANIMATION FROM PENCILS TO PIXELS Tony White	Focal Press, 2006	The best general overview of animation production in print. White discusses preproduction and production for ONE film, his short "ENDANGERED SPECIES". White follows the project from preproduction to post, dissects the film sequentially on an accompanying CD, and clearly shows how a concept evolves into a finished animated film. The illustrations are large and numerous.	White uses still photos of live actors instead of drawings to illustrate storyboard camera angles. This is confusing and not really applicable to animation. His technical sections are program-specific and will date. White covers all aspects of hand drawn and CGI animation which means that none are described in detail. Story and design are discussed in individual chapters but not explored in detail.
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MARKETING PLAN

Focal Press will have my book available for purchase in March, 2007.

They decided to print the book in China since they wanted the best available print quality for the images and this caused a slight delay in the release date.

I have suggested that the book be advertised on the animation world network (www.awn.com) and in Animation Magazine. Jerry Beck of cartoonbrew.com has offered free publicity for the book.

I also plan to visit the San Diego Comic Convention in 2007 and will sign copies of the book at a special table provided by the Creative Talent Network to their member artists. There is a possibility that I will present a panel there (this is currently in development).

Focal Press will also bring the book to the London and Frankfurt book conventions and the SIGGRAPH conference in 2007.

I plan to enter the book in the National Cartoonists' Society's REUBEN awards in 2007 as a candidate for Best Illustrated Book.

Complimentary copies will be distributed to animators and producers who will be in a good position to recommend it to other artists.

The blurbs are being written by Tom Sito, Jerry Beck, Ralph Eggleston and John Musker. The first two are well placed to publicize the contents among the animation community and the latter two are respected artists at the Pixar and Disney studios.

Supporting Documents:

Table of Contents,

**PREPARE TO BOARD! Creating Story and
Characters For Animated Features and
Shorts**

TABLE OF CONTENTS

PART ONE

0:01 Introduction

0:02 Dedication and Thanks

1:01 GETTING STARTED

- 1:1.01 First Catch Your Rabbit**
Working From News Items; Interpreting reality.
Creating extraordinary stories from ordinary materials
- 1:1.02 Linear and Nonlinear Story telling**
An explanation of two types of storytelling
- 1:1.03 Setting Limitations and Finding Liberation**
Your personal experiences can be adapted to animation.
If you haven't got a life, why not create one?
- 1:1.04 Shopping for Story: Creating Lists**
Use free association to create story ideas.
- 1:1.06 Nothing Is Normal: Researching Action**
- 1:1.07 All Thumbs: Quick Sketch and Thumbnails**
What a character designer should know.
- 1:1.08 Reality is Overrated** Why caricature is better
than literal interpretations of ANYTHING.
- 1:1.09 Past and Present: Researching Settings and
Costumes**

2:01 Vive La Difference! Animation and Live Action Storyboards

- 2:1.01** A detailed comparison of live action and animation
storyboards, with a table showing production stages
for both media.
- 2:1.02 Comic Boards and Animation Boards**
Comic strips also use storyboards, but they are
dramatically different from animation boards.
One works in a limited time frame; the other is limitless.

- 2:1.03 **Television Boards and Feature Boards.**
Television series boards differ from short and Feature film boards. Why you should know all about this before you start your own project.

3:01 Putting Yourself Into Your Work

- 3:1.01 **Basing story on your own experience.**
Using the behavior of real people and animals in the story instead of in the character design.
- 3:1.02 **The use of symbolic animals and objects.** Allegorical and cultural figures that carry meaning to your viewers. A short list for all you clever foxes.
- 3:1.03 **I am a Rock, I am an Island.** Abstract Concepts Illustrated with Symbolic Objects.
- 3:1.04 **The Newsman's Guide: Who-What-When-Where-Why.** A series of exercises in character design that tell us about your characters the moment we first see them.

4.01 Situation and Character Driven Stories

- 4:1.01 Story can be inspired by the setting or a personality.
Create obstacles for your characters to overcome.
- 4:1.02 **Stop if You've Heard This One**
Clichés and how to avoid them or: turn them on their heads. It's not what you do, but how you do it.
- 4:1.03 **Defining Conflict**
You gotta do what you gotta do.
- 4:1.03 **Stealing the Show.** Tell your story with the most interesting characters. Avoid letting secondary characters and storylines become more interesting than your main story.
- 4:1.04 **Parodies and Pastiches**
Parody satirizes a specific target, Pastiche can reinvent an entire genre.

5.01 What If? Contrasting the Possible and the Fanciful

- 5:1.01 Ask not what CAN happen, but what COULD happen.
- 5:1.02 **Beginning at the Ending: The Tex Avery “Twist”.**
Get your ending first, then work on the start..
Tex Avery talks about the time he wasn’t able to end one of his own short films.
- 5:1.03 **Establishing Rules**
Your animated universe may not obey the laws of the ‘real world,’ but it has to obey its own internal laws in order to make sense to us.

6.01 Appealing or Appalling? Beginning Character Design

- 6:1.01 A definition of the term “Appeal” as it relates to animated characters. Hint: It does not mean “cute”.
- 6:1.02 **Reading the Design: Silhouette Value**
Create a good, simple, recognizable shape for the character that will render it instantly recognizable in a ‘lineup’.
- 6:1.03 **Foundation Shapes and their Meaning**
How to design complex characters from simple shapes that you probably have lying around the house.
- 6:1.04 **Going Organic**
Designing characters that look alive by going with the design ‘flow’
- 6:1.05 **Creating Characters from Inanimate Objects**
The only limit is your imagination.
- 6:1.05 **Across the Universe**
Unifying the setting and character designs.

7:01 Size Matters: The Importance of Scale

- 7:1.01 How large is a house? How tall is a man?
Use objects and characters to get a sense of proportion.
- 7:1.02 **Practicing Your Scales.** A character’s scale can vary within itself or with its mood.

- 7:1.03 **Stereotypes of Scale.** The villain is always larger than the hero. The hero is always well built and strong. As Sportin' Life sang, "it ain't necessarily so."
- 7:1.04 **Triple Trouble: Working with Similar Silhouettes.** How *do* you tell the Three Little Pigs apart?

8.01 Beauties and Beasts: Creating Character Contrasts in Design

- 8:1.01 An essay on body language and a discussion of Charlie Chaplin's acting in the GREAT DICTATOR.
- 8:1.02 **I Feel Pretty! Changing Standards of Beauty**
What makes a character beautiful? There is a Line Of Beauty that might explain the concept.
- 8:1.03 **A Face that Only a Mother Could Love?**
Facial shapes that suggest character traits, and human responses to babyish proportions.
- 8:1.04 **Gods and Monsters: Contrasting Appearance And Personality**
Why ugly is easier to portray than beauty, and what sort of research you need to do for both.

9:01 Location, Location, Location: Art Direction and Storytelling

- 9:1.01 Researching Backgrounds, Settings and Art Direction Styles to Create a world. Background detail as a key to character. Master backgrounds and basic art direction.

PART TWO

10:01 Starting Story Sketch: Compose Yourself

- 10:1.01 **Tonal Sketches.** Compositional Rules to Remember. The Four Values; using tone to set the mood and tell the story. How to set the tonal values for your scene. The Fifteen Foot Rule. Designing your Frames.
- 10:1.02 **Graphic Images Ahead!**
Graphic shorthand and longhand and floor plans.

- 10:1.03 **STRUCTURE: The Mind's Eye.**
Whose story is this? Everything depends on your point of view.

11:01 Roughing It: Basic Staging

- 11:1.01 A definition of design techniques used in storyboarding: The value of positive and negative space and how a flop might not be a failure. Don't Cross That Line!
- 11:1.02 **I'M READY FOR MY CLOSEUP: STORYBOARD CINEMATOGRAPHY**
Cartoon characters have good sides and bad sides. Your pencil is your 'camera' and you determine if the character has a bad hair—or whole body-- day.

12:01 Boarding Time: Getting With The Story Beat

- 12:1.01 **The Elephant in the Room Or: Removing the Inessentials.**
Establishing the main story beats on your first storyboards.
- 12:1.02 **Working to the Beat: Story Beats and Boards**
Establishing the framework of the story.
- 12:1.03 **Do You Want To Talk About It?** Storytelling for animation is like making a speech. Actions can occur in the time it takes you to describe them.

13:01 The Big Picture: Creating Story Sequences

- 13:1.01 A definition of story sequences and a list of storyboard terms and applications.
- 13:1.02 **Panels and Papers: A Word About Storyboard Materials Or: The difference between television and feature film boards, part Two.**
- 13:1.03 **Acting Out: Structuring Your Sequences**
An illustration of a story that uses sequential Structure.
- 13:1.04 **A-B-Sequences: Prioritizing the Action**
Why 'B' does NOT necessarily follow 'A' in animation preproduction.

13:1.05 **Arcs and Triumphs.** How a character changes and develops character over the course of the film, and if not, why he should.

13:1.06 **Naming Names.** Sequences and characters in animated films all have names for identification purposes. Learn some of the funnier ones.

14.01 Patterns in Time: Pacing Action on Rough Boards

14:1.01 Expanding and contracting time on storyboards. the use of dialogue and sound effects, and when to add that additional panel.

14:1.02 **CLIMACTIC EVENTS.**
A story can be constructed like a really good roller coaster ride, with ‘ups’ and ‘downs’ and a release at the end.

15.01 Present Tense: Creating a Performance on Storyboard

15:1.01 Some acting challenges and how one may meet them, or at least obtain a proper introduction.

15:1.02 **Working with Music.**
I’ve got a song in my heart, and in my film.

15:1.03 **Visualizing the Script**
So you thought I’d never get around to ‘scripts’? Yes, Animated film uses scripts-- sometimes cruelly...

16.01 Diamond in the Rough Model Sheet : Refining Character Designs

16:1.01 The characters may be refined, but they should never get too stiff and formal.

16:1.02 **TYING IT DOWN: Standardizing your Design**
Turn your characters upside down and construct them from the inside out.

16:1.03 **YOUR CHEATIN’ PART: Non-literal Design**
Things are not always what they seem to be. A mouse’s ears or a girl’s hair part might not turn in three dimensional spaces. All’s fair in love and animation!

17.01 Color My World: Art Direction and Storytelling

- 17:1.01 Color and its emotional effect on setting and mood.
A series of horrendous puns follows. You've been warned.
- 17:1.02 **Fishing for Complements**
Simple color analysis and color theory.
- 17.1.03 **Saturation Point: Colors and Tonal Values**
Why color is like grayscale, only more so.
- 17:1.04 **Writing the Color: Color Scripts**
The action, mood and setting changes can be indicated by changing colors.
- 17:1.05 **O Tempora, O More Or Less**
Period color and how to research illustrators and materials from different historical periods.

PART THREE

18.01 Show and Tell: Pitching Your Storyboards

- 18:1.01 Presenting your First Story Pitch
to a Critical Audience. What to Do and
(especially) What NOT to do.
Ollie Johnston's Ten Second Rule.
- 18:1.02 **The More Things Change: The Turnover Session.**
Utilizing and Accepting suggestions for change.

19.01 Talking Pictures: Assembling a Story Reel or Animatic with a Scratch Track

- 19:1.01 Definition of 'story reel' and 'animatic'.
How music is used to aid the editing.
Slugging boards and rough timing for scanning.
- 19:1.02 **This is Only a Test: Refining Story Reels**
Previewing and reviewing your story reels, and
a short discussion of Previsualization.

20.01 Build a Better Mouse: Creating Cleanup Model Sheets

- 20:1.01 Cleanups versus rough models, and why a character may
Boil and not be mad.

21.01 Maquette Simple: Modeling Characters in Three Dimensions

- 21:1.01 Daumier, the birth of Maquette sculpture, and a step-by-step guide to sculpting your own.

22.01 Am I Blue? Creating Character through Color

- 22:1.01 Color Models for Character Moods and Situations. Why the colors may change depending on the location, emotion, and story point.
- 22:1.02 **Creating Color in Context**
Why 'realistic' color is only a relative concept. Symbolic colors and symbolic body parts.
- 22:1.03 **It's a Setup: Testing your Color Models.**
Place the characters on the backgrounds to see if they get along well together.

23.01 Screen and Screen Again: Preparing for Production

- 23:1.01 Goodbye, Good Luck, and Have Fun!

24.01 Books, Discs, and Websites for Further Reference

25.01 APPENDIX: ANIMATED INTERVIEWS

- 25:1.01 **DISCUSSION with A. Kendall O'Connor, art director, layout man, and storyboard artist.**
- 25:1.02 **CARICATURE DISCUSSION with T. Hee, caricaturist, story man, and director.**
- 25:1.03 **INTERVIEW with Ken Anderson, art director and development artist.**

26.01 GLOSSARY OF ANIMATION PREPRODUCTION TERMS