

Animated Realism

A Behind-the-Scenes Look
at the
Animated Documentary Genre

Judith Kriger



Animated Realism

This page intentionally left blank

Animated Realism

A Behind The Scenes Look at
the Animated Documentary Genre

Judith Kriger



ELSEVIER

AMSTERDAM • BOSTON • HEIDELBERG • LONDON • NEW YORK • OXFORD
PARIS • SAN DIEGO • SAN FRANCISCO • SINGAPORE • SYDNEY • TOKYO

Focal Press is an imprint of Elsevier



Focal Press is an imprint of Elsevier
225 Wyman Street, Waltham, MA 02451, USA
The Boulevard, Langford Lane, Kidlington, Oxford, OX5 1GB, UK

© 2012 Elsevier Inc. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publisher. Details on how to seek permission, further information about the Publisher's permissions policies and our arrangements with organizations such as the Copyright Clearance Center and the Copyright Licensing Agency, can be found at our website: www.elsevier.com/permissions.

This book and the individual contributions contained in it are protected under copyright by the Publisher (other than as may be noted herein).

Notices

Knowledge and best practice in this field are constantly changing. As new research and experience broaden our understanding, changes in research methods, professional practices, or medical treatment may become necessary.

Practitioners and researchers must always rely on their own experience and knowledge in evaluating and using any information, methods, compounds, or experiments described herein. In using such information or methods they should be mindful of their own safety and the safety of others, including parties for whom they have a professional responsibility.

To the fullest extent of the law, neither the Publisher nor the authors, contributors, or editors, assume any liability for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions, or ideas contained in the material herein.

Library of Congress Cataloging-in-Publication Data

Application submitted

British Library Cataloging-in-Publication Data

A catalogue record for this book is available from the British Library.

ISBN: 978-0-240-81439-1

For information on all Focal Press publications
visit our website at www.elsevierdirect.com

11 12 13 14 15 5 4 3 2 1

Printed in the United States of America

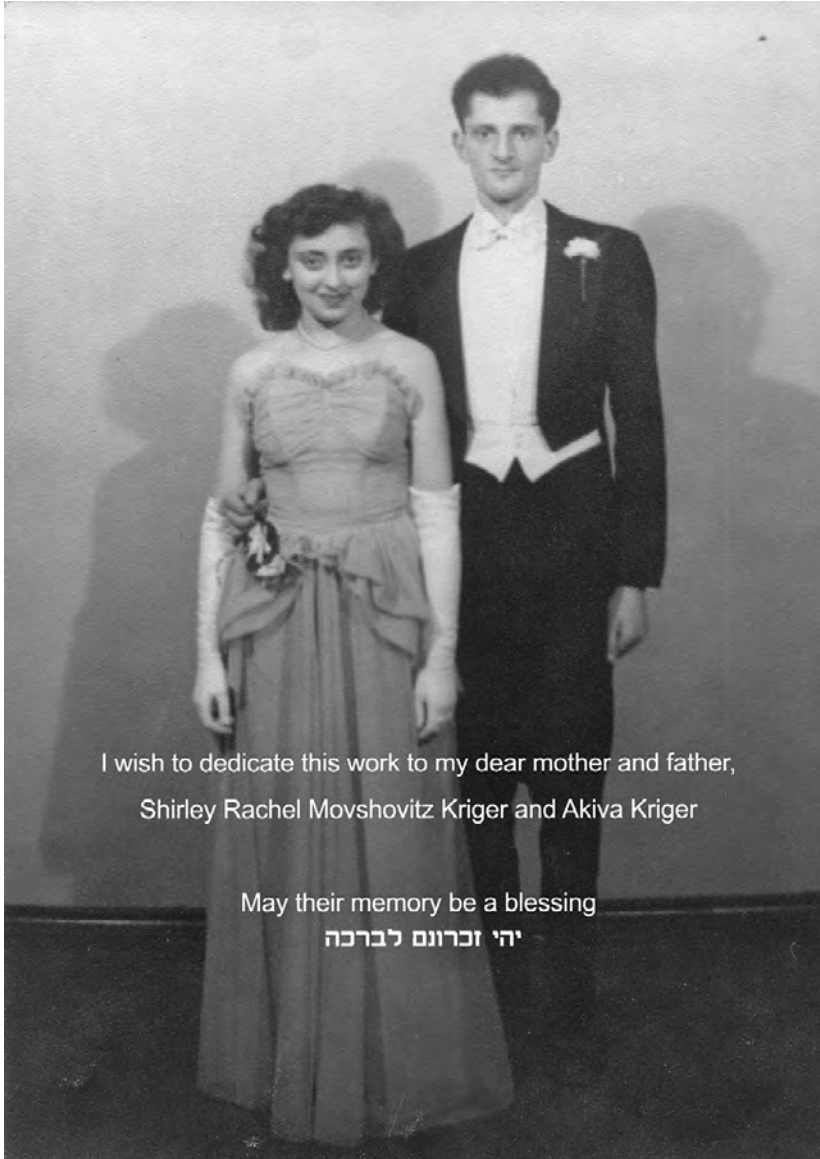
Working together to grow
libraries in developing countries

www.elsevier.com | www.bookaid.org | www.sabre.org

ELSEVIER

BOOK AID
International

Sabre Foundation



I wish to dedicate this work to my dear mother and father,
Shirley Rachel Movshovitz Kriger and Akiva Kriger

May their memory be a blessing
יהי זכרוֹנֵם לְבִרְכָה

This page intentionally left blank

Contents

Acknowledgements	ix
Contributors	xi
Introduction	xiii
Chapter 1: Finding Pleasure in the Imperfection: Yoni Goodman	1
Chapter 2: The Halfway Point to Reality: Bob Sabiston.....	17
Chapter 3: Personal Documentaries: John Canemaker	41
Chapter 4: French Canada’s Rising Star: Marie-Josée Saint-Pierre	75
Chapter 5: Documentary Filmmaking with an Animator’s Sensibility: Dennis Tupicoff.....	117
Chapter 6: Making Ordinary Human Experience Extraordinary: Chris Landreth	133
Chapter 7: The Iconoclastic Animator: Paul Fierlinger	163
Index.....	203

This page intentionally left blank

Acknowledgements

To those who have assisted me in the development of this book, I hope to acknowledge here the gratitude I feel:

To the *Animated Realism* team at Focal Press, and especially to my editor, Katy Spencer, thank you for saying “Yes!” and believing in me. To Tom White, my technical editor, thank you for your insightful comments, suggestions, and honest feedback.

Thank you to my colleagues—Gil Bettman, for sitting me down and encouraging me to develop and pitch the book idea, and Jeff Swimmer, for your infectious enthusiasm for documentary filmmaking.

Thank you to Michael Grusd, Naomi Hirsch, Diane Saltzberg, and especially to Dr. Allison Weiss for your encouragement. I would also like to thank Linda Charyk Rosenfeld and David Kriger for reviewing the manuscript and offering supportive feedback.

Thanks to the directors who inspired me to write this book and who gave generously of their time, experience, and works of art: John Canemaker, Paul Fierlinger, Yoni Goodman, Chris Landreth, Bob Sabiston, Marie-Josée Saint-Pierre, and Dennis Tropicoff. It’s been an honor and a pleasure getting to know each of you.

And finally, I’d like to give a special thanks to my students in the Digital Arts Department at the Dodge College of Film and Media Arts at Chapman University for asking good questions and reminding me that learning is a lifelong journey.

This page intentionally left blank

Contributors

John Canemaker - An Academy Award-winning independent animator, animation historian, teacher, and author, John Canemaker has screened his work to great acclaim at film festivals, museums, and universities around the world. Canemaker is a full professor and director of the Animation Program at New York University Tisch School of the Arts. In 2009 he received the NYU Distinguished Teaching Award for “exceptional teaching, inside and outside the classroom.” Canemaker won a 2005 Oscar and an Emmy Award for his 28-minute animated short *The Moon and the Son: An Imagined Conversation*. A distinguished author of 10 titles, his latest book is *Two Guys Named Joe: Disney’s Master Animation Storytellers Joe Grant and Joe Ranft*, published by Disney Editions.

Paul Fierlinger - Paul formed AR&T Associates, Inc., his own animation house, in 1971, initially to produce animated segments for ABC’s *Harry Reasoner Specials* and PBS’s *Sesame Street*, including *Sesame Street’s* popular *Teeny Little Super Guy* series, which runs to this day. Since 1971, AR&T has produced over 700 films, several hundred of which are television commercials. Many of these films have received considerable recognition, including an Academy Award nomination for *It’s so Nice to Have a Wolf Around the House*. Other awards include Cine Golden Eagles, and Best in Category Awards at festivals in New York, Chicago, Los Angeles, Annecy, Ottawa, Zagreb, Milan, Melbourne, Prague, London, and many other cities and countries - well over a hundred major film festival awards all together.

Yoni Goodman - Born in 1976, Yoni Goodman began his career as an illustrator and designer for *Maariv* and *Haaretz*, two major Israeli newspapers. While studying in the Department of Visual Communication at the Bezalel Academy of Art and Design in Jerusalem, Goodman fell in love with animation and hasn’t stopped making it since. Yoni was the Director of Animation for *Waltz with Bashir* (2008) and developed the Adobe Flash cut-out animation technique needed to create this feature.

Chris Landreth received an MS degree in theoretical and applied mechanics from the University of Illinois in 1986. For three subsequent years, he worked in experimental research in fluid mechanics at the University of Illinois with his advisor, Ronald J. Adrian. Landreth was responsible for developing a fluid measurement technique known as Particle Image Velocimetry (PIV), which has since become a fundamental way of measuring fluid flow. He received two patents for his work on PIV during his time at the University of Illinois. In 1989, Landreth studied computer animation under Donna Cox, at the National Center for Supercomputing Applications (NCSA). It was at this point that he created his first short film, *The Listener* (1991), a film that won him

notoriety by being shown on MTV's Liquid Television the following year. In 1994, Landreth joined Alias Inc. (now Autodesk Inc.) as an in-house artist. It was his job to define and test animation software before it was released to the public. His work was one of the driving forces in developing Maya 1.0, in 1998. Today Maya is the most widely used animation and VFX software package in production, and Alias subsequently was given an Academy Award for this in 2003.

Bob Sabiston - Bob Sabiston and his company, Flat Black Films, have been making innovative animation since 1987. His student films from the MIT Media Lab, Grinning Evil Death and God's Little Monkey, were some of the first films to combine 2D and 3D computer animation. Sabiston's own films, including Roadhead, Snack and Drink, and Grasshopper, have been influential in the burgeoning field of animated documentary.

Marie-Josée Saint-Pierre - Born in Murdochville, Quebec, Marie-Josée Saint-Pierre is a French Canadian filmmaker based in Montreal, Canada. Saint-Pierre obtained a BFA Honors in film animation and an MFA in film production from the Mel Hoppenheim School of Cinema at Concordia University. The award-winning director and film animator has directed several short animated and documentary films, including Post-Partum, an exploration of abandonment and postpartum depression; Passages, an autobiographical story about the birth of the filmmaker's first child; The Sapporo Project, a unique animated glimpse into the world of acclaimed Japanese calligrapher Gazanbou Higuchi; and McLaren's Negatives. Marie-Josée Saint-Pierre founded MJSTP Films Inc., an animation and documentary production company, in 2004. Her film work has been screened at over 150 prestigious festivals around the world while receiving many awards.

Dennis Tupicoff - Dennis Tupicoff was born in 1951 and graduated from Queensland University in 1970, later completing the Swinburne Film and TV School animation course in 1977. After working as a writer/ director/producer of his own films as well as TV commercials and other commercial and sponsored work, he was appointed Lecturer in Animation at the Victoria College of the Arts School of Television (1992–1994). Since then he has continued making independent films as writer, director, producer, and often designer/animator.

Introduction

One of the most magical and memorable experiences of my professional animation career was having the honor of meeting Steven Spielberg. I was living in the San Francisco Bay Area and working as an animator on feature animation, visual effects, and commercials. DreamWorks had recently purchased the studio I was working for, and Spielberg flew up for the day from Los Angeles to meet his new staff in Palo Alto. Although there were hundreds of us, he patiently took the time to meet us individually. In addition to briefly introducing myself to Steven Spielberg and shaking his hand, what I remember most about that remarkable day is what he said to us about animation. He talked about how in directing live-action films, often the best part of an actor's performance are the "mistakes" that are made. For example, sometimes during the middle of a take, the actor will sneeze or trip over something, causing an otherwise unscripted motion in his or her performance that adds to the believability of the scene. Spielberg went on to talk about how he wished animated films had more "mistakes," as they're often too perfect, which takes away from the enjoyment of the film. This is the memory of him that has vividly remained with me, all these years.

The term *animation* means many things to many people. Animated films can entertain or educate, or they can be a form of artistic self-expression. Whether created in the form of a personal, auteur-style short, a big-budget Hollywood blockbuster, or an educational app for the constantly changing array of handheld gizmos, in today's media-driven world animated content is more popular and powerful than ever.

Documentary films are captivating because of their strong and engaging factual stories. Whether in the form of journalism or self-expression, nonfiction films can be both educational and entertaining. Does shooting live footage of a particular subject make the film any more truthful than drawing the subject matter? Animation is not usually associated with documentary filmmaking, yet the directors profiled in *Animated Realism* are exemplars of this hybrid form of expression by telling unforgettable stories using iconic imagery. This book was written because it's important for directors and students of both the animated and documentary forms to understand how these forms of storytelling can be combined together in uniquely powerful and imaginative ways.

As Pulitzer-Prize-winning author Willa Cather wrote in her novel *O Pioneers!*, "There are only two or three human stories, and they go on repeating themselves as fiercely as if they had never happened before." We learn about ourselves and others by connecting through storytelling. Mythologist Joseph Campbell identified universal patterns that are used quite extensively in

storytelling, including stories told through the language of film. These patterns of archetypal characters appear in movies like the *Star Wars* series and *The Lord of the Rings* trilogy and help to explain the almost religious devotion that audiences worldwide demonstrate for these films.

Although it may be true that there are only two or three human stories, the ways in which these stories are created and circulated are constantly being reinvented. Distributing one's films outside of the studio system has never been easier or cheaper. Gone are the days of being required to shoot on film, wait for the lab to process the negative and print, rent a flatbed for editing at a per-hour rate, and only be able to view the finished film with a projector and screen. Today's independent animation, visual-effects-driven, and live-action films are made with accessible, high-end digital software and smaller, more portable than ever digital cameras, edited on laptops, and viewed on a wide-ranging, ever-evolving variety of gadgets. The ability to self-distribute and promote one's own artistic work has dramatically benefited from the Internet and ever-changing social media outlets. Web 2.0 allows creative artists to get their work "out there" and begin marketing their talent and demo reels to a worldwide audience within minutes, rather than weeks or years. Word-of-mouth spreads instantaneously and globally in the digital age.

But the ability to harness technology isn't the only characteristic necessary to create engaging stories with content. Telling factual stories in creative ways challenges the movie-going audience to listen and watch more closely. The fusion of nonfiction filmmaking with animation has greatly enhanced the world of documentary filmmaking and challenges us to confront our expectations and preconceived definitions about what both documentary and animated filmmaking are. Mixing in a medium that is typically used to tell fictional stories with documentaries causes the negative space, the imperfect space "between" the two genres to be all the more powerful. Not only visually stimulating, animation gives the genre of animated documentary a fresh, dynamic approach to storytelling. Directors of animated documentaries are breaking new ground and attracting audiences to their work because they are telling their stories in inventive ways and pushing the medium forward.

Though small amounts of animation have appeared before in a variety of documentary films, *Animated Realism* explores the work of pioneering directors who have thoughtfully crafted their entire nonfiction films in the animated form. In the 2008 Oscar-nominated *Waltz with Bashir*, animation director Yoni Goodman pushes readily available turnkey software in new ways and creates extraordinary, iconic imagery of repressed wartime memories. Bob Sabiston's pioneering software and influential look development have brought rotoscoping into the 21st century and produced the memorable animation styles of *Waking Life* and *A Scanner Darkly*. *The Moon and the Son: An Imagined Conversation* is director John Canemaker's 2005

Oscar-winning personal documentary, which uses the intimacy of hand-drawn animation to ask difficult and often painful questions of his father. Animator and director Marie-Josée Saint-Pierre's films courageously bring women's issues to the fore and use the animated documentary form to creatively portray Canadian filmmaking luminaries Norman McLaren and Claude Jutra. Dennis Tupicoff's background in animation and his wry sense of humor inform his award-winning animated documentary style. In *Ryan*, director Chris Landreth uses CG animation to create his 2004 Oscar-winning animated documentary film portrayal of well-known animator Ryan Larkin. Director and animator Paul Fierlinger has a renowned career in the animated documentary genre; he and his wife Sandra Fierlinger direct, animate, and distribute their beautifully hand-drawn feature-length films. The work of these directors shows the successful integration of animation with documentary and inspires artists and filmmakers alike to create original and compelling work.

Will the film be liked? Does it have the potential of reaching a broad audience? There will always be unknowns that the director must learn to live with, accept, and ultimately incorporate into the creative process. The contrast between the use of imperfect, shaky lines or non-"traditional" 3D computer graphics in animated docs and their intensely personal stories is what helps make the animated documentary so fascinating and compelling to watch. The joyful, visual imperfection in this mashed up filmmaking hybrid is precisely what reminds us that these are very real, very human stories. Spielberg, in his desire for imperfection in animation, had it right after all.

I find it interesting that my final manuscript is due on what would have been my father's 87th birthday. He passed away on March 5, 2011, after a hard-fought battle with brain cancer—before the completion of this book, though knowing it would be dedicated to him. My father was a gentle soul, a thoughtful and very intelligent man who worked as a civil engineer and had a keen understanding of math and science. But he also loved the arts. I have very fond childhood memories of sitting down to watch *Bugs Bunny* cartoons with my father, my late sister Diane, and my brother David. We all enjoyed these times and laughed together, and I think this experience, to a certain degree, influenced my desire to become an animator. My father paid for my first drawing lessons at the Ottawa School of Art, my first real training as an artist when I was a teenager, and later as a college student, he encouraged me to get summer jobs with Atkinson Film Arts, an animation studio that created Christmas specials and half-hour TV shows. He was thrilled when I was accepted into RISD, the Rhode Island School of Design, one of the top art and design colleges in the United States.

My father had an amazing knowledge of classical music and composers, and he met my mother in a classical music club while they were going to university. Though she passed away during my childhood, I have very strong memories of her and my uncle taking me to the movie theater to see

The Jungle Book. I learned early in my life that my mother appreciated the arts; she enjoyed playing Masterpiece, a Monopoly-type of board game for artists that entailed buying and selling famous works of art. My mother collected framed Renoir prints from the Metropolitan Museum of Art, and both she and my father appreciated a particular Renoir still life called *Onions*, which is still on display at the Clark Art Institute in Williamstown, MA.

Long before cloud computing and iPods, working with computer technology entailed having to use computer keypunch cards, something my mother was just beginning to learn before she died. I now realize that her interest in art and technology has been carried forward in me; my love of art and animation and obsession with computer software and hardware are passions that have guided and inspired me for decades. I am very much my mother's daughter.

For my dear parents, Shirley and Akiva Kriger, who would have been so proud.

May their memory be a blessing.

Los Angeles, CA

July 29, 2011



Finding Pleasure in the Imperfection: Yoni Goodman

There's No School Like the Old School

Documentary films date back many decades. John Grierson, a Scottish documentary filmmaker born in 1898 and considered the father of documentary filmmaking, defined documentary as “the creative treatment of actuality.” While studying in the United States, Grierson concentrated his research on the psychology of propaganda, focusing on how public opinion is formed and influenced by mass media, film, and the press. What a field day Grierson would have had today, with the explosion of reality TV shows, social media networking, the Internet, and 24-hour cable news networks.



FIG 1.1 Yoni Goodman.

Grierson was effectual in developing documentary cinema in both Britain and Canada but clearly didn't hold the Hollywood entertainment industry in the highest regard. In his 1932 essay, "First Principles of Documentary," Grierson felt that Hollywood movies didn't care to show the real world and instead focused on fictional, "artificial" stories. How would he have felt about using animation to tell nonfiction stories? Would the use of digital or hand-drawn "artificial backgrounds" take away from the realism Grierson sought, or would current trends in fusing animation with documentary work believably as "creative treatments of actuality"?

Comic strip artist and animator Winsor McCay's *The Sinking of the Lusitania*, copyrighted in 1918, was an animated film depicting the real-life torpedoing of the English Cunard liner Lusitania by a German submarine off the coast of Ireland and can be considered a precursor to today's animated documentaries. Max Fleischer began working in animation in 1915 and also got his start as a newspaper cartoonist. Together with his brother Dave, they patented the process known as Rotoscope in 1917. Their invention allowed the artist to draw frame-by-frame over live-action footage and is very much responsible for the look development of many of today's animated documentaries. Fleischer Studios created such memorable characters as Betty Boop and the star of the *Out of the Inkwell* series, KoKo the Clown.

The inventive influences of McCay and the Fleischer brothers have been carried forward to modern times in the pioneering feature documentary "Waltz With Bashir". Animation Director Yoni Goodman used a 2D, hand-drawn look to help tell Director Ari Folman's unforgettable story.

Biography

Born in 1976, Yoni Goodman began his career as an illustrator and designer for *Maariv* and *Haaretz*, two major Israeli newspapers. While studying in the Department of Visual Communication at the Bezalel Academy of Art and Design in Jerusalem, Goodman fell in love with animation and hasn't stopped making it since.

After graduating in 2002, he worked as a freelance animator and illustrator for numerous TV shows and commercials. In 2004, Goodman worked as Director of Animation for Ari Folman's documentary series, *The Material That Love Is Made Of*, creating three five-minute animated shorts that were used in the series. Goodman's successful connection with Ari Folman led to their next collaboration, *Waltz with Bashir* (2008). Goodman was Director of Animation and developed the Adobe Flash cut-out animation technique needed to create this feature.

Goodman has taught animation in the Bezalel Academy of Arts and Design and lives in Israel with his wife Gaya and their children Anat, Itamar, and Noa. He claims to suffer from a mild addiction to chocolate and coffee, which he says he can quit anytime he wants.



FIG 1.2

Printed with Permission, ©Bridgit Folman Films Gang LTD. 2009.

Interview

Judith Kriger: *How did you first get involved with animation?*

Yoni Goodman: After my military service, I started working at a newspaper. Afterwards, I went to an art school called Bezalel when I heard they had an animation course there.

JK: *Can you describe what the program is like at Bezalel?*

YG: When I was there, I studied in visual communications, which meant I was involved with graphic design, illustration. At that time [around 2000], animation was more of a specialized course, not a major. Nowadays, animation at Bezalel is a very developed, structured department, and has won a few prizes. Up until two years ago, I taught Flash, animation, and mentored some of the senior projects there. I had to give up teaching, though, because it became a bit too much with all my other [commercial and feature] jobs.

JK: *Who or what influences you?*

YG: A lot of things. All sorts of animation. Early Disney work, Milt Kahl's work, stuff like that. For the next feature, we're researching the Fleischer Studios' work. This is probably my favorite animation studio. The art in our next feature is going to be loosely based on the Fleischer cartoons—the "old school" style. They did some amazing stuff in their early cartoons.

JK: *What attracts you to their work?*

YG: It's interesting because at that point in time, Disney and Fleischer Studios were pretty much equal. Disney, of course, made *Steamboat Willie*, and then they went on to make *Snow White*, and Fleischer Studios eventually collapsed. They made some really wild, crazy animation. It's interesting—the period when those two studios were at their highest—I think about what animation might have looked like today if the Fleischers had won the "fight," so to speak. Disney always went for the very emotional cartoons, and the Fleischer cartoons were really hard-core, crazy.

JK: *That is an interesting thought; think about how different Pixar would have been today if that had happened.*

YG: That's the ironic thing about Pixar, actually, because they are "dropouts" from Disney. Disney said, "we don't want you; you're too wild and crazy," and now John Lasseter controls all the creative aspects of Disney. I'm sure he's laughing about it constantly, because you know—they kicked him out. He showed them!

JK: *He sure has!*

YG: I'm not overly fond of the later Disney work; I like their earlier stuff. Maybe it's because I'm now trying to get back to the core of animation, get back to where it all began. I'm really studying the early days of animation; all the Winsor McCay work. There's some amazing stuff there. That's the difference—in early animation, you can see that the animators were exploring. For example, it's the difference between *The Jungle Book* and *The Jungle Book 2*. *Jungle Book*, for me, is one of the top five animated films ever. When you look at it closely, you see tons of "mistakes"—not truly

mistakes, but what I mean is that you can see that some of the characters are not drawn perfectly anatomically correct, and you can see the roughness of the line. You can also sometimes see the brushstrokes in the backgrounds, and it's real magic. In *Jungle Book 2*, everything is so perfect . . . and so boring! I'm not saying that to criticize Disney animators, because they're amazing craftsmen—it's just that it's a little too "perfect." I find pleasure in the imperfection, and that's exactly what I see in the early cartoons.

JK: *Yes, it's similar to watching, for example, Aardman Studios' work and noticing fingerprints in the clay. This is one of the things that attracted to me to Waltz with Bashir: the story is very personal and so intense, and you've made it look like it's hand-drawn, and you see the imperfection in the line. You can therefore see the human being behind the "camera"—this, to me, is one of the reasons why it works so well.*

YG: I'm very pleased with the way the animation turned out. It was like a solution to a problem. It is actually very technical, because we used Flash to make it look like cut-out animation. Doing the animation on *Bashir* was like solving a riddle.

JK: *What are some of the other movies in your Top 5 list?*

YG: One of my biggest influences was Joanna Quinn's *Britannia*. It's amazing—I saw it as a kid—it was one of those things when you say, I want to do that for a living! It has the look of rough pencil, and everything is very alive. Another movie that really influenced me is *When The Wind Blows*, made in the 1980s. The story describes an elderly couple who experience a nuclear holocaust—but they don't get the blast, they get the radiation. For 90 minutes, you watch them dying in front of you. This movie really showed me the power of animation. I saw this movie as a kid, and I think it actually affected me more than I knew at the time. You can see drawn human figures and really relate to them; you can really feel them. It's a sad, melancholic movie, but it also has its high points and definitely is worth seeing.

Also on my list . . . *The Incredibles*. I'm a big Brad Bird fan. I like all the Pixar movies—except *Cars*. This was also a big lesson for us on *Bashir*: it's not about the animation; it's about arriving at the story. It's about making things fit for the story and not making the story fit for the roller-coaster ride. This is one of the main problems with 90% of the CG movies. In almost every CG movie they have these crazy camera movements and everything moves. Pixar's movies, on the other hand, hardly ever do that. They focus on the story, and if there's a roller-coaster scene, it serves the story. In general, CG bores me a bit.

JK: *What about it bores you?*

YG: Of all the forms of animation, I think CG is the toughest—except, maybe, clay animation. Clay animation is hard because it's very physical and you can make tons of mistakes. You move your elbow the wrong way and your whole

day is ruined. But clay has the magic of being of an organic nature, and that goes a long way. But CG is like a blank page, and you have to fill it with everything. Animation is all about fooling the eye—making the eye see what's not really there. Nothing about it is real, but you make the eye think it's real. In traditional animation it's really easy, because the eye is really easily fooled. As an extreme example, *South Park*, which is really rough, works—the eye is fooled because it accepts the “rules” of that world. It takes a few seconds, but then you accept it for its visual simplicity and focus on the story. They intentionally make it look simple and mechanical so that the story will come through.

On the other extreme . . . is CG. You model something in CG and it has a mass; the eye picks up the mass. The more you give the eye, the more it demands. This is why I think realistic CG animation will never work. I see all these technological advances, but when you try to get close to reality, that's when the eye starts to pick up the small details, and it ruins the illusion. In CG productions, in order to achieve a level of believability, you need to have the budget of a major studio like Pixar, Blue Sky, DreamWorks. They are able to get you interested, and you don't look at the characters just as modeled polygons. The reason is they have tons of money and tons of people working on these; they have budgets of 100 million dollars per feature. I think only about 10% of the potential of CG has been properly explored. Every studio, every animation student wants to be the next Pixar. I recently had an interview with a few guys in Madrid who said: “We're going to be the next Pixar!” How? You have a budget of 2 million dollars—how will you beat Pixar?



FIG 1.3

Printed with Permission, ©Bridgit Folman Films Gang LTD. 2009.