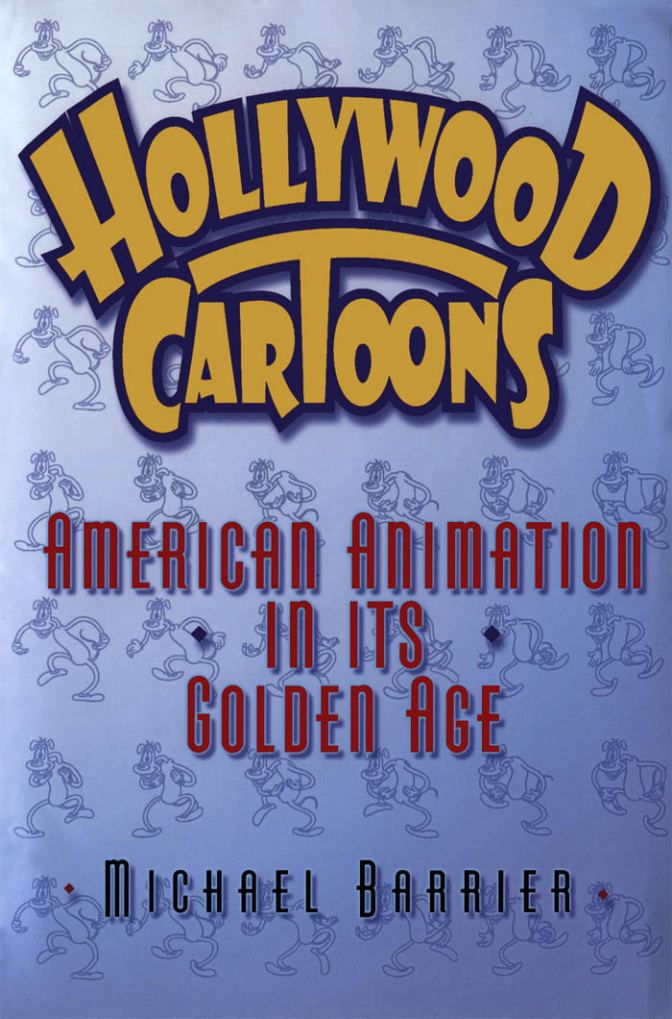
HOLLYWOOD CARTOONS
AMERICAN ANIMATION IN ITS GOLDEN AGE
MICHAEL BARRIER

Hollywood Cartoons

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American Animation in Its Golden Age

Michael Barrier

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To Phyllis

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Contents

Preface, ix
Acknowledgments, xv
About the "Flip Books," xix

Introduction, 3
PART I: Cartoon Acting, 7
1 Beginnings, 1911-1930, 9
"Flip Book": Rubber-hose Animation, 61
2 Disney, 1930-1933, 63
3 Disney, 1933-1936, 109
4 Disney's Rivals, 1928-1937, 153
5 Disney, 1936-1938, 193
6 Disney, 1938-1941, 235
"Flip Book": Stretch and Squash, 257
7 Declines and Falls, 1937-1942, 287

PART II: Cartoon Reality, 321
8 Warner Bros., 1933-1940, 323
9 The Disney Diaspora, 1942-1950, 367
10. MGM, 1939-1952, 403
11 Warner Bros., 1941-1945, 433
"Flip Book": Smear Animation, 437
12 Warner Bros., 1945-1953, 467
13 UPA, 1944-1952, 501
14 The Iris Closes, 1952-1966, 533

Afterword, 569
Notes, 575
Index, 627

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Preface

This is a book about American studio animation in its "golden age"—the cartoons, most of them only seven or eight minutes long, that were commonly part of theater programs in the thirties, forties, and fifties. When I was a child in the late forties and early fifties, I usually saw such a film once a week as part of a Saturday matinee at a neighborhood theater. On rare occasions, short cartoons might make up a whole matinee, and—great event—every year or two my parents took me in the evening to a new Walt Disney animated feature. I knew many cartoon characters only from their comic-book appearances, and it was in comic books that even so familiar a character as Bugs Bunny seemed most "real" because I saw him there so much more often.

Today it is a rare American child who is not exposed to thousands of hours of cartoons—including many made fifty and sixty years ago—before reaching puberty. Millions of Americans know cartoon characters and even individual cartoons from the golden age in a way that was all but impossible in the days before television. That latter-day intimacy has been a mixed blessing. Television, while making cartoons more accessible, has made them seem more a children's medium than ever before, by presenting them at times and in formats best suited to children's viewing. Cartoons have always been popular with children, but so were the great silent comedians; just as Charlie Chaplin could not be dismissed as a children's entertainer, neither could the Walt

Disney of the thirties be patronized as a children's filmmaker. It was adult admissions that lifted *Three Little Pigs* and *Snow White and the Seven Dwarfs* to enormous success, and it was adult audiences, and especially men in uniform, who responded enthusiastically to the Warner Bros. and MGM cartoons a few years later.

The greatest pleasures to be found in the best Hollywood cartoons are far more accessible to adults than to children. What I've tried to do in this book is identify those pleasures and go some distance toward explaining them, the latter a task that requires above all describing how the people who made the cartoons worked together. The Hollywood cartoons, like many another industrial product, were made by specialized workers in organized settings, but specialization at the animation studios often encouraged not assembly-line rigidity but a pooling of strengths. The rigorous schedule was not a prison but a school; lessons learned in one film could be applied immediately in another. The Hollywood cartoon at its best was a wonderful collaborative medium, and I write in this book about the nature of that collaboration, as well as its fruits.

Most of the time, of course, the Hollywood cartoon was not at its best. What makes the whole of the Hollywood cartoon's history, and not just the best of the films, worthy of attention? One answer, as always in such cases, is that the ideas at work in the best films shaped many lesser efforts, too. Devoting some time to the successful films' context—that is, to the relative failures—can yield greater understanding of those successes. What makes the whole body of the Hollywood cartoons most appealing to me as a subject, though, is the nature of the ideas that governed so many cartoons, strong ones and weak ones alike.

Consider, for example, the violent comedy that was characteristic of the Warner Bros. cartoons in the forties and fifties. Consider specifically a run-of-the-mill Bugs Bunny cartoon called *Southern Fried Rabbit* (1953), directed by Friz Freleng. Bugs has taken refuge inside a hollow tree, and his recurring adversary Yosemite Sam (a Confederate soldier this time) vows to blast him. Sam lights a bomb, but Bugs pops his head out of the tree long enough to blow the fuse out. Sam moves away from the tree and lights the fuse again, but a tube emerges from the tree and extends to the bomb, and Bugs uses the tube to extinguish the fuse again. Sam moves even further away from the tree and lights the fuse yet again, but this time, the bomb blows up as he rushes back toward the tree with it.

A real actor in the same situation in a live-action film would have to appear to be hurt or else the film would proclaim itself a fraud, but in the cartoon, because pain and injury have been made plausibly absent, comedy can go where human physical limitations prevented it from going before. Sam is not hurt, only a little singed—and, especially, foot-stamping mad. The world of such cartoons is one in which anger, greed, and even murderous impulses do not lead to suffering and death for the innocent, as they so often do in our own world, but to mild discomfort and temporary inconvenience for the wicked. It is a world where one could quite reasonably wish to spend more than seven minutes at a time.

Because the Hollywood cartoons were popular, there were lots of them—several thousand sound cartoons were released between 1928 and 1966, my cutoff date—and most of them have survived. I've tried in conducting research for this book to see the bulk of each studio's output, a strategy that has become much easier to implement in recent years thanks to the release of many hundreds of cartoons on videtotape and laserdisc, usually in their original form or something very close to it. Other cartoons remain accessible only in archives or private collections, but even the black-and-white cartoons released in the thirties are finding their way onto videotape.

During work on this book I was able to see almost all the short sound cartoons produced for theatrical release by the Disney, Harman-Ising, Schlesinger, Warner Bros., MGM, UPA, and Iwerks studios. I also watched a very high percentage of the Fleischer, Lantz, Terrytoons, Columbia, Famous Studios, and Van Beuren cartoons released between 1930 and 1950, as well as a substantial number of the later releases from the Lantz, Famous, and Terrytoons studios. I watched hundreds of silent cartoons as well, and many peripheral films like those made for the military during World War II. My general statements are based on actually seeing thousands of films, rather than extrapolating from a small sample.

My documentary sources are reflected in the endnotes. The Walt Disney Archives in Burbank is the central resource of this kind; no other film studio has done nearly so good a job of preserving its history. Even though large parts of the Disney studio's

records are not available to most researchers because of their continuing legal significance or their continuing use in production, what is available is overwhelming in its abundance.

Interviews are the most problematic area in film research. Memories can fail, and an interview may serve as a vehicle for rehabilitating a reputation or settling an old score. There is another hazard associated with interviewing people who work in a collaborative medium, and that is that they will be like the blind men describing the elephant—each mistaking a part for the whole, each mistaking the significance of what he did and saw and heard.

Such hazards are not an argument against interviews, though—much of animation's history has simply not been accessible in any other way—but rather an argument for conducting as many of them as possible, as thoroughly as possible; and that is what I have tried to do, with the invaluable assistance of the animator Milton Gray. Not only did Gray and I interview more than two hundred people, some of them repeatedly, but we measured their memories against one another's and against the films and all the other evidence. That interviewing began in 1969, and most of it took place in the seventies, when relatively little had been published about Hollywood animation; most of the people that Gray and I interviewed were clearly relying on their own memories. It's possible, through that sort of interviewing, to be reasonably certain about the accuracy of both particular statements and an interviewee's memories in general. For example, the late Wilfred Jackson emerged as an exceptionally reliable source on the Disney studio in the early thirties, a critically important period that is not well documented. The late Richard Huemer was a comparably reliable guide to the silent period.

My standard procedure was to make a transcript, or in some cases summary notes, of each interview and to give the interviewee the opportunity to revise that transcript; usually, but not always, the interviewee took that opportunity. (A few people died before an interview was transcribed or before they returned a transcript.) I have quoted from the revised transcript whenever there is one. Inevitably, in some cases interviewees excised "good stuff"—most often, colorful comments about former co-workers—but I found that the gains in accuracy, and in openness during the interview itself, far outweighed that cost. I have quoted deleted remarks in a very few instances, when the interviewees deleted those remarks only so that they would not bruise a former col-

league's feelings and all the parties involved have since died.

Although a few people who worked on the Hollywood cartoons have published memoirs in recent years, I have chosen to rely on those books as little as possible. Often, the interviews that Gray and I recorded—perhaps twenty years before the publication of an interviewee's book—are simply more trustworthy.

A few housekeeping matters:

For some release dates, I have given both month and year, but in other cases only the year, depending on what was needed to anchor a particular cartoon firmly in its studio's chronology.

In keeping with industry practice, I have referred to as "scenes" what most likely would be called "shots" in live action.

You will find references here not to Warner Brothers, but to Warner Bros., which was the way the company always identified itself. Throughout I've referred to the major film companies by the sort of shorthand in which "Paramount," for instance, embraces a tangle of related corporations bearing a variety of names.

Because the animation industry is willfully informal (as witness the requirement that Walt Disney's employees address him as "Walt"), once past a first reference—and sometimes even then, especially for secondary figures in my story—I have used the nicknames that were common currency. To refer to Charles M. Jones as anything other than "Chuck" would be silly once he was introduced; similarly, I have referred to Bob Clampett and Bill Tytla by those names on first reference, saving "Robert" and "Vladimir" for later, for their formal introduction, because everyone knew them as "Bob" and "Bill." When in doubt, I've come down on the side of clarity rather than consistency, which is truly a hobgoblin in this area.

Alexandria, Virginia M. B.
June 1998

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Acknowledgments

Milton Gray is largely responsible for this book's existence. He and I began corresponding in 1966, shortly after he started work at the Walt Disney studio as an inbetweener (he has since become a highly respected animator), and very early he communicated to me his enthusiasm for the best Hollywood cartoons. Milt's enthusiasm was contagious, and thanks to him, I began watching those cartoons more regularly and more observantly than I had before.

If Milt had done no more than pique my curiosity about the cartoons and the people who made them, he would have a large claim on my gratitude. But he has, as well, continued to help me at every turn—recording interviews, reading the manuscript with a sharp critical eye, and generally providing the kind of assistance that most authors can only dream of.

I am especially grateful, too, to Mark Kausler, another Hollywood animator, whose knowledge of animators' styles and of the films themselves is unequaled; he has always been very generous with that knowledge.

I have also received valuable help from a number of other historians of Hollywood animation, including Joe Adamson, Robin Allan, Jerry Beck, John Canemaker, J. B. Kaufman, Mark Langer, and Steve Schneider.

As indicated in the notes, I have had access to the personal papers of a number of people who worked on the cartoons. In many cases I am indebted to others for that access: to Bill

Blackbeard for items from Tack Knight's papers; to Nick and Tee Bosustow for items from the papers of their late father, Stephen Bosustow; to David Butler for items from Robert McKimson's papers; to John Canemaker for items from Sylvia Holland's papers; to Bob Clampett for items from Joe Dougherty's papers; to Sody Clampett and her son, Rob, for items from Bob Clampett's papers, in addition to the many items that their late husband and father provided himself; to Mrs. David Hand for items from her late husband's papers; to Mrs. Richard Huemer and Dr. Richard P. Huemer for items from their late husband and father's papers, in addition to those that Dick Huemer himself permitted me to copy; to Mark Kausler for items from Hugh Harman's papers; to Patricia Leahy for items from the papers of her late father, Paul Terry; to Steve Schneider for access to documents from the papers of a number of Warner Bros. cartoonists; and to Martha Werler for items from the papers of her late husband, Maurice Day.

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Well over two hundred people who worked on the Hollywood cartoons sat for interviews with me and Milton Gray, mostly in person but sometimes by telephone; others provided full tape-recorded responses to my written questions. Many of the people who sat for interviews also answered my questions in letters and provided me with documents and publications of various kinds. It's a source of deep regret that so many of the people on the following list are no longer here to read this book. I regret, too, that not everyone on the list is represented in the text, but they all

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Fred MacAlpin, Norman McCabe, James Macdonald, John

McGrew, Helen Nerbovig McIntosh, Robert McIntosh, Robert McKimson, Daniel MacManus, Michael Maltese, Sid Marcus, Carman G. Maxwell, J. C. "Bill" Melendez, Jack Mercer, Otto Messmer, John P. Miller, Phil Monroe, Manuel Moreno, Kenneth Muse, Clarence Nash, Grim Natwick, Maurice Noble, Dan Noonan, Cliff Nordberg, Les Novros.

James Pabian, Tony Pabian, Edwin Parks, Don Patterson, Ray Patterson, Bill Peet, Hawley Pratt, Alice Provensen, Martin Provensen, Thor Putnam, Willis Pyle, David Raksin, Ed Rehberg, John Rose, Virgil Ross, George Rowley, Herb Ryman.

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About the "Flip Books"

At three places in this book you will find a series of animation drawings. Each of these series illustrates a different style of animation—"rubber hose" animation, "stretch and squash," and "smear" animation—that is discussed in the text. Flip these drawings at a uniform speed and an illusion of movement will result. The drawings were made for this book by Milton Gray.

Character animation as practiced in the Hollywood cartoons embraced many other styles and techniques, but these three are particularly important to an understanding of the evolution of the art of animation.

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Hollywood Cartoons

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Introduction

Walter Kerr, in *The Silent Clowns*, refers to silent comedy—the films of Buster Keaton, Charlie Chaplin, Harold Lloyd, and their lesser contemporaries—as a "fantasy of fact": the camera confirms the reality of what is happening, but the special properties of silent film—silence itself, and a slight acceleration that weakens gravity's pull—transform that fact into fantasy.[1]

With animated cartoons, very nearly the reverse happened. In silent cartoons, fantasy in the form of blatant impossibilities was the stock in trade, so that, for example, Felix the Cat could detach his tail and use it as anything from a spyglass to a grappling hook. What was missing was a foundation in fact that would permit audiences, with a single suspension of disbelief, to accept the reality of what was happening in the cartoon they were watching. Even the most distinctive characters in silent cartoons were like playing cards in a magician's trick; they made no claim on the imagination outside the bits of cleverness in which they were used.

Sound filled part of the gap, but ultimately it was the improvement in drawing and animation that mattered most, because human beings are influenced much more by what they see than by what they hear. By the end of the thirties, cartoon makers could animate characters that all but dared their audiences not to believe in their existence, even when those characters were humanized animals or very peculiar-looking people. Such anima-

tion provided the missing ingredient, the plausibility—Kerr's "fact"—needed to bring the fantasy to life.

Most of this dramatic improvement in animated cartoons took place at the Walt Disney studio; the line of progress can be traced clearly through Disney's short cartoons and his first feature cartoon, *Snow White and the Seven Dwarfs*. The animation that Disney cultivated in those films shared with the best performances of living actors an emotional truthfulness, even though it differed fundamentally from live-action film in other respects. In the features that followed, though, Disney restricted "fantasy" increasingly to the subject matter. Once it had been established that a story was a fairy tale or an animal fable, "fact" dominated, in the form of very subtle but ultimately parasitic animation, separated from live action by only a leavening of caricature.

Throughout the thirties, while the Disney studio was moving steadily forward, cartoonists at other studios were simply figuring out what they were *not* doing, and as it turned out, they were definitely not making Disney cartoons. Since the Disney cartoons had defined the terms of animation's progress, that could have meant that other studios' cartoons were doomed to perpetual inferiority—except for one thing: by the early forties, it was becoming clear that, in animation, fantasy and fact can be combined in many different proportions.

Even though animated cartoons can be believable, they can probably never be *as* believable as live-action film. No matter how caught up in a cartoon an audience may be, it must be aware that it is watching photographs of drawings rather than photographs of real people. By way of compensation, the range of permissible fantasy in animated cartoons is much broader. Cartoon makers whose characters suggest a three-dimensional reality—that is, have some footing in fact—can do just about anything they want, as long as they respect the need for consistency within a film. A cartoon can be in some sense successful even if, at one extreme, it verges on an imitation of live action or, at the other, only a thin veneer of plausibility holds together a clump of ridiculous gags.

When animated cartoons are at their best, though, fantasy and fact do not merely coexist: they reinforce each other continuously. In the strongest short cartoons of the forties and early fifties, as in the Disney cartoons of the thirties, the most creative cartoon makers demonstrated repeatedly that what makes a cartoon character exactly that, a cartoon, can also make that character seem more real.

Their work did not pass unchallenged. Over several decades, and in radically different ways, other cartoon makers argued in effect that what made cartoon characters seem more real inevitably diminished them as drawings. Better to offer drawings that were unequivocally drawings, they said—even when those drawings were wholly derivative—than drawings that tempted audiences to think of them as something else. It was an argument echoing those that have swirled around painting and music and theater—and more recently, live-action motion pictures—for a century and more. The disagreements among cartoon makers were on a smaller scale, and rarely as well articulated, but they were at bottom just as serious. At issue ultimately was whether animated cartoons were by their nature ancillary to other arts, painting especially, or had some claim to existence as a unique art form—a claim rooted not in graphics, but in the animation of their characters.

Such a conflict could not have been imagined in the late twenties, at the dawn of the sound era, when not just the characters in cartoons but also the films themselves, and the tiny studios that made them, hardly seemed real at all.

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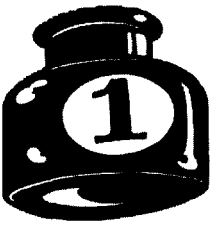
Part I: Cartoon Acting

The staff of the Paramount cartoon studio in New York City in 1921. Earl Hurd, the pioneer animator who ran the studio, is seated at the rear. The two mustachioed men at rear center are Frank Moser (left) and Ben Sharpsteen; the younger man at the far left is Bill Tytla. Courtesy of Ben Sharpsteen.



Beginnings, *1911–1930*

The photographs, filled as they are with solemn young men (not many women) dressed in vests and ties, and working at desks in spartan settings, could have been taken in almost any New York office building in the twenties; they do not suggest an artistic undertaking. It's only because the papers in front of these earnest toilers are drawings that their workplaces are recognizable as animated-cartoon studios rather than insurance companies.

Such people numbered a few hundred at most, a tiny fraction of the thousands who made up the rest of the film industry. Almost all cartoon studios were still in New York in the twenties, even though live-action filmmaking had largely moved to California years before. Animated cartoons had always been a cinematic afterthought: when regular production of cartoon shorts began in the middle teens, the industry's weight was rapidly shifting away from such one-reel (or less) films and toward multiple-reel shorts and features. Cartoons appealed at first as novelties, particularly when they added movement to familiar comic strips. By the twenties, though, animation had long since lost its novelty value, and many cartoon studios that had never offered much else were either out of the business or on the way there. In 1922, fewer than 23 percent of the nation's theaters offered cartoons on their programs (as opposed to the almost 73 percent that offered two-reel comedies).[1]

Early on, filmmakers tried to bring efficiency to the manufacture of what was, after all, a complex and expensive industrial product, without destroying what made people want to see the films in the first place. It was an inherently difficult balancing act, especially where cartoons were concerned. An animated cartoon could easily require thousands of drawings, each differing a little from the next, and making those drawings could take a long time; finding some way to generate drawings faster could seem all-important. As the photos of cartoon studios from the twenties suggest, with their businesslike atmosphere, cartoon producers did find ways to achieve a sort of efficiency, but what made regular production possible also robbed many of the films of interest. There is nothing so inefficient as the efficient production of a product that hardly anyone wants.

Winsor McCay, the New York newspaper cartoonist who was also the first American animator of consequence, made films that people wanted to see. But as if anticipating the dilemma his successors would face, he sidestepped the production problems more than addressed them.When McCay animated characters from his Sunday comics page, "Little Nemo in Slumberland," in 1911, he made his cartoon not primarily for movie theaters but as an addition to his vaudeville act.[2] Although a one-reel film incorporating the roughly two minutes of Nemo animation also appeared in movie theaters, simultaneously with McCay's own use of it,[3] he withheld two subsequent films, *How a Mosquito Operates* (1912) and *Gertie* (1914) (for which he animated a dinosaur) until he had exploited their stage appeal.[4] Another popular newspaper cartoonist, Bud Fisher, followed McCay's example by having a young cartoonist named Paul Terry (they had worked together at the *San Francisco Chronicle* a few years earlier) make an animated film based on Fisher's comic strip "Mutt and Jeff"; Fisher, like McCay, had his own vaudeville act.[5]

Terry's film has not survived. McCay's have, likewise accounts by his assistant John Fitzsimmons of how two of them were made. McCay's methods were radically at odds with rapid production on a regular schedule. For instance, his third film, *Gertie*, was the first to require much of a background. Fitzsimmons provided it by tracing a McCay drawing of the background onto each of the many hundreds of McCay's detailed drawings of the dinosaur herself.[6] Even the most talented cartoonist would have found it extraordinarily difficult to produce a regularly appearing series of short animated cartoons by working as McCay and

Fitzsimmons did; the question was whether there was any other way to do it.

The first attempt at such a series was, like McCay's Little Nemo cartoon, based on a comic strip. The French cartoonist Emile Cohl, who in the preceding four years had made dozens of short films—some containing animated drawings—for Gaumont and Pathé, came to the Eclair studios in Fort Lee, New Jersey, in the fall of 1912 to make a series based on George McManus's comic strip, "The Newlyweds." It began appearing in theaters in March 1913, by which time McCay had made only his first two films.

All but one of the Newlyweds films have disappeared, so it's not possible to say with any assurance how Cohl—whose French films were in many ways more innovative than contemporaneous American films—solved the production problems that such a series posed. He was able to make only one cartoon a month, though, as opposed to the planned release of one every two weeks, so it seems likely that the series' demands were not particularly easy for him to meet.[7] To judge from the sole surviving example, *He Poses for His Portrait*, released in July 1913, Cohl did not even attempt character animation like that in McCay's films. His characters—shown as negatives, white lines on black—are instead frozen in a tableau, each one highlighted in turn as their dialogue appears on the screen; movement comes mostly in bursts of free-flowing metamorphosis animation of the kind Cohl had employed in his French films (a whale becomes a meat grinder, into which a cat disappears; the cat emerges as white balls, which change into a goat, and so on). When characters do move, it is as cutouts. Cohl returned to France after eighteen months, leaving behind neither a continuing series nor trained assistants; shortly after he left, a fire destroyed almost all of his work for Eclair.

Cohl's biographer Donald Crafton cites an incident when Cohl was ordered by his superiors at Eclair to admit to his studio two visitors who showed an intense curiosity in his methods.[8] Crafton speculates that one of the visitors was Raoul Barré, a French Canadian cartoonist who had moved to New York in 1912, but that visitor more likely was John Randolph Bray, a cartoonist who had worked since the early years of the century for humor magazines like *Judge*. By 1913, when the visit to Cohl's studio probably took place, Bray was deeply involved in making films on a different model from either McCay or Cohl, and he was making them for Pathé, like Eclair, a French firm, whose American studio was just down the road from Eclair's, in Jersey City.[9]

Bray sold *The Artist's Dream*, his first film—in which animation and live action alternate, the two never combined in the same scene—to Pathé in 1913. Before he completed *The Artist's Dream*, Bray said a dozen years later, he learned that McCay "had been experimenting along the same lines,"[10] and that is likely enough, since Pathé scheduled the release of *The Artist's Dream* for 12 June 1913.[11] By that time, only the first two McCay films had been exhibited, the second in 1912, when Bray supposedly was already at work on his own film. (The climax of Bray's film, in which an animated dog explodes after eating too many cartoon sausages, suggests strongly that Bray had seen *How A Mosquito Operates*, in which the title character suffers a similar fate.) Bray distinguished himself from McCay, saying, "I wanted to simplify and perfect the process, so that the cartoons could be supplied as a regular motion-picture feature—as *many* of them as the public might want."[12] When Bray's second cartoon, *Colonel Heeza Liar in Africa*, was released in December 1913, it was not as a novelty, but as the first in a series with that character.[13]

Bray had, in fact, merely begun to simplify and perfect the process by addressing the early animators' largest problem, the one that McCay simply ignored and that Cohl circumvented through his use of cutout figures: how to combine characters (which had to move) with backgrounds (which ordinarily wouldn't). Bray's solution, which he reduced to a patent application on 9 January 1914, was to print multiple copies of the background for each scene, draw the characters on those printed sheets, and scrape away those parts of the background that the characters disturbed. (Alternatively, when the animator knew that part of the background would be disturbed for more than a few frames of film, he could have some of the sheets printed with part of the background blanked out. Then, when he had drawn the characters, the missing part of the background could be traced from one of the complete sheets.) Bray's method did not really differ much from McCay's, except that it mechanized the reproduction of the backgrounds; even at that, it called for assistants' tracing some parts of both characters and backgrounds.

Bray's initial patent application was rejected on 27 February 1914 by a patent examiner who had seen McCay's Nemo cartoon and who believed, correctly, that what Bray was trying to patent was not sufficiently different from the means used to produce McCay's film.[14] Bray's attorney labored successfully to distinguish Bray's methods from McCay's, and the patent was ultimately

granted on 11 August 1914. Under the pressure of actual production, Bray's methods did not live up to his patent's claims for them: he made only seven cartoons in all of 1914. Bray apparently animated his own limited output in 1914 with the help of a few assistants; it was probably not until late in that year that he hired other cartoonists as animators and set up a New York studio capable of systematic production.[15]

Competitors were close behind. By early in 1915, Raoul Barré had formed a studio of some kind to make cartoons for the Edison company in a series called Animated Grouch Chasers; the first was released in March.[16] By the end of 1915, he was making cartoons based on Tom Powers's "Phables" newspaper comics for release as part of the Hearst newsreel.[17] Barré did not use printed backgrounds like Bray's, but neither did his films require tracing nearly as extensive as McCay's. He was from all appearances the first cartoon maker to realize that it didn't matter whether what was put under the camera was a single drawing, as with the McCay and Bray methods. All that mattered was what the camera saw, and it could see as a single image what was actually a composite of several pieces of paper, pressed together under a piece of glass.

As one result, Barré could employ what came to be called the rip-and-slash system. It entailed tearing holes in the paper drawings so that, for instance, the moving part of a character's body was visible on one sheet while the stationary part was visible through the hole, on another sheet under it. When the two sheets were laid together, the camera saw them as one (at least if the torn paper's edges were feathered adequately), eliminating the need to redraw the stationary part.

Such a system could have embraced torn background drawings as well as torn drawings of characters, but Barré evidently chose to use translucent sheets, probably of celluloid, on which the backgrounds were drawn or pasted. Putting such a sheet over the animation drawings separated the characters from the backgrounds more effectively than Bray's invention did; but since the backgrounds were actually on top of the characters that were supposed to be in front of them, Barré's solution created problems of its own. Background drawings had to be high on the screen or otherwise placed so that the characters wouldn't disturb them; when such a disturbance was unavoidable, the animator had no choice but to trace the background drawing onto the animation drawing for however long the disturbance lasted.

Barré is generally credited with inventing not just rip-and-slash animation, but also what very quickly became the universally adopted method for keeping animation drawings in register, that is, each drawing in proper relation to the next. It involved installing two or more pegs at the top or bottom of the animator's drawing board and using drawing paper with holes punched to fit over the pegs.[18] Bray's method for registration, which involved aligning the "guide marks" on each printed sheet, was clumsy by comparison. Animators began very quickly to draw on boards equipped not just with pegs but with panes of glass illuminated from below—lightboards, as they were called—so that the animator could more easily see previous drawings as he made a new one. That need would have grown more pressing as drawings began to be broken up into several layers.

Earl Hurd, who had been a newspaper cartoonist in Chicago and New York,[19] came up with a method for separating characters from backgrounds that surpassed both Bray's and Barré's. Unlike Barré, who never patented anything, Hurd reduced his idea to a patent application on 19 December 1914. Hurd's patent called for drawing the animated figures on translucent sheets of paper and celluloid, painting them, and then placing them over a single background drawing when they were to be photographed. Bray's earlier patent had called for exploiting translucent paper's advantages in the actual animating—the idea was that an animator would be able to see the previous drawing as he made the next one—but he had not realized, as Hurd did, that translucence could be exploited in the photographing of the drawings as well.

By the time Hurd applied for his patent, Bray's method had already proved to be unworkable. Bray used printed backgrounds for a few early cartoons, like *Colonel Heeza Liar in Africa* and *The Grafters*, but they were hopelessly inflexible. In *The Grafters*, probably the first cartoon with cat and mouse antagonists, the staging is often dictated not by the comedy's requirements but by the backgrounds, so that, for instance, all the action in one scene takes place on the far left side of the screen, in a long shot. Bray cartoons from later in 1914 and 1915 show him trying to wriggle out from under his method's inadequacies, mainly through the use of cutouts for both backgrounds and characters.

Hurd received his patent in June 1915.[20] At some point during that year, he went to work for Bray, bringing his patent—and thus a solution to Bray's problem—with him. (He also brought along his character Bobby Bumps, who had appeared in a couple of car-

toons released by Universal.) Bray probably used translucent sheets of paper in producing a few cartoons at most before all the animation drawings for his cartoons began to be traced in ink onto sheets of celluloid—"cels," as they came universally to be called.

Bray himself received two more patents, one each in 1915 and 1916.[21] Through his own patents, and Hurd's, he was trying to stake out all of animation as his preserve, in effect emulating the Motion Picture Patents Company's efforts to license all film production and exhibition (efforts that had ended in January 1915 with an adverse court decision). Bray's patents gave birth not only to litigation, beginning with his 1915 suit against a short-lived series called Keeping Up with the Joneses, but to a continuing campaign by Bray and his formidable wife to persuade aspiring animators that they had to accept Bray's yoke.

Even though Bray was trying to establish his suzerainty over theatrical animation, his and Hurd's patents never completely stymied his potential rivals. He even gave one of them a backhanded boost. When Bud Fisher approached Paul Terry about undertaking a Mutt and Jeff series, Terry declined because he had already agreed to make cartoons for Bray; he recommended that Fisher talk to Barré instead.[22] The publicity for the new series mentioned only Fisher, but Barré was apparently involved with it from the start.[23] The first of the new Mutt and Jeff cartoons was shown in New York in March 1916.[24]

It was only through his use of celluloid that Barré came within hailing distance of the Bray-Hurd patents, and in later years he claimed that he had used celluloid as long ago as the summer of 1913, early enough to sink Hurd's critically important patent (Barré may have been making novelty films of some kind for Edison then).[25] As Barré and other cartoon makers used celluloid more extensively, they did so in ways that owed little or nothing to Bray's films. For example, it was not anyone associated with Bray, but rather William C. Nolan, an animator at Barré's studio in 1915, who came up with the idea of making wider background drawings and then moving them under the camera, a little in one direction or the other, each time a frame of film was exposed. Such movement encouraged the illusion that the camera was moving on a track parallel to moving characters.[26] Animators very quickly realized that they could combine celluloid overlays of foreground elements with Nolan's innovation: foreground shrubbery that moved on and off the screen more rapidly than the

background drawing, as if it were closer to the camera, enhanced the illusion of depth.[27]

As in Barré's case, there was enough ambiguity surrounding the Bray-Hurd patents—and enough that they did not address—to encourage other cartoonists to disregard them or work around them. In December 1916, Bray defeated a conflicting claim by Carl Lederer, another animator at Barré's studio. Lederer evidently made a renewed effort to nullify Bray's patents, only to drop it in January 1918, not because he had been defeated again, he said, but because "I found that the subject matter covered by the Bray patents is in universal use today."[28] Bray himself vowed to pursue infringers vigorously—and he sometimes did—but he may have been deterred by awareness of how fragile was his patents' validity. In any event, by 1918 his patents had become mostly a nuisance. Other cartoon makers had surpassed him technically; they had found ways to make cartoons on a regular schedule, not only by exploiting the flexibility that separating characters from backgrounds gave them, but also by adopting shortcuts of other kinds. They used cycles, for instance, in which a few drawings representing a single movement, like a stride in a run, were seen over and over again.

Their much larger problem was how to make their cartoons appealing to audiences.

The pioneer animators were not green cartoonists. Emile Cohl was in his fifties when he made the Newlyweds cartoons; Winsor McCay was in his early forties when he made his first animated film; Raoul Barré turned forty in 1914; John Randolph Bray was thirty-five in that year. All these men were accustomed to drawing for publication, that is, to doing work that required speed and proficiency. When Bray and Barré began setting up real studios, they attracted other cartoonists of the same kind. By the end of 1915, Bray had assembled a group of former newspaper cartoonists—Paul Terry and Earl Hurd were two of a larger number—who made the films for him, each specializing in his own characters.[29] The cartoonists at Barré's studio likewise included men who had come to animation after years as newspaper cartoonists or as contributors to humor magazines.

Late in 1915, Bray switched distributors, leaving Pathé for Paramount; he was now obligated to produce one cartoon a week.

By September 1916, when he was deep into the Paramount release, his staff included nine cartoonists, as well as four camera operators and thirty assistant artists.[30] Such assistants, at his studio and others, shouldered the more nearly mechanical tasks involved in production, much as Fitzsimmons did for McCay. When the animation was on celluloid, as at Bray's studio, an assistant might trace the characters in ink from the animators' pencil drawings. When the animators' own inked drawings were photographed, as at Barré's studio, an assistant might fill in the solid black areas or even erase the pencil lines. A talented newcomer need not remain in such a job long, however: when Richard Huemer started at Barré's studio in July 1916, he was animating after three weeks.[31]

The more seasoned cartoonists, including Bray and Barré themselves, had made the transition to animation with apparent ease, because animating was for them not all that different from simple cartooning. Although Bray showed himself in *The Artist's Dream* to be capable of depicting a dog's movements with surprising subtlety, other Bray studio films that survive from the teens tend to be fairly elaborate in drawing, like the nineteenth-century magazine cartoons they evoke, but barely serviceable as animation. Instead, a drawing may be held for many seconds on the screen or animation repeated throughout a film; likewise, rather than make, say, ten individual drawings to represent a rapid action, an animator might make only five drawings, or three, and have each drawing shot for two or three successive frames ("on twos" or "on threes").

Even Winsor McCay had resorted to such expedients as cycles and repeated animation, but only within the context of animation that was otherwise painstakingly realistic. In *How a Mosquito Operates*, McCay's animation of the mosquito as it attacks a sleeping man is startling—and even painful to watch—because the mosquito is so very large in relation to the man and plunges its huge beak so deep into the man's face. But McCay animated the swelling of the enormous insect's body, as it gorges itself on blood, with disarming subtlety: the mosquito fills out gradually and persuasively—not simply increasing in size, like a balloon filling with water, but as if its body had a certain structure, now distended. McCay animated his dinosaur, Gertie, with the same combination of grand scale and surprising delicacy; she is like a mischievous and unpredictable trained animal, suggesting variously an elephant, horse, or big cat. In the Bray cartoons, by contrast,

there is nothing resembling real movement; everything is stiff and mechanical, in keeping with the industrial model that Bray had embraced so confidently.

Barré had embraced it, too, but he may have been looking back over his shoulder at McCay's example with some wistfulness. Even in 1916 at the Barré studio, Dick Huemer said, "there was some attempt to improve animation," as well as evening art classes with a model: "We would come back at night to study the human form."[32] George Stallings, who animated for Barré, wrote to Huemer in 1963 about aspirations Barré had expressed even earlier, probably in 1915 during the Edison release: "Barré's one ambition...was to raise the quality...of animation so high that the others could not compete with him. He had a planned program for this all outlined and threw all of his profits back into it, whenever he had any, but he couldn't get far on twelve hundred dollars a picture."[33] Nothing speaks of such ambition in a Grouch Chaser like *Cartoons at the Beach*, which is primitive in both drawing and movement; the occasional heavily rendered drawing invites comparisons with an overripe tomato. *Never Again!* (1916) is comparably crude: only a police chief's mouth and arm move—in cycles—as he gives orders to Si Keeler, a seedy old traffic cop, in the first scene, while one held drawing suffices for Keeler himself.

Generalizing about the animated cartoons of the teens is treacherous because so many of the films have not survived and not all the surviving films are accessible, but the overwhelming impression is of films poorly animated, populated by highly artificial characters, and offering mostly jokes of the lamest kind—often in dialogue balloons, enhancing a resemblance to filmed comic strips. Cartoons never ran more than ten minutes or so, and they often shared a reel with a newsreel or a nature film. They were, in sum, films of a highly marginal kind, and there's some evidence, in trade-paper reviews and personal recollections from the time, that by late in the teens audiences were growing impatient with cartoons' weaknesses.

There's evidence, too—more often in accounts from the period than in the surviving films—that some people working in animation tried to respond by improving their product. One of them was Gregory La Cava, a New York newspaper cartoonist who, according to Nat Falk's early history, worked first in animation for Barré and then made animated cartoons for Rube Goldberg, by 1916 a famous newspaper cartoonist. It's not clear when La Cava

took charge of the cartoon studio that William Randolph Hearst established within his International Film Service to make films based on his comic strips; the first Hearst cartoons, from early in 1916, which included Barré's Phables and Krazy Kat cartoons animated by Bill Nolan, were probably farmed out. La Cava was certainly running the studio by sometime in the fall of 1916, when the first Katzenjammer Kids cartoons appeared. La Cava made improved cartoons, in Falk's account, by increasing the average number of drawings from 2,000 to 3,500, by introducing what Falk called a "more natural animation" as opposed to "stiff angular movements," and by substituting titles for balloons—in short, by moving the cartoons away from their comic-strip origins.[34]

Someone had to make those additional drawings, of course, and so the animator who could draw quickly took on added value. Frank Moser was the exemplar. He was yet another newspaper cartoonist; he had worked as one in Des Moines, Iowa, before finding a job of some kind in New York. He evidently did not get into animation until he went to work for the Hearst studio, most likely in its earliest days in 1916.[35] By 1918, when the Hearst operation briefly shared space with Barré's studio in the Bronx (it subsequently moved to Hearst's live-action studio in Harlem), Moser had become famous among animators as a "speed wizard," Dick Huemer said. "He was then considered the best animator in the world—and the highest paid, too—because he could turn out these fantastic amounts of footage; he just slashed the stuff out. Worked on paper, pen and ink...batted it out."[36]

The early animators had inherited, from newspaper comics and magazine cartoons, characters that were drawn and animated as relatively rigid vertical forms. What Falk called "more natural animation" involved not just more drawings—and thus more movement—but also character design with a greater reliance on curves. (The use of curves may even have grown in response to the increased number of drawings, curves being easier and faster to draw.) Vertical forms tend to stutter when they're moving across the screen, whereas curving forms tend to flow. It was, in various accounts, Bill Nolan who first demonstrated the potential in a more curving and pliable kind of animation, but he was certainly not alone. Another cartoonist who later won some credit for such an innovation was Charles Bowers.

Like so many others in the field, Bowers was a newspaper cartoonist until the middle teens, when he entered animation; he was by 1918 a partner in Barré's studio. Bowers's contributions

are hard to assess in the absence of so many films, but there is this praise in an unsigned obituary in a 1947 newsletter of the cartoonists' union (clearly written by some former colleague, possibly Ted Sears, who began working at the Barré studio around 1917): "He was one of the first to eliminate angular stiffness from animation and substitute smooth action based upon the movement of curved forms. He also added perspective and solidity of figure construction to an art that had long been two-dimensional."[37] Such terms could be applied without strain to parts of a surviving Bowers film called *A.W.O.L.*; it appears to have been made not long after the armistice, probably in 1919, as a cautionary tale for restless soldiers.

The small budgets and tight schedules that were so confining to Barré in the middle teens were no less confining later in the decade. When several animators worked on a film, as was increasingly the case, there was typically only the most limited effort to pull their disparate contributions together. While he was with Barré, Dick Huemer said in 1973,

> Barré would hand out the idea of the story. He'd say, "We're making a picture about Egypt this week; have pyramids in it, and sphinxes, and camels."... So, we'd go back to our boards. We would animate for a week—just about a week—cut it off, and then soon it would be spliced together.[38]

The process may not always have been quite that stark, but the animators unquestionably worked with only the most limited kind of guidance—on another occasion, Huemer recalled "a very rough scenario.... Probably on a single sheet of paper, without any models, sketches or anything."[39]

The Barré-Bowers partnership had broken up by the fall of 1918, after Barré suffered some sort of mental collapse.[40] The Mutt and Jeff series itself ended by early in 1923, from all appearances a victim, like other cartoons, of the postwar recession that overtook the American economy in the early twenties. The film industry as a whole was hit hard, but cartoon studios—making a product few people cared about—especially suffered.

A few studios in addition to the Mutt and Jeff operation had enjoyed at least mild prosperity in the years just after World War I. In September 1919, Bray broke with Paramount and began distributing his Pictographs—potpourris that mixed travelogues and nature studies with animated films of various kinds—through Samuel Goldwyn, on a schedule that called for three reels a week,

three times as many as before.[41] In October, the Bray studio announced a deal under which it would make cartoons with such Hearst characters as Krazy Kat and Happy Hooligan; in fact, it planned to package some of the Hearst studio's cartoons with those it made itself.[42] Paramount responded immediately to the loss of Bray's cartoons with cartoons of its own, as part of a weekly Paramount Magazine. Earl Hurd took his character Bobby Bumps from Bray to Paramount after the break, and Frank Moser left the Hearst studio to produce another series for Paramount, Bud and Susie.

Within two years, though, Paramount had first dropped the Magazine, then withdrawn from animation entirely, and the Hearst studio had closed. The Bray studio's role in the film industry—and in animation in particular—was declining rapidly. Goldwyn had acquired what was billed as a "controlling interest" in Bray Pictures Corporation early in 1920,[43] but the Goldwyn-Bray Pictograph ended in 1921, and Bray's alliance with the Goldwyn company apparently ended around the same time. In 1922, Bray began distributing what was now called the Bray Magazine on a "states-rights basis," that is, selling the exhibition rights to regional distributors, a definite step down from his earlier arrangements.[44]

New Bray cartoons starring the revived character Colonel Heeza Liar—a preternaturally vigorous old man who had no comedy in him—were made by George Stallings with the help of two younger animators, Walter Lantz and Clyde "Gerry" Geronimi, who had worked with him at the Hearst studio. As if in testimony to animation's declining popularity, the new films combined animation with live action; the combination work involved blowing up frames of the live-action film so they could be reshot with the character animation on celluloid over them.[45] Bray fired Stallings, Geronimi said, because he "had a habit of coming in late," and put Lantz in charge of the studio's animated films, with Geronimi as his assistant. In 1924, Lantz—who also acted in the live action—laid Heeza Liar aside in favor of a series built around a boy protagonist, Dinky Doodle.[46]

Bray himself had abandoned any active role in production of his cartoons. His interest had shifted away from theatrical films of all kinds and toward films for schools, filmstrips in particular (his company began offering a filmstrip projector in 1924).[47] He was observing the logic of the industrial model he had always followed. For a small studio like his, that logic pointed toward films

that served markets less volatile than theatrical audiences. Otherwise, his ambitions for animation were exactly as limited as they had always been: to hold the number of drawings to a minimum. For a 600-foot cartoon, he told a magazine interviewer, "we manage to get along with only 2,000 to 2,500 drawings"[48]—fewer than La Cava was putting into the Hearst cartoons a half-decade earlier. Bray had no larger ideas for organizing the production of his animated films. There was, however, a predictable concern with the most minor costs. "Walter had charge of the drawing supplies," the animator David Hand said, "and if a pencil wore out, you went to Walter and he gave you one more."[49]

Animation in the early twenties was guttering out much as might have been predicted; the yearning for greater efficiency, exemplified by Bray's pride in the poverty of his product even as his studio slid out of the cartoon business, had triumphed too often. A few cartoon studios did manage to thrive in the twenties, though, even if on a small scale. Their films invited audiences to find novelty not in the medium itself, but in what the cartoonists were doing with it.

J. R. Bray and Max Fleischer met around 1901 at the *Brooklyn Daily Eagle*. Bray was working in the art department and the eighteen-year-old Fleischer was, as Bray wrote in a third-person "History" many years later, a "cub artist, retouching photographs."[50] Fleischer moved to Boston to work for an advertising agency (Bray may have gotten him the job) and later became the art editor of *Popular Science* magazine. He and Bray met again, probably in 1917, at Paramount's offices, where Fleischer was waiting to show a sample cartoon he had produced. According to the "History," "Bray told Fleischer that he had an exclusive contract with Paramount and suggested he show it to him.... Bray agreed to try the cartoon on the public. It immediately was a success, so Bray engaged Fleischer and his brother to make a series at Bray Studios for regular release."

Fleischer had come up with a method that yielded animation that was, like McCay's, far more lifelike than Bray's or that of the other animators of the teens, but Fleischer's method was much closer in spirit to Bray's than to McCay's, because its animation was not really animation at all. It was instead a tracing from live-action film that was projected from below, frame by frame, onto

a glass surface the size of the animation paper. Like Bray, Fleischer sought patent protection: he filed an application for a patent on his method, called rotoscoping, on 6 December 1915. (Like Bray's, Fleischer's application was rejected at first but eventually approved, in Fleischer's case on 9 October 1917.)[51]

Fleischer and his younger brother Dave had tested the new method by filming Dave in a black-and-white clown suit—the distinct patterns made for easier tracing—and it was that same clown who became a continuing character in the Fleischers' cartoons for Bray. Fleischer cartoons began appearing in Paramount-Bray Pictographs by June 1918. The rotoscoping made the desired impression. One early review, of what was probably the clown's first appearance in a Pictograph, described him as "a wonderful little figure that moves with the sinuous grace of an Oriental dancer."[52]

When the Bray studio's production of both entertainment films and industrial subjects picked up after World War I, the two were sometimes combined, as in an animated Pictograph segment that demonstrated how a gasoline engine worked.[53] Max Fleischer's involvement in such films was surely substantial, given not only his background—especially his association with *Popular Science*—but also the infrequent appearances of his clown cartoons; they were subordinate to his other work. It was not until September 1919, when Bray moved his Pictographs from Paramount to Goldwyn, that the clown cartoons, now dubbed Out of the Inkwell, became a series within the Pictographs.[54]

In mid-1921, when Bray's entertainment films were of declining importance both within the studio and in the industry as a whole, the Fleischers set up their own studio.[55] Their timing, and the move itself, may have been dictated by the general slump in animation and the concurrent termination of the Pictograph. The Fleischers first distributed their new Out of the Inkwell series themselves, on a states-rights basis; by sometime in 1922, though, they had signed with a distributor—not one of the major film companies, but Margaret Winkler, a young woman who had just gone into business for herself after seven years with Warner Bros. as a secretary.[56]

The Inkwell films relied heavily on live action, even though the rotoscoping of Dave Fleischer diminished rapidly as the foundation for the clown's actions; rotoscoping is detectable only at the beginning of *Modeling* (1921), for example. Instead, the films presented the clown as a creature who emerged from a live-action

inkwell and played against a live-action cartoonist, Max Fleischer himself. The animation was mostly on paper.

Dick Huemer started animating for the Fleischers, probably in early 1923, when the total staff was, he said, "ten at the most"[57] (it had grown to nineteen by late in the year, when the studio moved to larger quarters at 1600 Broadway).[58] Roland Crandall was the only animator apart from Burton Gillett, who preceded Huemer by only a little and, Huemer said, "got me in there." Before long, Huemer told Joe Adamson, the Fleischers were paying him the impressive sum of $125 a week: "They would get crushes on people, a boss would, and say, 'Oh, this is the best animator in the business, he's a wizard! Can't lose him!' So they would pay him a good salary."[59] It was to make Huemer even more productive that the Fleischers proposed to him, probably in 1924, that Arthur Davis become his assistant.

Davis was to be an assistant in a new sense of the term. By the early twenties, there was wide acceptance of the idea that there was a sort of hierarchy of animation drawings. Winsor McCay himself advocated a "split system" in a correspondence course that Federal Schools published in 1923, telling the students that they should break movement down to single drawings by making a new drawing midway between two others, starting with the two at the beginning and end of a movement.[60] Many other animators were already working in a more sophisticated fashion, by making the most important drawings first and anchoring the rest of their animation in them. The poses that defined a movement came to be called "extremes," the others, "inbetweens," because they were literally in between: they smoothed the transition from one extreme to another.

An alternative adopted by some animators was to work "straight ahead," that is, to start at the beginning of a scene and make one drawing after another. That method could produce animation of a particularly fluid kind, but it also entailed risks—a character could easily grow or shrink over the course of a scene—and it was by no means the norm in the twenties; as Dick Huemer said, "We worked from pose to pose with inbetweens." The animators themselves drew the inbetweens, though, and it was that procedure that the Fleischers proposed to change in Huemer's case by making Davis a sort of subanimator who would draw the inbetweens for Huemer's scenes. "It was their idea.... They talked me into it," Huemer said in 1973. The Fleischer animators inked their own drawings, on paper ("You wouldn't dare

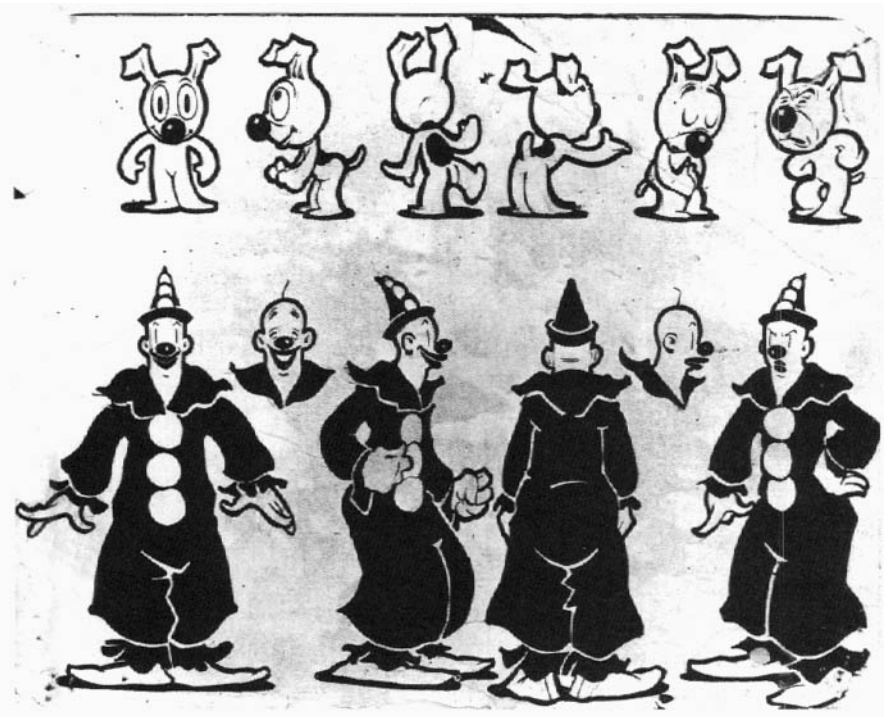
let anybody else touch your precious stuff," Huemer said), and so Davis, as Huemer's inbetweener, inked the inbetweens, adhering to Huemer's style.[61]

Huemer worked very little with Max Fleischer. "Max and Dave went off by themselves and thought up the stories," Huemer said, "some basic idea of the clown, say, getting involved with a masquerade party.... They would also then go off by themselves and shoot the live action." Once it was shot, Max was no longer involved. Dave Fleischer, on the other hand, "would come sit next to an animator, and they would talk.... Not writing anything down, just talk—a private gag meeting. That was the only preparation for the animation."

The Fleischer studio was in that respect much like Barré's Mutt and Jeff studio, where Huemer had worked not long before. What distinguished the Fleischer cartoons from Barré's, and from most other studios' cartoons, was their reflexive nature; whatever their ostensible subject, they were always cartoons about what it was like to be a cartoon. That self-awareness sometimes extended beyond the characters—the clown, called variously KoKo or Ko-Ko, knew he was made of pen and ink—to the filmmakers themselves. *Cartoon Factory* (1925), for instance, is built around the idea of mechanization, which embraces even the production of multiple Maxes (cutout photos of Max in a tin-soldier suit). Max appears in stop motion at the start, pressing levers to stir up all his drawing tools.

Max Fleischer had, of course, worked at J. R. Bray's side for several years, and he may have taken the industrial model all too seriously. He set up his own distributing organization, Red Seal Pictures Corporation, in 1923, and by 1925, Red Seal was releasing monthly "featurettes" that included not only the Fleischer Inkwell cartoons and Song Cartunes (the latter were film versions of the song slides that had been part of theater programs for decades), but also a variety of live-action shorts. Red Seal released 141 shorts in 1925, as opposed to only 26 in 1924.[62]

It was clearly too much. In October 1926, Max Fleischer asked for appointment of a receiver in bankruptcy, contending that, despite Inkwell Films' solvency, "the action of a film laboratory has forced it to seek the protection of the courts to work out its problems."[63] In November, Alfred Weiss, a film-industry veteran, bailed out Red Seal and Inkwell Films, paying $218,000 of the firms' liabilities and becoming president of both.[64] Paramount announced in May 1927 that it would begin releasing the Inkwell



A model sheet of KoKo the clown and his canine sidekick Fitz, drawn sometime in the late twenties by Dick Huemer. © Fleischer Studios; courtesy of Dick Huemer.

cartoons, which were to be "presented" by Weiss but "produced" by Fleischer.[65] The Red Seal episode ended, as Dick Huemer told Joe Adamson, "in the backer [Weiss] taking over the whole thing, and Max being ousted.... However, they weren't able to get the clown away from Max. So he set himself up over [in Long Island City], opened a little studio and continued making song cartoons."[66] That apparently happened around the beginning of 1929 and was the occasion for the formation of a new corporation, Fleischer Studios, in May 1929.[67] When the Fleischers moved back to Manhattan in October 1929, a *Film Daily* announcement said that their studio had "no connection whatsoever with Out-of-the-Inkwell Films, [*sic*] Inc."[68]

Despite such distractions, at least some of the Fleischer cartoons had passed beyond mere self-awareness to become as knowing in their handling of animation's properties as Buster Keaton's live-action comedies were in their examination of film itself. They employed metamorphosis—a device integral to ani-

mation since the earliest animated films—with an unprecedented relish. In *KoKo the Kop* (1927), Fitz the dog, fleeing after he has stolen a bone that Max has drawn, "hides" by becoming a window with a girl hanging out of it (he turns back into himself as KoKo kisses the girl). But, more striking, objects repeatedly change their nature without changing their appearance. The characters lift up and rearrange seemingly solid and immovable background elements, as if they were stage props. Thus rearranged, the background elements again appear to be fixed in place—as in fact they are. In the same manner, Fitz picks up the front half of a large rock; the remaining half appears to be a hole—and thus, it is one, which Fitz escapes into. Appearances are simultaneously true and false.

Cartoons like *KoKo the Kop* seem not to have emerged from any systematic exploration of the medium, but to have grown out of the contradictions built into the way the Fleischers made cartoons. For all that they adhered to a Bray-like model in so many ways, they did not follow through; at crucial points there was an abrupt transition from industrial efficiency to a much looser and more eccentric sort of filmmaking.

A few animation drawings from the Inkwell films have survived,[69] and on the evidence of those drawings—and the films, too—the Fleischers manipulated paper far more intricately than did other animators who put the paper animation drawings under the camera, as opposed to tracings of those drawings on celluloid. Working with paper drawings alone was much more restrictive than working with cels. Animators could, by tearing the paper, achieve only some of the flexibility that cel animation offered. Putting the characters on cels eliminated the need to worry about the characters' disturbing the backgrounds (at least as long as the drawings on the cels were opaqued, or painted, as they almost always were). Animators who worked with paper could never shed that worry. On the other hand, cel animation could match some of paper animation's virtues, since animators could divide individual drawings among more than one level of celluloid; a moving character or part of a character could be on one sheet and a stationary character or body part on another. Stacking sheets of celluloid in that manner produced noticeable differences in paint color—a white or gray seen through three sheets of celluloid was darker than a white or gray on top of the pile—but that was a minor annoyance compared with the time saved by not having to trace drawings that did not change from one exposure to the next.

Cartoon makers who stuck with paper because of its lower cost or more handsome appearance (the inked lines on cels tended to be crude-looking compared with the inked drawings on paper) still used cels to some extent, particularly for background overlays. But although the Fleischers put KoKo on cels over rear-projected frames from live-action film whenever the clown left the drawing board (the Rotograph, a device of Max's invention, yielded results similar to those in the Bray films made by Walter Lantz), they resorted to cels seldom if ever in the pure cartoon sections. There, the Fleischer staff tore and cut the paper animation with an ingenuity that probably became an end in itself. "Some of it was like lacework," said Al Eugster, who started work at Fleischers' in 1929. "I don't know how the cameraman ever handled that."[70] It is impossible to believe that the other studios' methods were not more efficient.

The Fleischers also worked without exposure sheets, a tool in use at some studios since the middle teens;[71] such sheets told the cameraman how many exposures, or frames of film, should be devoted to each drawing. Instead, as Roland Crandall wrote a few years later, "most of the planning, matching and timing was done under the camera"[72]—a practice no doubt mandated by the paper animation's complexity, and one at war with anything like efficient production. Similarly with their assigning Art Davis to Huemer to draw his inbetweens: however sensible such a move might have been, considered in isolation, as a way to increase Huemer's production, it probably would have made more sense, in those terms, had it been combined with careful planning of what Huemer was animating.

There is in the Inkwell cartoons continual friction between a rigorously mechanical approach to animated filmmaking, on the one hand, and an utterly whimsical, not to say careless, attitude toward stories and animation, on the other. As in Huemer's recollection, it seems in the films that Max Fleischer is in charge up to a point and then Dave Fleischer takes over, their radically different temperaments governing different aspects of each film. Thus it is that KoKo—clearly more Dave's creature than Max's—is constantly testing and poking at the mechanical apparatus that is Max's preserve and that (as the film is at pains to show) makes the clown's very existence possible.

In only one other series of cartoons in the twenties was there the same sort of examination of the medium, with the difference that in the other case a single sensibility was in charge. It is Otto

Messmer's Felix the Cat cartoons that reveal most clearly just how much—and how little—a creative animator might accomplish within the confines of the silent cartoon of the twenties.

Pat Sullivan, an Australian-born newspaper cartoonist, was making animated cartoons with the character Sammie Johnsin, a black child, by early in 1916, working with at least two assistants.[73] Sullivan's career over the next few years was erratic, like himself (he was imprisoned for nine months in 1917–18 on a rape conviction),[74] but by the fall of 1919, he was making cartoons for the weekly Paramount Magazine. Like Earl Hurd and Frank Moser, he helped fill the gap left in Paramount's program after Bray decamped with his Pictographs. When Sullivan signed a contract with Paramount in March 1920, one of the specified subjects of his cartoons was a black cat, Felix, who had been introduced (as "Master Tom") in a Paramount Magazine cartoon called *Feline Follies*.[75]

Sullivan was hit hard by the 1921 slump that brought an end to the Paramount Magazine and then to all of Paramount's cartoons. He emerged from the wreckage with ownership of his character, but at first he had no place to go with Felix. By late in 1921, though, he had become Margaret Winkler's client, even before the Fleischers signed with her. *Felix Saves the Day* was released in February 1922 as the first free-standing Felix cartoon.[76]

Sullivan was an animator—he learned the trade at Barré's studio in the middle teens—but he was, to judge from such surviving evidence as his 1919 Bray cartoon called *Origin of the Shimmie*, never a very good one. He was, besides, an alcoholic. By the early twenties, he had abandoned even a supervisory role to Otto Messmer, a younger man who had worked with him as a subordinate since the Sammie Johnsin days. The Sullivan studio moved around Manhattan in the twenties, from Forty-second Street to Sixty-fifth Street near Lincoln Square, and finally, for most of the decade, to Sixty-third Street near Broadway.[77] Although Sullivan had a small office off the large second-floor workroom that made up most of the Sixty-third Street studio, he rarely came there.[78] As Messmer said, "Once he had the studio going, that was it. He just owned it."[79]

Throughout the twenties, Messmer said, "there was never more than one animator helping me," plus assistants (some of

whom probably did some animation as well) and the cameraman. Messmer made layouts—rough sketches showing the other cartoonists what the backgrounds should look like—and he animated, he said, "at least 70 percent" of each cartoon. He was also the series' de facto writer: he made up enough titles for a year's output, and those titles dictated the general shape of the stories. "Since you had given the titles," he said, "it was easy to concentrate." Al Eugster, who traced the pencil animation drawings in ink, said he "never did see a script. Otto used to have maybe some small notes—small pieces of paper—and the rest of it in his head. When an animator finished a sequence he'd come over to Otto and pick up some more work, and then ad-libbed.... They'd sort of gag it up as they went along."[80]

The Felix cartoons were Messmer's creations far more than Sullivan's, but it was only Sullivan's name that appeared on the cartoons and in publicity for them. Messmer admitted that he was frustrated "a little bit" at not getting screen credit for the Felix cartoons. "But, you see, it was kind of a contented feeling that what we're doing is going; it's a nice feeling. A feeling of security."[81] Such passivity was extraordinarily convenient for Sullivan, who reaped not only all the glory but also, of course, most of the money that the cartoons generated.

There was soon plenty of both. Like the Fleischers' Inkwell cartoons, the Felix cartoons met the requirements of the more demanding theatrical environment of the middle twenties. There is abundant evidence—in everything from warm trade-paper reviews to licensed toys to Buster Keaton's unmistakable parody in *Go West* of Felix's ruminative pacing—that critics and audiences recognized the cartoons' superiority to most of what had gone before. As the Fleischers did in 1923 when they set up Red Seal, Sullivan left Margaret Winkler for what promised to be a more lucrative distribution arrangement, in Sullivan's case with Educational Film Exchanges: for the 1925–26 season, he committed himself—and Messmer, of course—to producing a new cartoon every two weeks.[82]

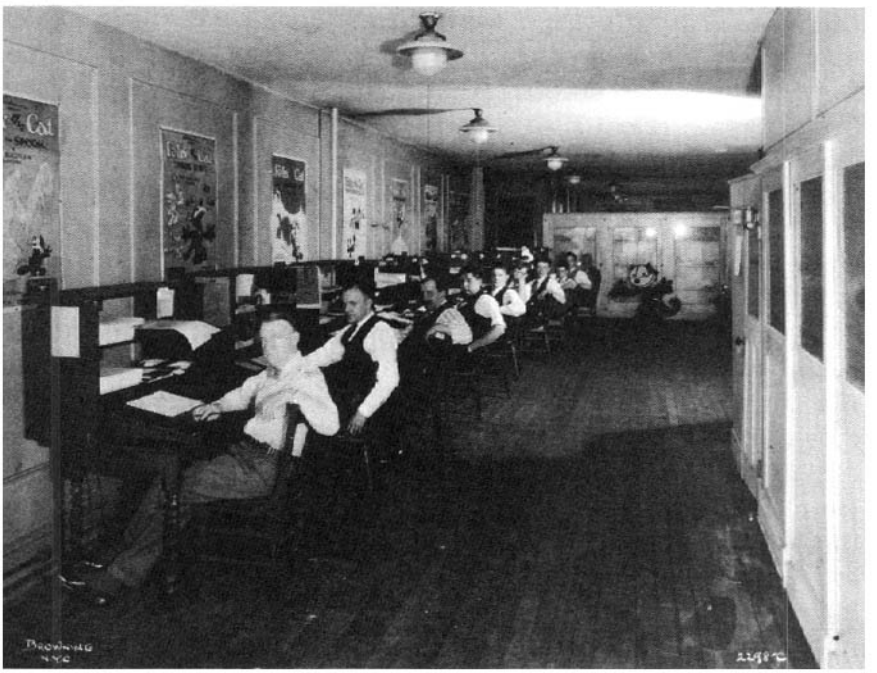
So popular had Felix become that Winkler, after losing the Felix series, started a competing series with a feline star: she got the rights to Krazy Kat, absent from films since the teens. After the demise of the Hearst studio, Bill Nolan had worked for two or more years as what Messmer called his "guest animator"; Nolan began making the Krazy Kat cartoons for Winkler at a studio in Long Branch, New Jersey, in the summer of 1925.[83]

A healthy percentage of the Felix cartoons have survived, and it's not readily apparent from many of them, particularly those from early in the decade, what aroused so much enthusiasm. Cartoons like *Felix Goes Hungry* (1924) are basically a stream of loosely related incidents, resembling in that respect short comedies like Keaton's *The Goat*; Felix occasionally mugs at the camera in closeup, taking his audience into his confidence as if he were a second-rate comedian in live action. Broaden the sample, though, and the basis of Felix's appeal becomes clearer.

In *Oceantics* (date uncertain, but probably 1925), Felix wants a round of Swiss cheese in the window of a grocery store. He reaches with his prehensile tail toward what appears to be a distant house, but when he lifts the front door off the house, it remains the same tiny size as Felix brings it toward the grocery. He places the door, still tiny, under the grocery's window, opens the door, reaches through the doorway up into the display space, and removes the cheese. He then takes the round of Swiss to a billboard that advertises player pianos, cuts the cheese into a thin strip, like a piano roll, and runs it through the piano on the billboard, producing music. By seizing the door, Felix collapses the illusion that the screen is a three-dimensional space; but he then insists that his audience accept the illusion represented by the billboard. He does both quite elegantly, without any hesitation or awkward transitions.

It was thanks mainly to Felix himself that Messmer's cartoons surpassed the Fleischers' Inkwell cartoons, which they otherwise so much resembled, in the piquancy of their continual scrutiny of the peculiar characteristics of the animated screen. More so than KoKo, Felix had the rudiments of a personality; the cartoons focused not entirely on sly transformations, but also on Felix himself—he was curious and rather hard-boiled—as he instigated and responded to them. Because Felix was wholly Messmer's creature, he could act as a surrogate for both his creator and the audience, exploring on their behalf a strange and treacherous place. Given the sharply different interests that Max and Dave Fleischer brought to their cartoons, there was no way that KoKo could play a comparable role.

Felix was rather square and angular in his early appearances, differing from earlier cartoon characters mainly in the simplicity of his black body. Here Messmer had a stroke of luck: Bill Nolan, when he was Messmer's guest animator, brought with him the drawing and animating style he had adopted at Hearst, the style



Pat Sullivan's Felix the Cat studio in the middle twenties. Sullivan himself is seated at the far left, in what was normally Otto Messmer's place; Messmer is to Sullivan's right, and to Messmer's right is Raoul Barré, once the co-owner of the Mutt and Jeff studio but by then Messmer's "guest animator." Courtesy of Al Eugster.

that emphasized curves rather than straight lines. Felix reflected Nolan's presence by becoming a more rounded, and thus more immediately appealing, character. In his circular construction, as well as in the general simplicity of his design, the revised Felix was a character who facilitated animation in a way that most earlier characters had not; KoKo's design, with its floppy clown suit, was fussy by comparison.

Through Felix, Messmer led the eye away from the many elements that his cartoons shared with the failed series of the early twenties. As it so often did—because the background drawings, on torn paper or celluloid overlays, framed the action—the use of paper animation in the Felix cartoons encouraged dull, uniform staging, in medium to long shots, with few closeups. The Felix cartoons also looked rather stark in their lack of grays, another by-product of paper animation; almost everything was pure black or white, except for celluloid overlays with gray areas. It was in

their animation, though, that the Felix cartoons were most revealing about the circumstances in which animated cartoons were being made in the twenties.

Despite the speed and regularity that the Sullivan studio's output required, it remained at its heart a one-man operation. Messmer differed greatly as an artist from Winsor McCay—Messmer was wholly a cartoonist, whereas McCay drew in an elaborate illustration style—but as filmmakers they worked much alike. They did as much of the work themselves as they could, delegating and taking shortcuts as little as possible. In Messmer's case, though, the schedule's pressure meant that he had to delegate and take shortcuts much more often than McCay did. Besides having people like Eugster trace the pencil drawings in ink, he met some of the pressure for production by animating frequently on twos (although "if it was running, or falling," he said, "you had to have it on ones") and relying heavily on what were by then the customary devices for economizing on animation: held drawings, cycles, repeats.

Such expedients, useful enough in individual cases, were damaging in their cumulative effect: the animation in the Felix cartoons is almost never more than functional, and the cartoons sag badly when what is actually on the screen counts for more than the thought behind it. That is why Messmer's fantastic transformations are most effective when they emerge incongruously in an otherwise "normal" setting, as with the grocery store in *Oceantics*. In a full-blown fantasy sequence where everything is of a piece, like the hallucinations the drunken Felix endures in *Woos Whoopee* (1928?), the films' limitations loom larger. As ingenious as he was, Messmer could make cartoons only by compromising right up to edge of mediocrity.

Messmer enjoyed as much freedom as he did only because he worked inside the cocoon of Sullivan's indifference; for all the apparent injustice of their arrangement, Messmer may have known that there were no other circumstances under which he could be so fully immersed in what really interested him. His speed and efficiency were the price he paid for that privilege.

Other cartoonists viewed speed and efficiency very differently: they were what cartoonists had to provide if they were to be taken seriously by the larger film industry. The cartoon producer in the twenties who most successfully accommodated himself to the industry's demands was not Pat Sullivan or Max Fleischer, but Paul Terry.

Terry had left Bray's studio by early in 1917, when he sold a cartoon with his character Farmer Al Falfa to the Edison company; then he made a few parodies of feature films before entering the army. After he was discharged in 1919, he supervised Paramount's cartoons until he struck a deal the next year to make an Aesop's Fables series. Terry's first contract was with an actor and screenwriter named Howard Estabrook, who actually came up with the idea for the series; Terry made only a few cartoons, though, before Estabrook sold his contract to Fables Pictures, Inc., a company formed late in 1920 to produce the cartoons.[84] Terry said many years later that he owned only 10 percent of Fables Pictures; ownership was mostly in the hands of the Keith-Albee vaudeville circuit, which could guarantee playing dates in its theaters.[85] Pathé scheduled the release of the first of Terry's Fables for 19 June 1921.[86]

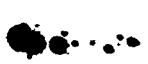
Theater owners still wanted short subjects for the sake of a "balanced program," but the industry's economics, centered now on features, dictated that those short subjects be made quickly and cheaply. Accordingly, the Fables moved through the new studio on a rigorous schedule that saw one cartoon completed every week. Terry's account book for 1923–25 indicates that during the first week of a three-week schedule, John Foster, a veteran of the Barré studio, worked on the story for a new cartoon; the second week, Frank Moser and other experienced men animated; the third week, less experienced men finished up. This torrent of work came from a staff that usually totaled only seventeen or so.[87] Terry put the character animation on cels, over background drawings on paper, as Bray had since the midteens—a far from automatic choice in the early twenties, when studios like Sullivan's were doing exactly the opposite. Although using cels for the animation was initially more expensive than using paper, cels could be washed and used again, and turnover would have been rapid on a once-a-week schedule.

The Felix cartoons were surely more popular than the Fables, but popularity is always fragile, as the short-lived careers of live-action movie stars had already demonstrated many times. Moreover, Sullivan's indifference, however useful it was to Messmer in some ways, held its hazards, too: Messmer recalled that Sullivan resisted making changes in the studio—using cels for more than overlays, for instance—by saying, "You don't change when you're making money." Terry had a much firmer grasp of the industry's realities.

It was Terry, far more than Bray, who established cartoon production on an industrial basis. The key to his achievement did not lie in how efficient he was at producing the cartoons, although in some ways he clearly was efficient: Terry's characters, most of them animals, were usually so brutally simple in design that they could be drawn and traced onto cels swiftly even by inexperienced help. Neither Terry nor any other cartoon producer of the teens or twenties ever devised a sophisticated division of labor, though; in that respect, the cartoon studios lagged far behind the live-action producers. Instead, Terry achieved efficiency on the screen itself by using shortcuts of all kinds, and with unprecedented vigor.

Every other cartoon maker had used shortcuts, to be sure, starting in the teens, but a filmmaker like Bray had used shortcuts without regard to what the results would look like. It was because he leaned so heavily on held drawings, in particular, that his cartoons were unappealingly stiff. It took Terry only a year or so to shake off such influences. After that, he relied much more than his predecessors had on those shortcuts, like cycles and repeat animation, that put his characters into motion. Like so many makers of live-action slapstick comedies before him, he attacked his audiences with the equivalent of brute force: furious activity, unmotivated violence. Such cartoons commanded an audience's attention, if not necessarily its admiration; they were plausible ingredients in a theater's program, as cartoons of the old Bray kind no longer were. There was visible in Terry's Fables a future of the kind that Bray had aspired to but never really achieved: one in which cartoons were a fungible product, appearing with great frequency and on a regular schedule.

As raw as the individual Fables inevitably were, the weight of the series as a whole—a new one every week!—could not but impress aspiring producers of animated films. One young cartoonist who admired Terry's work first saw the Fables in Kansas City, Missouri, in the early twenties. "Even as late as 1930," Walt Disney said, "my ambition was to be able to make cartoons as good as the Aesop's Fables series."[88]



In 1921, when Walter Elias Disney was only nineteen years old (he was born in Chicago on 5 December 1901) he was working as a cartoonist at the Kansas City Film Ad Company, which

produced advertisements that were shown at local theaters. He was the fourth son of a frustrated striver who had moved his family around the Midwest, from Chicago to Marceline, Missouri, to Kansas City and back to Chicago again, trying to succeed at one business after another. Walt had by his middle teens settled on cartooning as the career he wanted; his only formal art instruction was a cartooning course at the Art Institute of Chicago. He drove an ambulance in France after World War I and then returned to Kansas City, where the family still owned a house.[89] At Kansas City Film Ad, Disney and other cartoonists made cutout figures, riveted at the joints, that were manipulated under the camera in a primitive form of stop-motion animation.[90]

Even then, Disney wanted to be in business for himself. Fred Harman, another Film Ad cartoonist, later wrote that he and Disney "secretly rented a studio, bought a used Universal movie camera and tripod and a second-hand Model T Ford coupe," and tried to shoot film for the Pathé newsreel of the third American Legion convention, held in Kansas City from 31 October to 2 November 1921.[91]

Animation was also part of their plans. "They were determined they were going to quit as employees and become their own Paul Terrys," Fred's younger brother Hugh said. Like Bray and the Fleischers before them, Disney and Fred Harman based their first animated film on a drawing that came to life. That cartoon—they may never have finished it—was called *The Little Artist*, Hugh Harman said, "and it was nothing more than an artist, a cute little fellow, standing at his easel, and he was making a picture, and as I recall it came to life on his easel."[92]

Fred Harman had given up on the fledgling studio by the time that Rudolph Ising answered a newspaper ad for an artist, probably early in 1922. The studio was still called Kaysee Studios, the name Harman and Disney had given to their unsuccessful business; the staff consisted of Disney and a camera operator, Red Lyons. "When I started at Kaysee Studios, they weren't making anything I can remember," Ising said fifty years later, "except probably a sort of news thing for the Newman theater."[93]

The "news thing" was a recurring reel called Newman Laugh-O-grams—in effect, a filmed editorial cartoon, the Newman name taken from the small local theater chain that showed it. In the one surviving example—the first such reel, made in February or March 1921 and the earliest extant animation by Disney himself—Disney appears as a "lightning sketch" artist, drawing commen-

taries on local events; there is a little animation only at the end, in a bit about a scandal in the Kansas City police department. Policemen walk in simple, identical cycles (only their heads differ), and as they're thrown out of the station house, they're cutouts of the kind Disney was familiar with.[94]

Learning how to produce even such crude animation was not easy in Kansas City. Disney himself wrote in 1937 that his first source of information on animation was a book by Edwin G. Lutz, *Animated Cartoons: How They Are Made, Their Origin and Development*, "which I procured from the Kansas City Public Library."[95] That book, published in 1920, is essentially a compendium of labor-saving techniques of the kind Terry started using so aggressively in his Fables the next year. Hugh Harman, who began working for Disney in the summer of 1922, confirmed that "our only study was the Lutz book; that, plus Paul Terry's films.... We used to get them at the exchange, through a girl who worked there...and take scissors and clip out maybe fifty or seventy-five feet.... We learned a lot from Terry."[96]

Disney incorporated as Laugh-O-gram Films—and may have quit his Film Ad job—in May 1922, around the time he moved his studio to the second floor of the new McConahy Building at Thirty-first and Forest and began expanding his staff. By his own account, he had already spent six months or so making a version of *Little Red Riding Hood* at night with the help of several unpaid "students" who were learning animation from their unlettered instructor (work that evidently took place before Ising was hired).[97] Now he planned to move ahead with a series of such short cartoons.

As he launched his new company, Disney put up a brave front in the trade press. He announced Laugh-O-gram's formation in June 1922 with the promise that "the plan of distribution" would be revealed "shortly."[98] In August, Leslie Mace, Laugh-O-gram's sales manager, and Dr. J. V. Cowles, its treasurer (and principal financial backer), were in New York, where Mace was "arranging for distribution of a series of twelve Laugh-O-grams to be released every other week."[99] In fact, distributors were not much interested—hardly surprising, given the chilly climate then, even for established cartoon producers. The films themselves, however many Disney was able to show to potential distributors, could not have been much of an inducement. As Terry used Aesop as the loose frame for his series, so Disney used fairy tales. What his cartoons lacked, though, to judge from three that survive, was Terry's

economy of both means and narrative. For example, in *Puss in Boots*, a modernized version of the original story is laboriously worked out, and the animation has much the same quality: earnest and careful, much of it on ones.

In September 1922, Mace finally sold a series to a Tennessee company called Pictorial Clubs, for distribution to schools and churches. The Pictorial Clubs contract was bizarrely one-sided, probably reflecting Disney's eagerness to make some kind of national distribution deal: Pictorial Clubs made only a hundred-dollar down payment, with the balance of eleven thousand dollars not due until 1 January 1924. As it turned out, Disney delivered the six contractually required cartoons by late in the fall of 1922, but Pictorial Clubs, in its Tennessee incarnation, went out of business soon after, long before the eleven thousand dollars was due. It transferred its assets, including the cartoons—but not its liabilities—to a New York company bearing the same name.

The Laugh-O-gram staff scattered after the company ran out of money to pay them, but in the spring of 1923, with bankruptcy looming, Disney pulled some of them back together to make a new film, *Alice's Wonderland.* He emulated the Fleischers' combination of animation and live action in the first part of the film, introducing cartoon characters into the real world as the Inkwell films did (the setting is the Laugh-O-gram studio, with Disney on screen in a Max Fleischer-like role), but then he added a reverse twist: he inserted a real girl, four-year-old Virginia Davis, into "Cartoonland." Of Disney's surviving Kansas City cartoons, it is *Alice's Wonderland* that most closely resembles an Aesop's Fable. When Alice arrives in Cartoonland, there is a welcoming parade with a great variety of animals, all moving in cycles and repeats; they instantly evoke Terry's films.

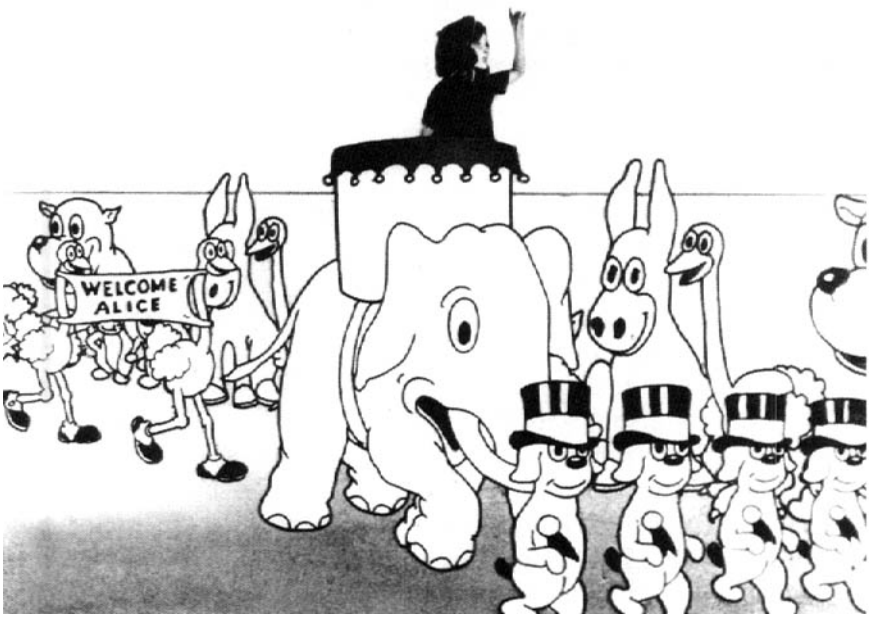
Disney began trying to interest distributors in an Alice series in the spring, but he had not succeeded by the time *Alice's Wonderland* was finally completed in the summer of 1923. He left late in July for Los Angeles, drawn there by the presence in California of his older brother Roy (a World War I veteran who was recuperating from tuberculosis at a government hospital) and an uncle. He took with him *Alice's Wonderland* as a sample reel, but left behind Laugh-O-gram's camera stand and other equipment in the back room of a hardware store whose owner, Fred Schmeltz, had taken the equipment as collateral for his loans to the company. Hugh Harman, Rudy Ising, and another veteran of Laugh-O-gram, Carman G. "Max" Maxwell, presenting themselves

as Arabian Nights Cartoons, used that equipment to make a cartoon of their own, *Sinbad the Sailor*.[100] Their film was eventually shown for three nights in October 1924 at the Isis theater, as a test, but that was the extent of its theatrical exhibition.[101]

Disney had better luck. While he prowled the movie studios, looking for a job of some kind in live action (all the cartoon studios of consequence were still in the East), he sent *Alice's Wonderland* to New York, where a film-storage company screened it for any distributors who showed interest. In October 1923 he struck a deal with Margaret Winkler, who as the distributor of the Felix and Inkwell series already had almost two years' experience handling cartoons. She was about to lose the Inkwell series to Red Seal, though, and she was, moreover, in the midst of an acrimonious dispute with Pat Sullivan, who already wanted to take the Felix cartoons elsewhere for more money; signing with Disney was a sort of insurance policy. Winkler offered to pay him fifteen hundred dollars for each film, the first to be delivered by 15 December 1923.[102] Disney had rented a tiny studio space two blocks from his uncle's house and had bought a used camera for two hundred dollars. He immediately began work on the animation for a new film, and he offered a contract to the parents of Virginia Davis, his *Alice's Wonderland* star; the Davis family moved to Los Angeles quickly enough that Disney missed his very tight delivery deadline by only eleven days.[103]

If the other animation studios of the early twenties were mostly pocket-sized, the new Disney Brothers Studio was the tiniest of the lot, consisting at first only of Walt and Roy (who shot the live action that Walt directed). The Alice Comedies, as they were called, were not really cartoons at all, but rather live-action comedies with animated inserts. They strongly resembled Hal Roach's Our Gang series, with certain children, like a fat boy, turning up in one film after another; Virginia Davis herself, with her blonde curls, suggested a miniature Mary Pickford. The animation in the earliest Alice Comedies, by Disney himself, was equally derivative: it recalled the Fables, only it was even more oppressively loaded with shortcuts (so that, for example, a character's body is noticeably rigid while its head or perhaps just its eyes move).

Disney slowly expanded his staff as the Alice Comedies established themselves. In February 1924, he hired Rollin Hamilton as the first cartoonist on his California staff; and in July, he lured west Ubbe Iwwerks (or, more frequently, Ub Iwerks), an



From Walt Disney's Alice's Wonderland (1923), the last film he made in Kansas City, with Virginia Davis as Alice.

animator whom he had known since they worked together briefly in a Kansas City commercial-art studio in 1919. Iwerks and Disney had been colleagues at Kansas City Film Ad after that, and Iwerks had then worked for Laugh-O-gram. He was back at Kansas City Film Ad when Disney persuaded him to move to California.[104]

Alice the Peacemaker—the first Alice on which Iwerks animated, immediately after his arrival in California—showed some improvement in drawing and animation, especially of the human characters; it was with *Alice the Peacemaker,* too, that the live action became a true framing device, and the animation the clear center of interest. Now that he at last had a strong animator on his staff, Disney moved swiftly into making real cartoons. By the time the tenth film in the series, *Alice the Piper,* was released in December 1924, there was no live-action framing story, only live action combined with the animation (more smoothly than before).

The comic thinking in these films was still at a sub-Fables level;

Disney was so far from mastering his medium that he was vulnerable to jarring accidents. In *Alice the Piper*, rats pour out of a king's nightshirt in cycle animation, but there are too many of them, and their regular flow suggests bodily emissions. Slowly but surely, though, Disney was mastering lessons from the cartoons made by more experienced producers and sometimes improving on their work. *Alice Solves the Puzzle*, released early in 1925, offers an enhanced version of what was already a stock cartoon gag: a character doesn't fall until he realizes he has lost his support. Julius, Alice's feline sidekick, pauses as he climbs a pulley rope, puffing and wiping his brow until he sees that he has pulled the rope completely over the pulley; he gestures down for the rope to come up and then grasps at the pulley above him, before he finally falls. Julius owed his presence in the Disney films to Felix, and he finally gets to the top by using his tail as a spring, very much as Felix might have done, but it is the general purposefulness of the comic business that most clearly invites comparisons with the Felix cartoons.

In June 1925, Hugh Harman and Rudy Ising—their hopes for a cartoon series of their own in abeyance—moved west to join Disney's staff. With more animators on his staff, Disney began putting more animation into the films, and Alice disappeared from each Alice Comedy for long stretches. In *Alice's Orphan*, made late in 1925, Alice (now played by Margie Gay) was present in only two scenes, making awkward and meaningless gestures that could have been combined with animation of almost any kind.

By now Disney really was the director of his films; that title fit him more snugly than it did any of the other cartoon makers who might have claimed it in the twenties. Disney no longer acted in his films (as Lantz did) or animated for them (as Messmer did); free of such distractions, he could devote more time to controlling those things that a director most needed to control, in particular, the shape of the stories and the pacing of the films. Rudy Ising said that Disney "was the one who really sort of put the story together" and assigned sequences to the animators; once those sequences had been animated, Disney made out the exposure sheets that guided the cameraman—specifying, for example, how many times a cycle was to be repeated (the cameraman himself might have made such a decision in the Laugh-O-gram days).[105]

"He was always thinking and acting pictures," Ising observed. "The cartoon medium, I think, was an expedient back then.... I

think he really would have liked to have been in live pictures, but cartoons sort of overwhelmed him."[106] By 1925 Disney was beginning to sense in animation opportunities of a kind that he might have thought existed only in live action. To seize those opportunities was, however, a forbidding task for a filmmaker not yet twenty-four years old. Moreover, Disney was surrounded by people who were concerned with opportunities of other kinds.

After Harman and Ising moved to Los Angeles, they and Disney "were together practically every night of the week," Ising said.[107] Harman remembered the same sort of camaraderie, rooted in everyone's intense interest in the cartoons: "We would do nothing after dinner but start thinking of stories and acting them out."[108] The three men shared not only youthful enthusiasm (both Harman and Ising were born in August 1903, not quite two years after Disney) but also youthful ambition. Harman and Ising were just as determined as Disney had been to go into business for themselves. In August 1925, barely six weeks after they joined Disney's staff, Ising wrote to their friend Ray Friedman in Kansas City: "We think that in a year we will be able to begin production on our own pictures with the experience and information we are gaining here."[109]

Disney's staff was thus a fragile asset; so was his relationship with Winkler Pictures. Margaret Winkler had married Charles Mintz in November 1923, shortly after making her deal with Disney, and within a few months, it was Mintz, rather than Winkler, who was corresponding with Disney, usually in a harsh, hectoring tone. Disney was increasingly important to Winkler Pictures in the middle twenties, when it lost first the Inkwell cartoons and then Felix, and that may have been why Mintz browbeat him so mercilessly. From the start, the final editing of the Alice Comedies was done not by Disney but by Winkler Pictures; it was as an editor that Margaret's brother George spent at least part of 1924 at the Disney studio, and Mintz told Disney in October 1925 that it was to George Winkler that he owed his studio's survival.[110]

By then, though, the balance of power had started to shift. In a 17 November 1925 letter, Mintz lectured Disney about how single-reel subjects were failing. A week later, he took exactly the opposite tack: he was trying to talk Disney into waiting for his share of

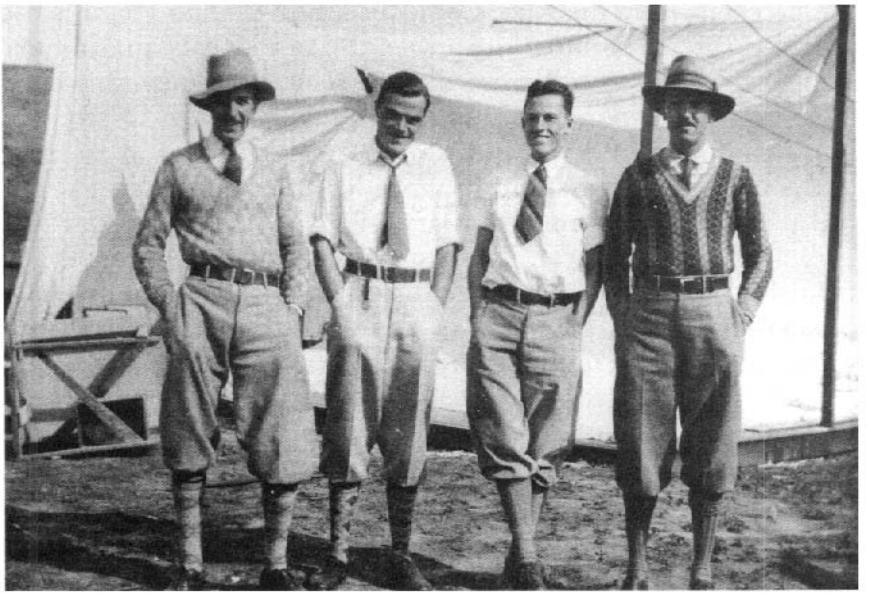
the proceeds from the Alice Comedies until Winkler Pictures had received fifteen hundred dollars on top of its costs, and he told Disney that substantial grosses were assured. Disney—his backbone stiffening—persisted until Mintz finally agreed to give him more money.

Disney could now afford to move to larger quarters—and did, on a rainy day in mid-February 1926, to a building at 2719 Hyperion Boulevard, on the eastern edge of Hollywood.[111] The furnishings of the new studio reflected the Disneys' tentative new prosperity. "Walt's office looks like a bank president's loafing room," Ising wrote to his family two months after the move.[112]

Disney had started giving his animators a bonus for finishing a cartoon in two and a half weeks, but when they earned the bonus on six films in a row, he wanted to put them on a two-week schedule.[113] Such irritants did nothing to discourage Harman and Ising from pursuing their own ambitions. By the summer of 1926, they were approaching distributors about getting their own release. They expected to hire away Disney's other two animators, Iwerks and Rollin Hamilton. "This will leave Walt in a mellavahess [*sic*]," Ising wrote to Max Maxwell, "but business is business."[114] When the Disney studio closed for vacation in September 1926, Harman and Ising, working with Iwerks and Hamilton, made a second Arabian Nights cartoon, *Aladdin's Vamp*, in offices they had rented for two weeks.[115] (The cartoon, which miraculously still exists, has a cast made up of cats.) They were no more successful than before in finding a release.

Harman and Ising were going to pay Iwerks seventy-five dollars a week, or twenty-five dollars more than they planned to pay themselves. Iwerks had become a sort of West Coast equivalent of Frank Moser, the fabulously fast New York animator, but he was not merely fast, he also created patterns of movement that less dexterous animators could follow. Ising did not animate on his own at Disney's but instead followed Iwerks's layouts, which indicated how a character should move across the screen by means of circles for the head and a line for the tail "and maybe some of the feet," plus an occasional drawing of the full figure, all on a single sheet of paper. Ising used that sheet as his guide as he made multiple animation drawings: "You just followed the lines that he had already put in."[116]

Iwerks's influence is clearly visible in a film like *Alice the Fire Fighter*, released in October 1926. Its cycle animation is strikingly proficient, if just as strikingly obvious. Here, though,



Walt Disney and the three principal members of his staff pose around 1926 at the outdoor set where the live action for the Alice Comedies was filmed. From left: Walt Disney, Rudy Ising, Hugh Harman, and Ub Iwerks. ©Disney Enterprises, Inc.; courtesy of Rudy Ising.

Disney used that mechanical quality to advantage. Julius—or one of a large number of identical fireman cats—takes a puppy from the window of a burning building; he hurls the "rescued" dog four stories to the ground, then does it again and again, with two more unfortunate mutts. The rhythm the cycle animation establishes—its very matter-of-factness—actually enhances the comedy.

The comedy in the Alice Comedies continued to be more often rough and even cruel, based on physical damage rather than witty transformations of the Felix kind. There was growing evidence within the films themselves, though, that what was involved was less a failure to comprehend what Messmer was doing than a rejection of it. Disney was groping toward some alternative kind of animated comedy. Rudy Ising recalled that the Winklers encouraged Disney "to study Felix and get some of that funny stuff. You know, he would take the top of his head off, and an idea would come out, or his tail would go up and form a question mark. We all thought that was kind of corny."[117]

For all the traces of personality that Felix showed, Otto

Messmer never let his audience forget that Felix was as artificial as his environment. Felix's appeal was always based not on disguising that artificiality but on how cleverly Messmer manipulated it, in particular, by turning Felix's body into a sort of infinitely versatile Swiss army knife. Since the turn of the century, though, live-action filmmakers had shown an ever stronger desire to create an illusion of reality, and Disney—who could very well have gone into live action after he moved to Los Angeles—was at heart a member of their camp. Thus he treated his characters not as assemblages of detachable parts, in the Felix manner, but as organic wholes, even when the results were unfortunate. In *Alice's Brown Derby*, released in December 1926, a dog groom kneads a horse's stomach exactly as if it were dough, finally knotting the flab and snipping off the excess; such a "gag" invites a kinesthetic response, and not a pleasant one.

Clumsy gags of that kind were common in the Alice Comedies of 1926, but the clumsiness was starting to vanish by the next year. Only about half of the fifty-six Alice Comedies have survived, and many of the missing titles are concentrated in 1927, but *Alice's Circus Daze* (released in April of that year) shows that by then Disney and his animators could bring off even relatively complex gags and animation. When the cartoon first reveals the three rings of the circus (after some gags outside the tent), they are aswarm with activity—in cycles, yes, but *elaborate* cycles.

By the time that cartoon appeared, Disney had already shifted to production of a new series, this time for distribution not by a small-time states-rights operation but by Universal, which was, if by no means as grand as Paramount or Metro-Goldwyn-Mayer, nonetheless a full-fledged Hollywood studio. Winkler Pictures was still the middleman, however: it was not Walt Disney but Charles Mintz who signed a contract with Universal on 4 March 1927, for twenty-six cartoons with a new character to be called Oswald the Lucky Rabbit.[118]

Rudy Ising was involved only briefly with the Oswald series: Disney fired him late in March 1927. "I'd go to sleep on the camera," Ising said, "and a couple of times I went to sleep with my hand on the button, and Walt got mad about it." But, he said, he planned to leave soon anyway.[119] Harman and Ising had continued to pursue a release of their own. In January 1927, they had written to Maxwell that they felt "quite confident of securing a contract, as we are corresponding with Metro Goldwyn, Fox, Universal and Paramount."[120] Ising wrote to his sister that month

that he and Harman had "a secret shop all equipped and can start immediate production on our own pictures."[121]

There's a clue to his colleagues' disdain for Disney in a letter Ising wrote in June 1927, three months after Ising himself had left the studio's staff, but while Harman and another Kansas Citian, Isadore "Friz" Freleng, were still there: "He is still trying to make us [*sic*] think he is overpaying us and that we have a lot to learn."[122] Freleng, who had worked with Harman at Kansas City Film Ad, had joined Disney's staff in January 1927, taking Rollin Hamilton's place. Hamilton had left, Freleng said, "because he couldn't bear the abuse that Walt heaped upon him."[123] (Hamilton returned to the staff in May 1927, though, to work with Harman on the Oswalds.) Freleng, in his account, became the target of the abuse that Hamilton had once received. "I made mistakes," Freleng said almost fifty years later, his resentment still very much alive, "and Walt—even though he expressed patience in his letters prior to my joining him—didn't show any. He became abusive and harassed me."[124]

The Disney studio in the late twenties was from all appearances not a particularly pleasant place to work. Harman spoke in 1973 of pressure to turn out animation and concomitant pressure from Walt Disney to simplify the drawings. Iwerks increased that pressure, he suggested, through his great facility: "Before you knew it, within a half hour, he would have maybe twenty or thirty drawings of Oswald, running off into perspective. All he had drawn [beforehand] was perhaps a guideline like this and another one like that—careless sweeps."[125] Iwerks was that great rarity, an animator who could work straight ahead without losing control of his animation (perhaps thanks in part to guidelines of the kind Harman mentioned). His resistance to working like most other animators, with extremes and inbetweens, was a source of continuing friction between him and Walt Disney, who, like the Fleischers with Dick Huemer, wanted his strongest animator to spread his work thinner. Ben Clopton, who started at the studio in February 1927, began working under Iwerks around the time that production of the new Oswald series began, and it was then, or soon thereafter, that Iwerks started leaving inbetweens for an assistant to draw.[126]

Only nine of Disney's twenty-seven Oswald cartoons have survived, and not all of those are accessible, but seven of the extant films are, in their general contours, very much like the surviving Alice Comedies from 1926 and 1927. There is more dismember-