

A MANUAL OF METHODS, PRINCIPLES AND FORMULAS

FOR CLASSICAL, COMPUTER, GAMES, STOP MOTION AND INTERNET ANIMATORS

To Imogen,

my co-conspirator and wife, without whom this book would certainly
not exist – and the author might not be around to write it.

I want this book to put over what I have found to be the best working methods, so that animating becomes better and easier to do.

There are lots of formulas, principles, clichés and devices here to help, but the main thing I want to pass on is a way of thinking about animation in order to free the mind to do the best work possible.

I learned it from the best in the business and I've boiled it all down into a systematic working order. It transformed my work – I hope it will be useful to you.



A commercial I did based on a Frank Frazetta poster.

CONTENTS

1	WHY THIS BOOK?
11	DRAWING IN TIME
23	TIME TO DRAW
35	IT'S ALL IN THE TIMING AND THE SPACING
41	LESSON 1
46	ADVANCING BACKWARDS TO 1940
47	History of the Chart and Inbetween
48	Extremes and Breakdowns
57	Keys
61	Three Ways to Animate
68	Testing, Testing, Testing
70	The X-Sheet
75	Came the Dawn . . .
76	The Best Numbering System
78	The Great Ones and Twos Battle
80	The Top and Bottom Pegs Battle

84	MORE ON SPACING
88	Classic Inbetween Mistakes
90	Watch Your Arcs
92	Getting More Movement Within the Mass
96	The Elongated Inbetween
99	The Major Beginner's Mistake
99	The 'Ruff' Approach
101	How Much Do We Leave To The Assistant?
101	Take The Long Short Cut
102	WALKS
106	Getting the Weight
109	Set the Tempo
111	The Passing Position or Breakdown
115	Two Ways to Plan a Walk
118	The Double Bounce
120	Loosening it Up
128	Digging Deeper into Walks
135	There's Nothing Like Trying It
136	The Heel
136	Foot Action
142	Normal Walk Spacing
146	Weight Shift
147	The Belt Line
148	Arm Movements
156	Counteraction
163	The Recipe
167	Sneaks
173	The Tip Toe Sneak
176	RUNS, JUMPS AND SKIPS
189	The 4 Drawing Formula Run
192	The 3 Drawing Run
195	The 2 Drawing Run
200	The Recipe
201	Run, Jump, Skip and Leap
209	Skips
212	Jumps
213	Weight on a Jump

217	FLEXIBILITY
218	The Breakdown
223	Simple Overlap
226	Overlapping Action
230	Simple Counteraction
231	Breaking Joints to Give Flexibility
246	Flexibility in the Face
249	Overlapping Action in the Face
251	Instant Read – Profiles for Readability
256	WEIGHT
262	Pressure and Weight
264	How Much Effort Do We Have To Expend?
269	Dancing
272	Rules of Thumb On Synchronising Action
273	ANTICIPATION
282	Surprise Anticipations
283	Invisible Anticipations
285	TAKES AND ACCENTS
295	A Hard Accent Bounces Back
295	A Soft Accent continues
297	TIMING, STAGGERS, WAVE AND WHIP
297	Stagger Timings
299	The Side to Side Vibration Formula
301	Whip Action
301	Wave Action
304	DIALOGUE
305	Phrasing
310	Picture and Sound Sync
311	Accents
314	Attitude
314	The Secret
315	ACTING
320	Change of Expression
321	Look for the Contrast
323	An Acting Point

324	Body Language
324	Symmetry or 'Twinning'
325	Steal It!
325	Eyes
327	ANIMAL ACTION
328	Live Action Reference
330	Basic Animal Walk Pattern
333	DIRECTING
334	The Brief
334	The Leica Reel
334	Separate the Characters
335	Best Foot Forward
335	Casting Animators
335	Making Changes
335	'Say! Say!'
335	Voice Recording
335	Hook Ups
335	Research
335	Editing
335	Believe in Your Material
338	REVIEW
338	The Procedure
339	The Ingredients
342	Acknowledgements

Roger Rabbit © Touchstone Pictures and Amblin Entertainment, Inc.
 Used by permission from Touchstone Pictures and Amblin Entertainment.

