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CLASSICAL CEL
ANIMATION,
WORLD WAR II,
AND *BAMBI*

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The word animation derives from *anima*, meaning “breath” or “soul,” and *animare*, “to give life to.” Animation creates the *illusion of life*, and it does this through movement. There are two distinguishing characteristics: First, the image is photographed on film frame by frame, and second, in consequence the illusion of motion is *created* cinematically rather than recorded. In animation, a special camera is used that can photograph one frame at a time. Between exposures, the animator incrementally moves an object: It may be cels, puppets, clay, sand, or paper cutouts, but the basic principle is that the illusion of motion is constructed *cinematically*. That is, rather than photographing something that is already moving, movement is created *in the camera* through stop-motion photography, or the photographing of an object frame by frame (Solomon 1994, 5, 9–12).

Just as drawings in flip-books also seem to move when we flip the pages, we perceive motion in a succession of rapidly projected still images. Nineteenth-century curiosity items and optical toys like praxinoscopes, thaumatropes, and zoetropes¹ were the product of this fascination with the novelty of motion, and were the precursors of animated film. Early filmmakers like Albert E. Smith (*The Humpty Dumpty Circus*, 1898?), James Stuart Blackton (*The Haunted Hotel*, 1907), and Edwin S. Porter (*Fun in a Bakery Shop*, 1902) created “trick” films with stop-motion photography, which seemed to make simple props and objects move.

Genre and Mode of Production

Animation comes in many possible styles and modes, as it can be lyrical, abstract, poetic, experimental, or nonnarrative. It can be in short or feature-length form, and be made by large studios or by independent and experimental artists, like

Canadian-American Caroline Leaf (1946–), who “paints with sand,” or German Lotte Reiniger (1899–1981), who animated extraordinarily delicate paper cutouts or silhouettes, or the American twin brothers Quay (1947–), who work with strange dolls, puppets, and found objects. Animation has drawn upon oral folklore and fairy tales, in the rich puppet animation of Poland, Russia, and the former Yugoslavia and Czechoslovakia. Japanese manga (graphic novels) are the source for anime feature films like *Akira* (Otomo, 1988) and *Ghost in the Shell* (Oshii, 1995). Although animation also includes pinscreen² animation, stop-motion animation, direct or scratch-on-film, and 3-D puppet and clay animation, by the 1910s cel and paper animation already dominated the form (Furniss 2008, 16). Cel animation (today largely displaced by computer animation) is so called because animators draw objects, subjects, and backgrounds on separate sheets of transparent celluloid acetate sheets called cels (patented by Earl Hurd and J. R. Bray in 1915), which are laid on top of one another in order to save time in an extraordinarily labor-intensive medium (one second of film can equal 12–24 individual drawings).

Animation’s precursors date back to the earliest examples of human art in the cave paintings of Lascaux and Altamira, which suggested motion through the segmentation and duplication of animal limbs in prehistoric cave paintings of hunters and prey. Animation also has links to Egyptian hieroglyphics, which created meaning through sequential drawings. Perhaps its strongest roots are in the eighteenth-century graphic tradition of illustration, caricature, and satire of British artists like Thomas Rowlandson (1756–1827), William Hogarth (1697–1764), James Gillray (1757–1815), and George Cruikshank (1792–1878), and nineteenth-century artists like John Tenniel (1820–1915), who illustrated Lewis Carroll’s *Alice in Wonderland*, and Wilhelm Busch (1832–1908), a German graphic artist and poet whose *Max und Moritz* (1865) series directly influenced Rudolph Dirks’s *Katzenjammer* comic strip and Hearst’s later animated film series. Many early animators like John Randolph Bray, Winsor McCay, and Max Fleischer were newspaper cartoonists or commercial illustrators. Animated cartoons in the teens and twenties were gag-based, and drew from graphic conventions of the comic strip and political cartoon with speech bubbles, dotted point-of-view lines, and simple symbols like a light bulb for an idea, or footprints for motion. Some of the earliest animated films like James Stuart Blackton’s *Enchanted Drawing* (1900) and *Humorous Phases of Funny Faces* (1906), or Winsor McCay’s *Gertie the Dinosaur* (1914) were influenced by vaudeville or traveling fairs in which the artist quickly created drawings on paper or blackboard called “lightning sketches.” Many animated cartoons capitalized on the popularity of preexisting comic-strip characters, like Winsor McCay’s Little Nemo, E. C. Segar’s Popeye, Bud Fisher’s Mutt and Jeff, Andy Capp’s Li’l Abner, or George Herriman’s Krazy Kat and Ignatz Mouse. Capitalizing on this popularity, the newspaper publishing magnate William Randolph Hearst (1863–1951) established an animation department as part of his film studio, International Film Service, in 1915, and converted many of his comic strips into animated cartoon series. The relationship also works the other way: For

example, Disney's Mickey, Warner Bros.' Bugs Bunny, Daffy Duck, and Porky Pig, and Otto Messmer's Felix the Cat all became popular comic-book characters as a result of their initial theatrical success.

As the film industry shifted to an industrialized assembly-line system in the teens, so too did animation. As Donald Crafton has shown, the labor-intensive nature of animation (at sound speed of 24 fps, generally 12 drawings, each photographed twice, are used to produce one second on-screen) meant that 720 individual drawings (60 × 12) were needed to produce one minute on-screen. This meant that pioneer artisans like Émile Cohl in France, McCay in the United States, and Ladislav Starevich in Russia were replaced by animation studios created by Bray, Hearst, and French-Canadian Raoul Barré, whose mass-production requirements necessitated division and specialization of labor (Crafton 1982, 137–168). In 1914, Bray established the first animation studio, and Barré created the first animated cartoon series with *Colonel Heeza Liar in Africa* (1913) (Beck 2004, 89–90). Early inventions like Hurd's cels simplified and streamlined the production process, because, unlike paper, they were more durable and could be reused. Barré's development of a "peg and punch" system aided the precise registration of thousands of drawings (preventing the image from wavering), and his "slash and tear" method was a competing timesaver method to Hurd's cels, using a paper cutout that also reduced the need to redraw backgrounds. Animating on "twos" or "threes," or rephotographing every second or third drawing, reduced the total number of individual drawings by a third to a half (thus 480 or 720 drawings created one minute of action). All of these devices were labor-saving techniques designed to aid the animator in an assembly-line system.

Kristin Thompson suggests that with the decline of live-action films' novelty value beginning around 1907, cartoons replaced them in this function. Whereas live-action moved toward an emphasis on stars, narrative, genre, and ever-greater realism, animation stressed the cinema's magical qualities. Many cartoons self-reflexively foregrounded the process of their own creation, or what Crafton calls "self-figuration" (1982, 347), with cartoon studios of the teens and twenties developing cartoons that mixed live-action and animated forms – Walter Lantz's *Dinky Doodle* series showed animator Lantz interacting with Dinky, while the Fleischer Bros.' *Out of the Inkwell* (1919–1926) series began with Koko the Clown leaping out of a bottle of ink to play pranks on a live-action Max Fleischer. By contrast, Walt Disney's Alice series (1924–1927) featured a live-action girl interacting with an animated universe.

For much of the history of cel animation in the United States, comedy has been the dominant genre with the gag, metamorphosis, and slapstick predominating in the early silent and classical sound eras. By 1914, with Winsor McCay's *Gertie*, personality animation emerged and, by the 1930s, led by Disney, story would increasingly replace episodic gags, although formulae like the chase continued to be important. Pioneers in personality animation included Messmer (Felix the Cat) and the Fleischer Bros.' Koko the Clown and Bimbo. With the coming of sound to

the film industry, musical cartoon series featuring popular musical forms like jazz, swing, the rumba, and samba proliferated in the early 1930s and included the Silly Symphonies (Disney), Looney Tunes and Merrie Melodies (Warner Bros.), Happy Harmonies (MGM), and the Swing Symphonies (Universal/Walter Lantz) series.

Disney's Impact on the Art Form

Disney's third Mickey Mouse cartoon, *Steamboat Willie* (1928), has often claimed the title of first synchronized sound cartoon, although this rightfully belonged to the Fleischer Bros.' first Song Car-Tune *Oh Mabel!* (1924). The Fleischer Bros.' *36 Song Car-Tunes* (1924–1927), including 19 De Forest sound-on-film cartoons first called Ko-Ko Song Car-Tunes, created a moving ball that bounced over the lyrics of a popular song, with which the audience was invited to sing along (these were renamed in 1929 as the "Screen Song" series). The Fleischers continued to innovate with the Betty Boop cartoons of the 1930s, featuring musical songs sung by their eponymous heroine, with guest stars like Cab Calloway in *Minnie the Moocher* (1932), *Snow White* (1933), and *The Old Man of the Mountain* (1933), and Louis Armstrong in *I'll Be Glad When You're Dead, You Rascal You* (1932). The Fleischers recorded their soundtracks after the animation whereas the Disney studios created the soundtrack first. Disney's character Oswald the Rabbit (1927–1928), and the first (silent) Mickey cartoon *Plane Crazy* (1928), as well as *Steamboat Willie*, were all animated by Ub Iwerks, who was one of his most important creative collaborators and who also animated the first Silly Symphony *Skeleton Dance* (1929). Although Disney was not the pioneer in sound or color it has often claimed to be, the studio was a leader in using these new elements. It also pioneered the use of storyboards (the first form of a visual script to break down and plan action) in the early Mickey Mouse cartoons. Meanwhile at Warner Bros., Rudolf Ising and Hugh Harman developed a pilot sound cartoon, *Bosko the Talk-ink Kid* (1929/1930), which led to a contract with Leon Schlesinger to provide cartoons to Warner Bros. *Sinkin' in the Bathtub* (Harman/Ising, 1930) launched the Looney Tunes series, and the Merrie Melodies series followed in 1931, both designed to promote the Warner Bros. sound catalog.

Among Disney's most important competitors were the Fleischer Bros. The technical inventions of Max Fleischer included the rotoscope (1915, patented 1917), which involved the tracing of live-action photography onto cels to capture realistic motion (used extensively in their first feature, *Gulliver's Travels*, 1939) and the stereopticon, or setback (1933), a device to enhance three-dimensionality. This enabled the insertion of cels in front of, or into, a 3-D model set, which could be rotated on a turntable, and it was used extensively in the Popeye featurettes of the late 1930s (*Popeye the Sailor Meets Sindbad the Sailor*, 1936). European animators like Lotte Reiniger, however, had preceded the Americans in experimenting with depth.³ Meanwhile at Disney, a team led by William Garity conducted early tests with the multiplane camera in *Three Orphan Kitties* (1935), and then *The Old Mill* (1937) (Smith

1987). The multiplane camera was a vertical (and later horizontal) camera system that allowed the camera to track downward past layers of paintings on sheets of glass that could move independently toward or away from the camera, in order to create the illusion of depth. It would later be used to masterly effect in features like *Snow White and the Seven Dwarfs* (1937), *Pinocchio* (1940), and *Bambi* (1942).

Where Disney was known for its bucolic and pastoral *mise-en-scène*, Fleischer cartoons of the 1930s and 1940s (and later those of Warner Bros. and MGM) were brashly urban, with stories set in factories, skyscrapers, nightclubs, and bars. The approach to storytelling varied as well, with Disney favoring a childlike innocence that was mocked in cartoons like Warner Bros.' *A Corny Concerto* (1943), which parodied *Fantasia* (1940), or MGM's *Swing Shift Cinderella* (1945), which made fun of Disney's earnest adaptations of fairy tales. The Fleischer Bros.' Betty Boop series addressed adult viewers, alluding to sexual desire, prohibition, and homosexuality. Even the death penalty was a pretext for a gag with the electric chair in *Betty Boop for President* (1932). Fleischer cartoons articulated social anxieties around sex, prostitution, unemployment, gambling, and vice, and would influence the adult humor of Warner Bros.' animation of the 1940s.

By the 1930s, Disney was pioneering a shift away from the dominant aesthetic of the 1920s, called *rubber hosing* (in which bodies and limbs of characters were like balloons or rubber hoses and could expand and contract at will), and toward a new technique called *squash and stretch*, in which characters had three-dimensionality and consistent volume and weight. The other major technological and formal innovations of the 1930s were the introduction of sound and three-strip Technicolor. While Bray had led the field with the earliest cartoon in color with *The Debut of Thomas the Cat* (1920) in the Brewster Color process, a British puppet cartoon, *In Gollywog Land* (F. Martin Thornton, 1912/1916), made in Kinemacolor, has also been claimed as the first color cartoon.⁴ With an exclusive three-year agreement with Herbert and Nathalie Kalmus's Technicolor Corporation, Disney introduced three-strip Technicolor (which combined red, green, and blue) in its Academy Award-winning short *Flowers and Trees* (1932), while the other studios had to content themselves with two-strip Technicolor (red and green) until 1934. Disney's first animated feature, *Snow White and the Seven Dwarfs*, featured a more discreet palette compared to the later *Fantasia*. Whereas, until the 1960s, color in live-action cinema was largely confined to travelogues, musicals, and costume and fantasy pictures like *The Adventures of Robin Hood* (1938), the animation industry led the way in color's generic association with fantasy.

Changes in the 1940s Cartoon: Speed and Sex

One of the major changes by the 1940s was the introduction of the screwball character (Woody Woodpecker, Bugs Bunny, Screwy Squirrel) and the extraordinary acceleration in narrative pacing and comedic speed pioneered by Tex Avery, first at

Warner Bros., and then at MGM, where he moved in 1941. Animators like Avery, Bob Clampett, and Frank Tashlin at Warner Bros., and William Hanna and Joseph Barbera at MGM, made cartoons that were self-reflexive, hyperbolic, and full of sexual innuendos, and their hallmarks were absurdity and speed. Avery's cartoons were known for their direct address to the viewer, with characters who held up signs that commented on the action, or other characters with phrases like "Silly, isn't he?" Fred "Tex" Avery was an enormously influential animator. As Avery noted: "I found out that the eye can register an action in five frames of film. ... Five frames of film at twenty-four a second, so it's roughly a fifth of a second to register something, from the screen to your eye to the brain" (Maltin 1987, 296). Avery's insight into the speed with which spectators can understand and process visual information shows he was a pioneer for the subliminal editing and breakneck narrative strategies that are the norm today. Humor and cynical sophistication were also hallmarks of Avery's work. World War II led to a partial relaxation of the Production Code, or Hollywood's self-censorship system, with more sexual jokes in cartoons, especially in those made exclusively for soldiers. However, even for the homefront audience, cartoons became more risqué. Avery's Woolfy and Showgirl series at MGM featured the sexual chases of a "Wolf" who exhibits various exaggerated expressions of sexual desire and appreciation for a showgirl (animated by Preston Blair), including erection jokes, such as the Wolf turning into a torpedo or a stiff cardboard figure, or hitting himself on the head with a mallet in his sexual excitement. In the Wolf series, Avery took reaction shots (called takes or extremes) further than any other animator, beginning with *Red Hot Riding Hood* (1943), followed by *Swing Shift Cinderella*, *Wild and Woolfy* (1945), and *Little Rural Riding Hood* (1949). Avery's influence is evident in a Tom and Jerry cartoon *Mouse Cleaning* (William Hanna and Joseph Barbera, 1948) where Tom's eyeballs disconnect from his head in an exaggerated take. Avery's satiric reinventions of traditional children's fairy tales as adult tales of male desire run amok, together with his hyperbolic formal experimentation and direct address, have influenced films like *The Mask* (1994) and *Who Framed Roger Rabbit* (1988), and contemporary animation like *South Park* and *The Simpsons*.

Animation and War

Propaganda, according to Webster's dictionary definition, is "the spreading of ideas, information, or rumor for the purpose of helping or injuring an institution, cause, or person." In other words, propaganda is always *tactical and strategic*, that is, it has specific goals. Like the rest of the film industry, animation studios soon shifted production toward the war effort after the United States declared war on Japan and Germany in December 1941. Hollywood features, newsreels, cartoons, and other shorts promoted a number of specific goals. These included: (1) clarifying why Americans were fighting, through a contrast between democracy and

fascism; (2) promoting patriotism and solidarity with American allies, especially the British and French; (3) instilling a hatred of the enemy and challenging lingering currents of isolationism; and (4) encouraging Americans to do specific things – pay their taxes (*The New Spirit* and *Spirit of '43*, both Disney); buy war bonds (*Any Bonds Today*, Warner Bros.; *Seven Wise Dwarfs*, Disney); ration food (*Point Rationing of Foods*, Warner Bros.); recycle (*Weakly Reporter*, Warner Bros.); grow vegetables in “victory” gardens (*Barney Bear's Victory Garden*, MGM; *Ration Fer the Duration*, Fleischer Bros.); watch for spies and avoid gossip (*Spies* and *Rumors*, both Warner Bros.); and support the first peacetime draft initiated in 1940 (*Draftee Daffy* and *Draft Horse*, both Warner Bros.). While men were away at war, women took over traditional male jobs from driving taxis to factory work, and many cartoons acknowledged these social changes or used them as gags. For example, Tex Avery's modernized fairy tale *Swing Shift Cinderella* ends with Cinderella as a Bette Davis caricature catching the bus to the “Lockweed 12 o'clock aircraft shift.”

Created in 1942, the First Motion Picture Unit (FMPU, known as “Fumpoo”) or 18th Air Force Base was led by Rudolf Ising and was based at Culver City (Solomon 1994, 113). Like the Signal Corps unit in Dayton, Ohio, with 150 photo retouchers, FMPU's staff of 125–150 men combined limited animation, recycled cartoons, and live-action photography as cheap strategies to increase production and churn out training and propaganda films. For example, *The Thrifty Pig* (1941) was a recycled version of *The Three Little Pigs* (1933) with a Nazi wolf trying to blow down a brick house reinforced with war bonds. Disney's production increased an extraordinary amount: from 37,000 feet before the war to 204,000 feet at the end of the fiscal year 1942–1943, with 95 percent dedicated to the war effort (and this with a third of Disney's original staff drafted) (Solomon 1994, 119). Actors like James Stewart and Clark Gable volunteered for the Air Force or Army, and so did animators. In addition to FMPU and the major animation studios (Warners, Disney, Fleischers, MGM, Columbia, etc.), independent animation contractors like former Disney animator Mel Shaw and former MGM director Hugh Harman also competed for war contracts. By the mid-1940s, major studios were devoting most of their workloads to projects for the US Army, Navy, and Air Force.

Like the rest of Hollywood, animation studios turned over some of their physical plant for War Department needs and devoted production to war-related matters. The Army billeted men in the Disney studios and stored ammunition for the defense of the California coastline there. Disney animators designed free cartoon logos for 1,400 civilian and military units, with many of them featuring Disney characters – the most popular of which was Donald, who appeared on 25 percent of the logos (Solomon 1994, 117–119). Walter Lantz studios did the same with logos featuring their stars Andy Panda and Woody Woodpecker.

Wartime animation was of two principal types: either the explicit propaganda short or those animated films that made incidental or passing references to the war. Disney led the first category with earnest propaganda cartoons, including *Education for Death: The Making of a Nazi* (Clyde Geronimi, 1943) – a *Bildungsroman*

of a young German boy, Fritz, growing up, becoming indoctrinated, and joining the Nazi war machine. Also directed by Clyde Geronimi in 1943 was *Chicken Little*, a barnyard parable about a fox, Foxy Loxy, who wants to get into the henhouse. He reads from a “Psychology” book (originally titled *Mein Kampf*), quoting: “If you tell ‘em a lie, don't tell a little one, tell a big one.” Indeed, animal allegories like Warner Bros.' *The Ducktators* (1942) were among the simplest ways to refashion fables or fairy tales (which already contained moral lessons or warnings) with war-time messages about the threat of fascism or demagogues. Parables in cartoons had also appeared before the United States joined the war, the most notable of which was MGM's Academy Award-nominated *Peace on Earth* (Hugh Harman, 1939), a Christmas fable in which Grandpa Squirrel tells his grandchildren how human beings ended up wiping themselves out through endless war. This allegory about the human proclivity for violence and destruction would be picked up more obliquely in the ominous figure of “man” in *Bambi*, as we will discuss below.

The second category of cartoons, or those which made passing or incidental references to the war, included many allusions to blackouts, “no unnecessary travel,” and the rationing of meat and other luxuries, as with Bob Clampett's *Coal Black and de Sebben Dwarfs* (Warner Bros., 1943), a parody of Disney's feature *Snow White and the Seven Dwarfs*, which replaces the film's white characters with black racial caricatures. In Clampett's version, the “Wicked Queenie” is rich in scarce wartime goods: white-walled tires, coffee, and sugar. She hires Murder, Inc. to “black out So White,” and their van has the racial sight “gag” “We rub out anyone, \$ 1. 1/2 price midgets. Japs free.”

Although films like *Peace on Earth* and *Education for Death* adopted a serious tone, many more propaganda cartoons used comedy as a strategy to disarm audiences. Donald Duck in *Der Führer's Face* (1943) dreams he lives in Nazi Germany and is an assembly-line worker in a munitions factory. Like Chaplin in *Modern Times* (1936), Donald can't keep up with his workload. As he struggles to keep saluting (“Heil Hitler! Heil Hitler!” he quacks repeatedly to Hitler's portrait) while simultaneously screwing on the tops of bombs, he eventually becomes entangled in the production line. All the while, anthropomorphized fascist loudspeakers yell at Donald to work faster or to take an enforced (20-second) vacation. *Der Führer's Face* featured marvelous surreal sequences which, like the earlier “Pink Elephants” sequence in *Dumbo* (1941) and the riotous musical climaxes in *Saludos Amigos* (1943) and *Three Caballeros* (1945), were rare departures from Disney's dominant aesthetic of verisimilitude.

Many wartime cartoons used language as a comedic device, exaggerating the speech patterns of Adolf Hitler who speaks a pseudo-German (as in Tex Avery's *Blitz Wolf*, 1942), just as Charlie Chaplin parodied Hitler with a spluttering Adenoid Hynkel in *The Great Dictator* (1940). Caricatures of enemy leaders like Hitler, Benito “Il Duce” Mussolini, or Emperor Hirohito, or political or military figures like Hideki Tojo, Joseph Goebbels, or Hermann Göring, frequently appeared with exaggerated physical features, implying negative character traits (Goebbels was often small, weasel-like, and green, Mussolini was a burly buffoon and a braggart).



36.1 Donald Duck dreams he is a Nazi worker in Jack Kinney's *Der Führer's Face* (1943, producer Walt Disney). (Image enlargement.)

Racist attitudes and stereotypes also shaped differences in caricaturing the enemy, with the Italians and Germans being treated quite differently from the Japanese. Thus, Mussolini and Hitler were usually shown as buffoons speaking a nonsensical Italian ("tutti-frutti") or German in *The Ducktators*, a barnyard parable with Hitler, Tojo, and Mussolini as ducks, but the Japanese were repeatedly caricatured in racial terms, often with large glasses and protruding teeth; as Popeye describes them, they are "slant-eyed, buck-toothed, yellow-skinned Japansies" in *You're a Sap Mr. Jap* (1942), and appear in similar fashion in *Tokio Jokio* (1943). *Bugs Bunny Nips the Nips* (1944) is typical of deeply embedded white American racial attitudes. Bugs washes up on a Pacific Island and finds Japanese soldiers quartered there. Pretending to be a Good Humor ice cream salesman, he hands out grenades to them disguised as popsicles, saying "here's yours, bowlegs, here's one for you monkey face ... Here ya are slant eyes."

In other words, animation was a disarming and deceptively entertaining system to convey specific dominant ideologies, whether in the form of demeaning racial caricatures or to exercise control and manipulation of the GI and the home front. Animation was especially useful in training soldiers in particular skills and had already been used in World War I.⁵ And while many training films were largely in live-action, the use of animation for select sequences was a visually simple way to communicate highly technical, yet vitally important, information (because it could

save lives), often to soldiers with limited education and literacy skills. It gave advice on the care and maintenance of weaponry (*Gas, Fighting Tools*), suggested survival strategies for the battlefield, explained how to identify enemy warplanes or boats, and warned GIs about booby traps (*Booby Traps*) and Axis spies (*Plane Daffy, Spies*). It stressed the importance of keeping one's gun clean and one's mouth shut (*Spies, Rumors*), and taking one's malaria shot (*The Winged Scourge, Private Snafu vs. Malaria Mike*). A training film like *How to Fly a Lazy Eight* stressed the importance of pilots turning slowly when flying a figure eight (or else the plane would stall, leading to a potentially fatal situation), and FMPU used Mae West's voice and caricature to convey the message with humor and sexual innuendo. Disney made over 200 training films in the course of World War II, such as *Stop That Tank* (1942), which taught soldiers through a mixture of animated and live-action sequences how to use a particular antitank weapon. It opened with an animated Hitler speaking the usual comedic German (spluttering words like "sauerkraut") in a little tank. The effectiveness of the antitank gun eventually sends Hitler down to hell, where he throws tantrums, and the Devil mockingly tells us, "he says he's being oppressed." Adopting the sexual allusions of many wartime cartoons, the cartoon ends showing a silhouetted soldier holding his rifle in his tent, observing that a rifle is like a woman – "It must be caressed and nourished." *Thunderstorms*, a black-and-white Disney training film commissioned by the Bureau of Aeronautics, showed pilots when they could fly into thunderstorms, and when they should fly around them. As always, these were quick, cheap productions, with Disney recycling weather sequences from *Bambi* in *Thunderstorms*.

Warner Bros. (through Leon Schlesinger Productions) made 26 cartoons between 1943 and 1945 featuring a GI character named SNAFU (an acronym, "situation normal – all fucked up") for the Army-Navy Screen Magazine film series for soldiers. These cartoons educated through comedy. Frequently, the stupidity of the series' protagonist, Private Snafu, led to his premature death or imprisonment in a POW camp, because he does not take appropriate precautions (*Booby Traps*). A number of the cartoons (*Gripes, Spies, Rumors*) were written by Theodor Geisel (Dr Seuss) and featured his distinctive rhyming schemes. Warner Bros. also made a similar Capt. Hook series for the Navy.

Many wartime cartoons featured cartoon stars like Donald and Daffy Duck as enlisted soldiers. Daffy Duck is terrified of a visit from the persistent little man from the Draft Board in *Draftee Daffy* (1945); Donald is grouchy about training marches in *Fall Out, Fall In* (1943); Pluto wants to join up in *The Army Mascot* (1942); while Popeye is a wartime sailor in *The Mighty Navy* (1941). Popeye and his can of spinach (a Fleischer addition to the Segar comic strip) was a metaphor for the industrial strength of wartime America, and the Superman series showed the superhero fighting against industrial sabotage, Axis spies, and fifth columnists in Fleischer cartoons like *Japoteurs* (1942) and *Secret Agent* (1943). Using stars like Bugs, Daffy, and Popeye suggested that they embodied vital wartime virtues like toughness, persistence, and determination; further, that these were uniquely American values, as with the

wisecracking coolness of Bugs Bunny, who is slow to anger but who also means business when he declares in his Brooklyn accent, "This means war!" (using Groucho Marx's famous phrase). Bugs suggests in *Super Rabbit* (1943) that citizen soldiers are the real heroes. He enters a phone booth, saying, "this is a job for a real superman," and exits dressed as a Marine. Historian Steve Schneider suggests that "Bugs Bunny has been loved for over a quarter of a century now, but he has never been loved the way he was during the war years. ... [He] was a symbol of America's resistance to Hitler and the fascist powers ... and it is most difficult now to comprehend the tremendous emotional impact Bugs Bunny exerted on the audience then" (1988, 181).

As for Daffy Duck, in his earliest incarnations in *Porky's Duck Hunt* (1937) and *The Daffy Doc* (1938), he was a screwball rather than a cantankerous character. Schneider suggests that Daffy's screwiness and impetuosity were ideologically useful:

the character became heroic, a blaze of unstoppable spirit useable for patriotic ends ... If the duck's lack of restraint permits him to do anything, let him do it against the enemy. (1988, 156).

For example, *Plane Daffy* (1944) spoofs the World War I fighter pilot genre and the classic femme fatale spy Mata Hari. Daffy Duck plays a courier pilot with a "military secret" who is determined to withstand the sexual wiles of "Hatta Mari, a gal who's a spy for the enemy Axis." We know she is a Nazi spy because in quick succession we see three rapid zoom-ins on swastika earrings, a swastika garter belt, and a swastika brooch on her shoes. The sequence is hilarious precisely because the swastikas are such overt signifiers. Hatta Mari has been responsible for the death of many a fighter pilot, including the unfortunate Homer Pigeon, who was easily seduced by her wiles. Determined to fight the Nazi femme fatale, Daffy says, "I'm the squadron woman hater! She won't get to first base, this Hatta Mari tomater!" Frank Tashlin humorously plays with abrupt changes in pace between extremely fast and very slow movement when Daffy speeds away from Hatta Mari, then leisurely climbs some steps (mickey-moused with single piano notes), then resumes his dash (with a smear of paint for blurred motion). The military secret turns out to be a piece of paper that says "Hitler is a stinker," and then caricatures of Göring and Goebbels pop up to say, "Ja, everybody knows that."

Cartoons were not always subtle in their ideological approach. The US Treasury commissioned Disney to make *The New Spirit* (1942) in order to explain why a massive expansion of taxation under Roosevelt was necessary to fight the war. It spawned a sequel, *The Spirit of '43*, in which Donald Duck is confronted by his good angel, a Scottish-accented figure who advises him to save his money and "fight the Axis by paying his taxes," but Donald also has a bad zoot-suit-wearing devil who encourages his spendthrift nature. The cartoon warns Donald and the audience that they need to remember the following dates (March 15, June 15, September 15, December 15), "when" as the cartoon's voiceover portentously announces, "every American should pay his or her income taxes, gladly and

proudly." It demands of the audience: "Will you have enough money on hand to pay your taxes when they fall due?" It urges: "Spend for the Axis, or save for taxes!" Warner Bros. was particularly dedicated to the antifascist fight and was the first studio to make anti-Nazi live-action films like *Confessions of a Nazi Spy* (1939), after a Jewish employee was beaten to death in 1936 in Berlin. Their cartoon *Russian Rhapsody* (1944) promoted solidarity with the Soviets, with a comical Hitler, speaking pseudo-German, going off in a plane to bomb Moscow. He is soon sabotaged by Russian gremlins who sing: "We are the gremlins from the Kremlin" (to the tune of a Russian folksong, "Orchechornya"). Hitler crashes his plane after the gremlins frighten him by wearing a mask of Joseph Stalin.

Disney first turned to feature film production for economic reasons. With the introduction of color and sound, his animated shorts became increasingly expensive, with costs outweighing profit. In addition, a shift to features allowed for greater character and story development and away from the limitations of gag-based comedy. Let's take a look now at a representative example of Disney's feature work with *Bambi*. Although Disney first conceived of *Bambi* as far back as 1935, even as he began work on his first feature-length animated film *Snow White and the Seven Dwarfs*, *Bambi* took five years to make.⁶ Delayed partially by the 1941 studio strike and the onset of war, it was preceded by the release of *Pinocchio* (1940), *Fantasia*, *The Reluctant Dragon* (1941), and *Dumbo*.

Bambi

Promoted in its trailers as "the world's greatest love story," *Bambi* premiered on August 8, 1942, and received three Academy Award nominations: Best Song ("Love is a Song"), Best Sound, and Best Musical Score. It lost money on its initial release, leading Disney to re-release *Snow White and the Seven Dwarfs* in 1944, but by 1947 with a re-release, it began to recoup its \$2 million cost.⁷ After *Snow White*, Disney wanted to make a feature entirely with animal characters. He once observed, "I'm a lover of nature. I respect nature very much. ... I feel that observing the habits of the creatures of nature, man can learn a lot."⁸ The film was based on Austrian Felix Salten's 1923 novel *Bambi: Ein Leben im Walde/A Life in the Woods*,⁹ and the central character's name was derived from the Italian word *bambino*, "little one." The innovations of this film were in two principal areas: (1) the stylized naturalism of the landscape backgrounds, with the environment of the forest and the meadow based on the impressionist paintings of inspirational artist Tyrus Wong; and (2) the stylized anatomical verisimilitude of the animal designs and motion. A strong believer in improving his animators' draftsmanship, Disney had paid his animators to attend the Chouinard Art Institute a decade earlier, and in 1932, he began studio art classes led by Don Graham. As part of Disney's educational training programs, animators also attended the lectures of Rico LeBrun, a painter who specialized in animals.

The animators initially drew from real deer, skunk, and rabbit models, but as these studio models rapidly became domesticated, the animators also turned to studying Maurice Day's documentary footage of animals and foliage in Maine and made trips to the Los Angeles Zoo. Drawing deer presented certain challenges, with their eyes on either side of the face, small chins, and the wide gap between eyes and mouth – the latter two elements being key ways to express personality in animation. Bambi's head is stylized, rounder than a real deer's head, and the eyes are exaggeratedly large to aid expression. The original deer of Salten's novel were changed from European roe deer to American white-tailed deer, and the character of Thumper was a Disney addition. Other innovations included complex establishing shots created with the multiplane camera, giving an extraordinary sense of depth to the forest mise-en-scène in expository establishing shots and specific sequences like "April Showers." Disney also sent two cameramen to Katahdin State Forest in Maine to shoot model footage of the deer and foliage for the animators (Grant 1987, 197), and David Whitely has also suggested that Yosemite National Park and its landmarks provided another important visual referent for the film (2008, 65–68).

Anthropomorphism and the Cycle of Life

Snow White and the Seven Dwarfs and the features that followed in the 1940s established a recurrent Disney theme: the separation, orphanage, or isolation of child from parent, whether it be Dumbo, who loses his mother to the circus, or Pinocchio, who is imprisoned by Stromboli and later taken to a Dickensian Pleasure Island where little boys are turned into donkeys. Similarly, Snow White has no mother, and her wicked stepmother the Queen seeks her death. When she flees into the forest, she discovers the Seven Dwarfs' cottage, which she initially assumes to belong to children, because their furniture is so small. She wonders if, like her, they have no parents; in turn, she becomes a mother for them, cleaning house and making the dwarfs wash their hands before dinner.

Sharing with the other features a theme of childhood loss, *Bambi* is a *Bildungsroman*, a portrait of the eponymous hero's physical and emotional growth to adulthood (including mating and reproduction), which includes his two anthropomorphized friends, Thumper Rabbit and Flower the skunk.

Part of this maturation process is the experience of loss and death, and one of the film's most powerful and traumatic scenes is the tragic loss of Bambi's mother (voiced by Paula Winslowe), who is shot in the meadow by "Man" the hunter. Original plans that included Bambi returning to find his mother dying in a pool of blood were scrapped as too gruesome, yet the mother's offscreen death nonetheless remains an emotionally devastating scene. The immensity of Bambi's loss is accentuated through acoustic and visual strategies: As Bambi searches for her, repeatedly crying "Mother," we hear a nondiegetic choir humming. The reality of



36.2 Anthropomorphized *Bildungsroman*: Thumper, Bambi, and Flower grow up together as friends in David Hand's *Bambi* (1942, producer Walt Disney). (Image enlargement.)

Bambi's now permanent isolation is intensified by the special effects of snow falling ever more densely in the foreground, which also softens the entrance of Bambi's father, as he delivers the dreadful words: "Your mother can't be with you anymore."

Bambi continued Disney's pioneering development of the animation of weather effects, expanding on techniques that he first experimented with in the 1937 Silly Symphony *The Old Mill*, with rain, wind, thunder, and lightning. When Disney shifted into features, he developed a new animation department called special effects, in which animators specialized in animating water or light or shadows. These artists created the striking shadows and subtle candlelight that mimicked live-action chiaroscuro cinematography, when the Wicked Queen transforms into an old hag in *Snow White*. They pioneered the realistic animation of water in the underwater scenes with Monstro the Whale in *Pinocchio*. In *Bambi* the pastoral mise-en-scène is the setting against which the characters grow and mature, and the special effects department created the extraordinary detail needed for the seasonal transitions from spring to winter, and expanded on water and light effects with innovations in the representation of snow and fire.

Another pioneering technique used in *Bambi* was the voice talent, which included actual children's voices for the animals: Bambi (voiced by four different actors at different ages, including Bobby Stewart, Donnie Dunagan, Hardie

Albright, and John Sutherland), Thumper (Peter Behn and the adult voices of Sam Edwards and Tim Davis), and Flower (Stan Alexander, and the adults Sterling Holloway and Tim Davis). Most famously, the distinctive voice of Thumper Rabbit was that of Peter Behn, a very young child whose comedic charm led to an expansion of Disney's anthropomorphic addition to the Salten story. Thumper is essentially a precocious, rambunctious little boy, whose name and tendency to thump his rabbit foot in excitement suggest his personality. His vivid character was a striking example of the studio's development of personality animation, which used subtle physical and facial details to convey individuality.

For example, when Thumper mocks Bambi's spindly attempts to walk as a young fawn, his mother intervenes. "Thumper!", comes a stern voice from off-frame. The camera pans left to reveal Mrs Rabbit. Like a contrite child, Thumper responds, "Yes, Mama." She sternly asks him, "What did your father tell you this morning?" Clearly, he has done this before (and not so long ago at that). With his eyes closed, Thumper recites as if from an oft-repeated lesson he has learned by heart, "If you can't say something nice ..." (He then pauses, almost forgetting the next part.) Taking a deep breath, with a twitch of the nose, he then recovers the thread, "don't say nothing at all." Physical behavior conveys a character's thought process and personality. As Thumper speaks, he goes slightly pink, puts his paws behind his back, and his ears go back. He starts to rotate his left foot in concentration, expands his chest as he pauses, and then opens his eyes and looks to his mother for approval at the end of his speech. These physical details help suggest a succession of emotions – the recalcitrance, embarrassment, contrition, and restlessness typical of a young child. As Milt Kahl, one of the four supervisors, noted in a lecture on this scene, "Peter Behn had trouble remembering the lines, so the animators used the hesitation, to suggest a similar one in the character: the main thing is that in this case you have fairly subtle ideas, but the changes of mood he goes through are strong enough to be successful" (Canemaker 2001, 141). Like human children, Thumper also doesn't like to eat his vegetables. He tells Bambi how much he loves eating blossoms, in preference to clover. Just as he is about to bite a blossom, Thumper's Mother again scolds. "What did your father tell you about eating the blossoms and leaving the greens?" As we hear these lines, Ollie Johnston enhances the comedy with a "hold" or freeze, with Thumper poised with his mouth wide open over his favorite blossoms.

Bambi's growth to adulthood, along with that of his friends, structures the narrative: He experiences the natural world with all its wonders (a rainstorm); he sees his reflection for the first time (which startles him); he goes ice-skating with Thumper in winter; and he meets Faline, with whom he will eventually mate. A major rite of passage in this pastoral *Bildungsroman* is the "Twitterpated" sequence where Bambi, Flower, and Thumper learn about springtime mating and the necessity to avoid it from Friend Owl (voiced by Bill Wright), who warns them: "nearly everyone gets twitterpated in the spring time." Despite the warnings, Flower falls in love with a female skunk, and a subtle erection joke follows. After she kisses him, Flower turns red, then stiff as a board, and falls over. A similar scenario develops with

Thumper, who spots Miss Bunny, the future Mrs Thumper. Here anthropomorphic details of her primping and preening, stroking her ears as if they were hair, plumping her cheeks, chest, and tail as if they were clothing (all the while humming to herself), transform the rabbit's behavior into recognizable human actions. Staging of the shots or the arrangement of the character in the space also accentuates certain details. Disney's shots mimic live-action editing, as we cut between reaction shots of a stunned Thumper and Miss Bunny, as she walks closer and closer to the (implied) camera, until her giant blue eyes dominate the frame, underscoring her mesmerizing quality. Thumper's arousal is an intense thumping of his foot, and again a subtle sexual pun follows where Miss Bunny touches his nose, and he collapses. Meanwhile, Bambi turns away in disgust, only to run smack dab into Faline, who now has matured into a young doe, and for whom he too becomes "twitterpated."

Dread and Death

Yet, lighthearted sequences like springtime mating alternate with scenes of dread in *Bambi*. The violence, death, and social displacement that Man the Hunter brings in the form of a forest fire could not but have reminded audiences of the world war then raging. Initially premiered in London in August 1942, *Bambi's* release in New York had been delayed by over a month with the extended run of another wartime melodrama, *Mrs. Miniver*, which, like *Bambi*, deals with the loss and suffering that war brings.

Bambi links a strong sense of dread with a specific space: the meadow that tempts the young deer with its openness and plenitude. Bambi's mother's quiet-spoken yet intensely serious voice helps establish this sense of dread, which prompts Bambi to slink back into the grass, ears back in fear, as she warns:

"You must never rush out on the meadow. There might be danger. Out there we are unprotected. The meadow is wide and open and there are no trees or bushes to hide us so we have to be very careful. Wait here. I'll go out first and if the meadow's safe, I'll call you."

To heighten the tension at this moment there is no nondiegetic score, and then strings and woodwinds play slow, isolated phrases that start and stop, mimicking the cautious actions of Bambi's mother as she advances into the meadow, ears cocked for signs of danger.

The meadow scene emphasizes that nature is not only a playground for the adventurous young Bambi and Thumper, but also dangerous and foreboding, and this dread comes largely from "Man," an ominous figure who is much talked of but never shown full-frame. Largely because of his success in evading Man, Bambi's father is noble; his longevity brings him respect and communal status. As Bambi's mother says, "of all the deer in the forest, not one has lived half so long. That's why he's known as the Great Prince of the Forest." Hence, Bambi's family is an

aristocracy of survival, and Bambi's own birth at the beginning of the narrative marks him as a celebrity, just as the birth of the adult Bambi's two baby fawns, which concludes the film, suggests that a new "circle of life" begins again (a theme renewed 50 years later in *The Lion King*).

As the "young Prince," Bambi must survive in order to mature, whether a battle with Ronno for his mate Faline, or a gunshot wound which, unlike his mother, he can overcome ("get up Bambi," urges his father). To survive, one must be extraordinarily cautious (skills taught by his mother), and even then, this does not guarantee life. Coolness under fire is required, and a scene with a quail shows the consequences of fear. When Man returns to hunt, the quail becomes hysterical with the tension, shrieking, "I can't stand it anymore!" Despite the other animals' warnings, she flies up and is shot. This scene intensifies the sense of dread we feel every time Man is spoken of ("Man – was in the forest"), for when the animals speak of him, it is in abstracting, emphatic terms – and we only see him metonymically as arms or feet. When Bambi grows into an adolescent, his father takes over his instruction. A large hunting party has arrived, and Bambi's father warns, "It is Man. HE is here again. There are many this time. We must go deep into the forest – Hurry!"

Wise counsel, because Man once again brings death, and Bambi must rescue Faline, who has been cornered by Man's hunting dogs. Man's carelessness with his fire leads to the inferno that sweeps the forest. A wide shot of the valley reveals the spreading forest fire, with crows circling in the sky. Panic follows, with all the animals (rabbits, chipmunks, squirrels, birds, deer) fleeing and seeking refuge on an island in the middle of a lake. We see anthropomorphized refugee mice, birds, raccoons, and possums with their offspring coming ashore, backlit against the blazing fire. For the audiences of the day, images of flames and refugees could not but remind them of the Blitz and wartime bombing, and those fleeing Nazi Germany.

The Musical and Domesticated World of Nature

Ted Sears, who worked on *Bambi* in story development, said: "I think we should get away from the book. I think we should look at it as a symphony based on the story of Bambi."¹⁰ So far, we have seen that *Bambi* typifies Disney's binary representation of nature as either terrifying, haunted, and violent or benign, domesticated, and anthropomorphic. One is a violent nightmare, where Man is in the forest and brings sudden death and fire; the other is a cozy playground of anthropomorphic animals who frolic in play and mating rituals among beds of flowers. Disney's 75 Silly Symphony cartoon shorts, made between 1929 and 1939, established this close relationship of the pastoral and the musical, as we see in *Winter* (1930) raccoons and rams go ice-skating, while a mouse plays icicles as if they were a xylophone. Flowers and fish dance to Pan's music in *Playful Pan* (1930), and in *Summer* (1930), caterpillars, dragonflies, and stick insects dance and play. As in *Steamboat Willie*, animals become musical instruments, playing one another as if they were drums or pianos.

In other words, if nature is sometimes cozily bucolic, with friendly rabbits and chipmunks who help Snow White with her domestic tasks ("Whistle While You Work"), it is always musical, and the domestic and the pastoral are frequently conjoined through the expository and atmospheric use of classical music. In *Bambi*, a symphonic structure narrates a film in which there is limited dialogue, introducing the deer community and the Great Prince. Through Bambi's eyes, we see and hear the herd on the meadow for the first time, as the nondiegetic score by Frank Churchill and Edward Plumb mimics the tempo and physical movement of the characters. String instruments mickey-mouse, or precisely mimic, the tempo, "shape," and rhythm of the playful prancing of the deer, and then Bambi also imitates their movement. French horns mark the magisterial entrance of Bambi's father. The symphonic score can also express dramatic conflict: As Bambi fights Ronno for Faline, the clash of percussion is an analogue to the expressionistic rim lighting depicting the battling deer.

The "April Showers" song sequence musically narrates Bambi's first experience of rain. It starts with mickey-moused clarinet notes paralleling isolated drops of rain that accelerate in tempo, to which a triangle joins. A vocal accompaniment then joins in, singing, "drip drip drop, little April showers." *Bambi* was one of the few features in which all the songs (written by Churchill and Larry Morey) are nondiegetic rather than sung by characters. Dramatic attention is on the beautifully detailed water effects and the various animal families scurrying for shelter (quails, birds, squirrels), beautifully animated by Sylvia Holland. A field mouse that darts from mushroom to mushroom becomes our focal point for a time, comically sheltering beneath a mother pheasant's tail. Three-dimensionality is enhanced by foreground elements of branches and leaves, as the multiplane camera pans to follow the rivulets of water that pour down in the middle field of action. The dramatic midpoint of the song is marked by a slow pan upward to the tops of trees as lightning begins, and we cut back to Bambi, who now hides beneath his mother, terrified of the alternating flashes of light and dark that simulate a lightning effect. The vocal and instrumental score accelerates as edits quicken, cutting to a low angle shot of the treetops and a backlit shot of a family of rabbits looking out from a cave. Like the flashes of lightning in *The Mad Doctor* (1933) and *Snow White*, lightning illuminates as if it were an X-ray, showing the veins of the leaves. At last, the musical and visual tempo slows with the diminishing raindrops, and a track out with the camera takes us through a thick forest of leaves, concluding with a tilt down to raindrops slowly dripping on a reflection of the dramatic orange sky. And so we move musically through the seasons, which score Bambi's growth and experience. From facing his first rainstorm to delighting in flowers and butterflies, or negotiating a frozen lake in winter and seeing his first snow, Bambi grows and matures, and at every step Disney's musical score shapes our perception of the narrative and emotional significance of these events.

After the enormous success of *Snow White*, the features of the wartime years like *Bambi*, *Dumbo*, and *Fantasia* were financial disappointments, partly due to the

higher production costs and loss of the European markets caused by World War II. In response to these serious financial constraints that threatened the company's existence, Disney adopted money-saving strategies for the remainder of the decade. Feature films became partially live-action, like *The Reluctant Dragon* and *Victory Through Air Power* (1943), or were anthologies of shorter cartoons. Strung together with animated transitions linked by characters like Donald Duck, these anthology or package features would include *Make Mine Music* in 1946 (which featured "Peter and the Wolf"), *Fun and Fancy Free* (1947) with "Mickey and the Beanstalk," and *Melody Time* (1948) with "Little Toot" and "Johnny Appleseed." Even the Latin American package films *Saludos Amigos* and *The Three Caballeros* were underwritten by Nelson Rockefeller's Office of the Coordinator of Inter-American Affairs (CIAA), as part of its "Good Neighbor" policy, which sponsored visits of Disney animators to research and produce South American-themed shorts and was designed to shore up Latin American countries like Brazil, Argentina, Chile, Paraguay, and Peru against fascist influence. More importantly for Disney, this financial support became an opportunity to cultivate a new market to replace the European one he had lost during the war. After *Bambi*, Disney would make seven of these anthology feature films, and it was not until *Cinderella* in 1950 that the company would return to making a feature-length animated story. Today, *Bambi* is a key film in the Disney canon. With its iconic characters Bambi and Thumper, its lyrical depiction of natural landscape and seasonal change, its skillful blend of documentary-like observation of animal movement and comedic anthropomorphism, and its emotionally powerful and manipulative depiction of pastoral life, *Bambi* would influence many Disney features to follow.

Notes

- 1 First called a Daedalum when it was invented by William Horner in 1834, the zoetrope was given its name by Pierre Desvignes. The device was a cylinder with slits on the side, through which one could view drawings on a strip of paper. When rotated, the images seemed to move. A praxinoscope was a similar device that used mirrors instead of slits. A thaumatrope was a card with a different picture on each side attached to two strings, which, when rapidly rotated, seemed to combine the two images (e.g., a bird and a cage appear to be superimposed as a bird in a cage).
- 2 Pinscreen animation, developed by husband-and-wife animators Alexandre Alexeieff and Claire Parker, uses a screen of movable pins, which can be moved in or out by pressing an object onto the screen. The screen is lit from different angles so that the pins cast shadows to form images, which are photographed.
- 3 Disney and Fleischer were not the first to develop the illusion of three-dimensionality, as Lotte Reiniger had used a version of the multiplane camera in 1926 on *The Adventures of Prince Achmed*, as had Berthold Bartosch in 1930 for *The Idea* (Crafton 1982, 245).
- 4 Additive color processes, such as Kinemacolor (1906), could reproduce a specific color by adding and then mixing red and green through filters in the printing and projection

process. Subtractive processes such as the Brewster method (1913), and later two-strip Technicolor (1922), split red and green light waves onto separate negatives, which were then recombined and printed. Three-strip Technicolor added blue to this process, for a result that combined red, green, and blue.

- 5 J. R. Bray's studio was the first company to produce military training films for the US government in World War I, with Max Fleischer supervising production at Fort Sill in Oklahoma in 1918 (Beck 2004, 90). There were also war-themed cartoons with the *Colonel Heeza Liar* and *Mutt and Jeff* series (Shull & Wilt 1987, 12), and cartoons that mimicked newsreels, like Winsor McCay's *The Sinking of the Lusitania* (1918).
- 6 Four of the "Nine Old Men" (Milt Kahl, Eric Larson, Frank Thomas, and Ollie Johnston), or the leading animators in Disney's shift to feature production in the 1940s, worked part-time on the film. However, *Bambi* differed from the earlier features in that animators worked on specific sequences of the film rather than having sole responsibility for a character (Barrier 2003, 315).
- 7 Internet Movie Database, at <http://www.imdb.com> (accessed February 1, 2009).
- 8 "The Magic Behind the Masterpiece," *Bambi*, two-disc CAV Laserdisc, 55th Anniversary Edition (1997). Also available on "The Making of Bambi," two-disc Special Platinum DVD Edition (2005). As this essay went to press in 2011, Disney released a two-disc DVD/BluRay Diamond Edition with two deleted scenes and one deleted song previously not released.
- 9 Salten was a pseudonym for Austrian Jew Siegmund Salzmann, who was born in Budapest and later moved to Vienna. Initially published in 1923, *Bambi* was translated into English in 1928, and later became a Book of the Month selection. Disney purchased the rights to the story from Sidney A. Franklin for \$1,000 in 1937. Franklin initially conceived of a live-action film, but realizing the practical difficulties approached Disney to make an animated version instead. Twin Books, a company that bought the rights to the novel from Salten's son-in-law, sued Disney for copyright infringement, arguing it was entitled to greater royalties (Disney's film and related publications were highly profitable). Copyright had originally been secured in 1926, and renewed by Salten's daughter Anna in 1954, but Disney successfully argued that the book had in fact been published in 1923 without copyright, and so in effect had passed into the public domain. This was reversed by an appeals court in 1996. See Paul Schons, "Bambi, the Austrian Deer," originally published by the Germanic-American Institute in September 2000, at http://courseweb.stthomas.edu/paschons/language_http/essays/salten.html (accessed February 2, 2009).
- 10 "Inside Walt's Story Meetings," Platinum DVD Edition, 2005.

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37 FRIZ FRELENG'S JAZZ

Animation and Music
at Warner Bros.

Krin Gabbard

Short, animated films probably ought not to be the principal source for a history of jazz and black music. But we can learn a great deal from the Merrie Melodies and Looney Tunes that Isadore "Friz" Freleng (1906–1995) directed for Warner Bros. from the 1930s through the 1950s.¹ These cartoons provide a thorough history of popular understandings of jazz during specific eras, even if we strongly reject these understandings today. In Freleng's *Clean Pastures* from 1937, jazz is portrayed as a popular music for "primitive" African-Americans even as they are turning into urbanized economic subjects. In 1944, in his *Goldilocks and the Jivin' Bears*, Freleng anticipates the difficult "art music" later known as bebop by casting jazz as an outsider music for devotees playing mostly for themselves. The "Afterword" to this essay follows this trajectory into the 1950s, when Freleng's *Pizzicato Pussycat* and *The Three Little Bops* present jazz as a thoroughly commoditized mainstream music for white suburbanites. Before considering these cartoons in detail, I will sketch the early history of animated features at Warner Bros. and the men who created them. Placing the jazzy cartoons in a larger context reveals how intimately they were involved with the development of popular attitudes toward jazz during these decades. Indeed, the cartoons shown in movie theaters throughout the 1930s and 1940s reflect and refract American culture every bit as much as the Hollywood feature films that so perfectly fit Althusser's concept of "ideological state apparatuses." But because the cartoons almost always featured wall-to-wall musical soundtracks, they are an even better guide to the construction of popular music and jazz than the feature films could ever be.