Lunacy at Termite Terrace

The Slapstick Style of Warner Bros. Animation

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The slapstick tradition is a mode of comedy characterized by the use of physical violence, acrobatics, knockabouts, collisions, and horseplay. From the improvisational performances of Italian *Commedia dell'Arte* to American vaudevillian theatre, to the comedies and animated cartoons of American cinema and television, the spectacles of the slapstick tradition have been popular entertainment forms, making audiences laugh with the representation of exaggerated physical violence, wacky antics, and mayhem.

Sound plays a major role in slapstick comic routines. Gags, comic bits, or *lazzi* are a combination of aural and visual events that happen simultaneously. Physical violence and disruption, mockery and abuse of the body, acrobatics and grotesque movements are rendered as composites of visual elements and sounds. The word that gives name to the tradition illustrates clearly the integral relationship between images and sounds inside the comic routines. The foundational device from *Commedia dell'Arte*, the *batocchio*, is translated into English not just as a *stick*, nor just as a *slap*. *Slapstick*, a reduction of *slap-of-the-stick*, is a composite word that carries in its meaning the simultaneity of sounds and images. Such audiovisual simultaneity has turned into the conventional sound practice of the slapstick tradition for producing comic effects.

What I call *sounds of the slap-of-the-stick* are the different sounds that have been used across media to enhance comic routines, adding acoustic physicality to them, exaggerating—even more—the violence and disruption, and materializing the grotesque movements and the mockery and abuse of the body. Visual impacts such as pratfalls, pie smashes, blows, collisions, squashes, and stretches turn into points of synchronization where the sounds of the slap-of-the-stick are heard. The perfect synchronization of the sounds and visuals finally creates the comic effect of meeting elements of different natures, such as sounds produced by a piece of metal hitting an anvil with the visual 'bonk in the head' of a cartoon character. The comic effect is achieved because the sound we hear is not the sound that a real human or animal body would produce when it falls or when it is being hit, but a highly amplified and concrete sound.

An important development of the slapstick tradition took place in American animation from 1937 to 1943. During this period of time, Looney Tunes and Merrie Melodies—the theatrical animated cartoons produced by the studio of Leon Schlesinger and distributed by Warner Brothers—started to show an innovative approach to the re-interpretation of comic routines and to the construction of complex soundtracks rich in sounds of the slap-of-the-stick. On the one hand, taking advantage of the possibilities of the animation medium to transgress the physical laws of time and space, the artists from Termite Terrace (as animator Tex Avery famously dubbed Schlesinger's studio)

rendered conventional comic routines in ways that were impossible to achieve on the stage or in live-action film. The mockery and abuse of the body develops into absurd squashes and stretches, giant impacts or impossible collisions; the grotesque movement turns into long falls from the sky, back flips without gravity, or impossible acrobatics.[1] On the other hand, the orchestration of a rich variety of sounds of the slap-of-the-stick with a continuous medley of musical genres played by a symphonic orchestra and with an exaggerated comic dialogue, gives rise to a complex soundtrack in which all the elements are tightly synchronized to the beat and to the image. The new slapstick approach did not disappear after 1943; it was matured, stylized, and became the trademark of Warner Bros. animation for the next twenty years.

In this article, I try to understand the principles according to which the Looney Tunes and Merrie Melodies soundtracks are constructed and how they innovate the slapstick tradition. I describe the different tracks (music, dialogue, and sound effects) that constitute the complex soundtracks, characterize the human talent that was responsible for creating them (Carl Stalling, Mel Blanc, and Treg Brown), and explain the practices and technologies that were used in their production. Finally, in order to illustrate how all the elements of the soundtrack were orchestrated and the effects of their combination, I analyze the Looney Tune "Porky in Wackyland" (Robert Clampett, 1938).

Collaborative Technologies, Collaborative Practices

At Termite Terrace, collaborative technologies and collaborative practices were essential to the creation of a complex soundtrack and to tight audiovisual synchronization. On the one hand, at the human level the collaboration was exemplified in what was known as the 'gag meeting,' a kind of brainstorming or jam session. In the gag meetings, writers, directors, layout artists, animators, the music composer, the sound effects man, and the voice actor got together in a room, showed the stories and characters they were working on, and threw gags in to make them funnier and funnier. On the other hand, new technologies allowed for the standardization of production processes and the collaborative work among the 'termites.' Tools such as the exposure sheet, the bar sheet, and the click track were artifacts used for the convergence of visual and audio elements prior to the final stage of the animated cartoon in a film reel.

The exposure sheets were pioneered in the early days of cel animation and became a standard of the industry. These were basically paper documents in which the action of a scene was systematically timed out frame by frame. From them, animators "drew and exposed the requisite number of pictures" (Curtis 195). Each frame was indicated in a numbered row that had many columns. Some of the columns corresponded to the cels that had to be layered (backgrounds and characters were drawn in separate cels) and their order (front, middle, back). Other columns corresponded to the camera instructions (fades and cross-dissolves, angles, pans, zooms). The exposure sheets accelerated the production of a cartoon—three cartoons had to be released for theatrical projections on a monthly basis—and facilitated the parallel way of working. At the same time, background artists were making the landscapes, animators were drawing the key poses of the characters, in-betweeners were drawing the character movements, the sound effects man was recording and selecting sounds, and the music composer was scoring. All of them had the exposure sheet as a blueprint for their tasks.

Bar sheets were similar to the exposure sheets in that they described very precisely the timing of the cartoon. However, bar sheets had an advantage: they provided more detailed information about the sound because they had space for writing down musical notation (the basic melody appeared in a stave), important parts of the dialogue (such as screams and shouts), and sound effects. Bar sheets looked like composites of a musical score, a storyboard, and an exposure sheet, and they are a unique example of the convergence of writing technologies in a single sheet of paper.[2]

The development of bar and exposure sheets motivated the creation of the click track. This tool was a sort of metronome that the musicians from the Warner Bros. orchestra listened to while they played the scores. Because the musical timing was tight to the number of frames, the ticks of the track the musicians listened to while playing were like sonic marks of certain numbers of frames. As Carl Stalling, the composer and music director, explained, "We made recordings of 'tick' sounds at different beats—a tick every eight frames, ten frames, or twelve frames—and played this on a phonograph connected to the recording machine and to earphones. Each member of the orchestra had a single earphone, and listened to the clicks through that" (Barrier 43).

Through his years at Termite Terrace, Stalling became a master of timing the music to the visuals using bar and exposure sheets, and influenced the way animators approached audiovisual synchronization. As Daniel

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1. Although some of the potential of the medium to render physical violence and disruption had been explored before, the Looney Tunes and Merrie Melodies from this period introduced a conspicuous acceleration in the timing of the slapstick gags.

2. In fact, bar sheets have the word *bar* in their name because in musical notation, vertical lines (bars) are used to separate segments of time with a defined number of beats.

Goldmark points out, "According to Stalling, once the basic story for a cartoon had been finalized in storyboard form (usually 300-400 key poses and drawings), he would meet with the cartoon's director and determine the various tempi for each scene. This mapping out of the cartoon's action, known as 'timing,' enabled the directors to tell their animators precisely how many frames per second each scene had" (20).

Treg Brown also used exposure and bar sheets for making the sound effects track. Exposure and bar sheets not only allowed for the perfect audiovisual synchronization but also facilitated the sophisticated orchestration of sound effects with music. Thanks to these sheets, the sounds of the slap-of-the-stick Brown created were organized according to the tempo of the music and became important rhythmic marks in the complex soundtrack.

Carl Stalling's Music

Carl Stalling developed a compositional method for cartoon music that was based on silent film accompaniment improvisation. When Stalling says, "I improvised at the theaters, and that's composing, but it's not writing down" (Barrier 40), he is referring to an improvisation that relies heavily on the composer's retrieval of information from music catalogues and music sheets. At Termite Terrace, Stalling had at his disposal not only the conventional silent film music catalogues that contained plenty of public domain works (usually pieces from the classic and romantic periods, and popular folk songs), but also an extensive catalogue of popular tunes that Warner Bros. owned and encouraged him to use. Stalling improvised by putting together, one after the other, bits and pieces of popular tunes, classical greats, incidental music, and his original compositions. This method, as Daniel Goldmark has stated, is a cue-by-cue (song-by-song) scoring style that "meshes well with the absurd, nonlinear logic of the Warner Bros. universe" (34).

Besides using musical quotations, Stalling also included his original music in the scores he wrote. His original cues were as varied in genre as the ones he quoted: they ranged from swing tunes to lullabies to lyrical and abstract melodies. In all of them, Stalling relied heavily on the timbre of specific instruments to comically exaggerate the visual action. Musical effects functioned in many of these cues as sounds of the slap-of-the-stick that punctuated the physical violence and grotesque movements of the comic routines. For instance, he used the trombone slide for a character

Porky in Wackyland (1938)

tumbling or falling and violent outbursts of brass and percussion when a character was being hit in the buttocks.

At the production phase of music recording, Stalling conducted the Warner Bros. orchestra (a fifty-piece ensemble) and supervised recording sessions of usually two hours for a single cartoon.[3] The music was recorded in a sound-on-film track optically by means of electricity—more precisely, by the light of a bulb and amplified microphones. Since the sound-on-film technology made it possible to freeze the music in a single track, the music could be spliced and pasted later if necessary. Indeed, that process facilitated the construction of a continuous musical track full of abrupt changes.

Mel Blanc's Voices

Music was just one of three key elements in the complex Looney Tunes and Merrie Melodies soundtracks. Mel Blanc, 'the man of a thousand voices,' was the protagonist of the dialogue track, the second of these elements. With his powerful vocal chords, his capacity for imitating diverse accents, and the ability of his sound engineers to manipulate the pitch of sound-on-film recordings, Blanc gave voice and personality to almost all the Warner Bros.'s animated characters. From 1937 to 1943, Blanc created the voices of cartoon stars such as Porky Pig, Bugs Bunny, Daffy Duck, and Tweety Bird.

Blanc's background in the entertainment business was crucial for providing personality to the cartoon characters. If Stalling brought the sound practices of silent film accompaniment to Termite Terrace, Blanc brought the sound practices of the radio comedians. For instance, Blanc was a master of mimicking accents, be it Bugs Bunny's Brooklyn jive, Speedy Gonzales's Mexican staccato, or Pepé Le Pew's French drawl. He could also comically exaggerate speech problems such as a lisp (Daffy Duck, Sylvester the Cat) and stuttering (Porky Pig) to impress upon the cartoon characters a unique sonic identity that the audience could immediately recognize.

An important characteristic of the voices Blanc recorded is that they are very concrete.[4] Besides giving personality to the cartoon characters, the voices provide the charac-

ters with gravity and physicality, and sometimes work as sounds of the slap-of-the-stick. The extreme modulations in a sentence, the scratchy voice in a shout, or the off-key voice in a cry have a materializing effect that grounds the cartoon in reality. In the slapstick comic routines in which the cartoon characters mock and abuse their bodies or execute grotesque movements, the concrete quality of Blanc's voices becomes more prominent. For instance, when Daffy performs back flips and acrobatics in "Porky's Duck Hunt" (Tex Avery, 1937), "Daffy Duck and Egghead" (Tex Avery, 1938), and "The Daffy Doc" (Robert Clampett, 1938), a loud "Hooo Hooo!" emerges from the dialogue track and is repeated several times. This shout is characterized by an uneven modulation that goes up and down as rapidly as the cartoon character's movements.

Treg Brown's Sound Effects

However, although the music and dialogue tracks contain some sounds of the slap-of-the-stick (for example, cymbal crashes, piano glissandos, shouts, and screams), they are not as rich in this vocabulary as the sound effects track. Treg Brown, a former musician and film editor, was the termite denizen responsible for making, recording, editing, and selecting the noises that punctuated the exaggerated physical violence and grotesque movements displayed on the screen.

Brown systematically explored the comic potential of *synchresis* and was able to create many incongruous relations between sounds and images.[5] Noises such as zips, car screeches, water squirts, plastic stretches, bulb horns, sirens, and 'boings' became hilarious when Brown used them to punctuate slapstick gags. For instance, the sound of a 'boing' could be played when the eyes of a cartoon character are poked; or the sound of a siren could be played when the bodies of cartoon characters are inflated as if they were balloons.[6]

Brown developed several methods for making the sound effect track. One of these methods consisted of recording the sounds of noise-making devices or 'traps' from vaudeville and silent film accompaniment such as horns, whistles, and crash-boxes. Although these traps were residual apparatuses from the early twentieth century, their

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3. As Daniel Goldmark has revealed, there existed a contract between Warner Bros. and Schlesinger, in which Warner "agree[d] to furnish and supply Schlesinger with…musicians, singers, voices, talent, sound, sound equipment and recording crew used in the recording of the cartoons…All recording of music and sound effects [was to] be done under the supervision of a musician and of a technician employed by Schlesinger" (21).

4. Mel Blanc understood the potential of his vocal chords when speaking in front of an electrical amplified microphone, and was able to do vocal acrobatics such as changing the timbre of his voice as he pleased.

5. As Michel Chion explains, *synchresis* is "the spontaneous and irresistible weld produced between a particular auditory phenomenon and a visual phenomenon when they occur at the same time. The joint results independently of any rational logic" (63). *Synchresis* opens many opportunities for using sounds with comic purposes due to the possibility of incongruous encounters with the visuals.

6. Such use of the 'boing' sound can be heard in "Porky in Wackyland." The siren sound can be heard in "The Daffy Doc."

sounds acquired a new 'close-up' quality (free of reverberation) when they were recorded on sound-on-film using electrical amplified microphones. This new quality facilitated the exaggeration of their volume during the production process of dubbing (re-recording) the final soundtrack.

Another method Brown developed was rooted in the practices of sound effects men from radio and Foley artists from live-action films. This method consisted of creating sounds that would be heard as representations of aural events using a variety of physical objects and electrical amplified microphones. For instance, Brown would make a close-up recording of the tapping of two halved coconut shells on a wooden table, and then use that recording as a representation of a horse trot. As Blanc has pointed out, the imaginative work of Brown consisted of "shooting off a 45-caliber pistol to achieve the sound of a door's slamming shut, smacking an anvil to accompany footage of a cartoon character getting bonked on the head, or simulating a cataclysmic crash by dropping two armfuls of metal objects from the top of a ladder onto a concrete floor" (83).

In addition, Brown practised some alternative methods that were common among *musique concrete* composers and avant-garde sound artists such as the cutting and splicing of sound-on-film tracks as well as the changing of a sound's pitch by means of altering the speed of reproduction.[7] Because sounds were frozen in sound-on-film tracks, Brown was not only able to cut and splice them and make sound montages, but was also able to store different recordings, which he used for later cartoon soundtracks. All these sound effects on reels were not only noises that Brown had recorded but also sounds that he had collected from the Warner Bros. live-action film soundtracks. For instance, the sound of an airplane that emerges in "A Tale of Two Kitties" (Robert Clampett, 1942) when Catstello is falling and doing back flips in the air was likely selected from the soundtrack of a live-action film.

Welcome to Wackyland: "It *Can* Happen Here"

In order to illustrate how all the elements of the complex soundtracks are sophistically orchestrated, let us examine "Porky in Wackyland." The story of this Looney Tune is quite simple: an intrepid explorer tries to catch a unique wild bird in an unknown land. Upon landing in "Darkest Africa" Porky enters Wackyland and finds a topsy-turvy world full of oddities. One of the citizens of this crazy world is the unique Do-Do Bird, an anarchic clown that moves incredibly fast, mocks, and abuses Porky Pig's body, and controls gravity, time, and space. At the end of

the film, when Porky finally seems to catch the dodo, he is shocked by the fact that the bird is not really the last of the dodos. A multitude of these creatures surround him and scare him with their noise.

All the action seems to happen at a manic speed: at least fourteen slapstick gags are stitched together with the simple plot of a hunt. The contrast between slow- and fast-paced gags creates an energetic and dynamic rhythm. Thanks to this contrast, the soundtrack has a rhythmic tension that accentuates not only the surprising and shocking emergence of the slap-of-the-stick sounds but also the changes in music.[8] The variety of the sounds of the slap-of-the-stick is impressive, ranging from sound effects (anvil hits, bulb horns, slapstick hits, boings, rubber stretching, car screeches, door slams, wood hits), to Blanc's shouts and screams (AAAAARRRG!, Yahooo!, uuuUUU!), to musical effects (cymbal crashes, high xylophone notes, outbursts of percussion and brass). The orchestration of such a medley of music, sound effects, and voices gives a rich texture to the soundtrack and, since all the elements have been synchronized with the beat and the frame, enhances the cartoon's apparent speed.

Many sounds of the slap-of-the-stick emerge from the sound effects track, masking the sound of the music track thanks to the clarity and loudness of the former's close-up perspective. During the music cue called "Schlesinger Swing" (lasting seventy-five seconds), one slapstick comic routine is punctuated by the sound of metal hitting an anvil. This gag is inserted inside a long panorama of Wackyland without any logical narrative development. After forty seconds of displaying different oddities that move with the hot rhythm of swing music, a cartoon character that looks like a prisoner appears holding a cell window. He desperately shouts, "Let me out of here!" several times until a policeman with a wheel instead of legs, a big moustache, a crescent moon in his long hat, and a big star on his chest hits him in the head with a truncheon. As soon as the prisoner's shouts emerge from the dialogue track, the volume of the orchestra fades out. This change in the dynamics of the soundtrack creates an aural suspense that ends when the sound of metal hitting an anvil is played in perfect synchronization with the visual impact. One second after the sound effect emerges from the soundtrack, the volume of the orchestra fades in and reappears with an energetic outburst of brass.

At other times, the sounds of the slap-of-the-stick emerge from the dialogue track, as when the Do-Do Bird

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7. These practices were inspired by film-editing techniques from the silent era. It is possible that Treg Brown learned them through his former job as a film editor.

8. Sixteen music cues appear in the original cue sheet (see Appendix): six popular "Tin Pan Alley" tunes from Warner's Catalogue, one classical music piece (Rossini's "William Tell"), one folk song ("Mulberry Bush"), one swing piece ("Schlesinger Swing"), and several abstract and dramatic melodies.

introduces himself to Porky Pig. At this moment, a very unique music cue, 'Ad Libbing,' indicates the improvisation of the voice actor during three seconds while the orchestra remains in silence. Blanc recorded a very modulated "uuuuuuUUUUU!" that goes together with the visual action of the Do-Do scaring Porky with a very loud cry. As the pitch of the voice increases, Porky jumps and is sustained in the air for the length of the "uuuuuuUUUUU!" This cry functions as a sound of the slap-of-the-stick that accompanies the loss of Porky's balance and gravity and the following fall back to earth.

Although Brown's sound effects and Blanc's voices sometimes mask the sound of the orchestra, at other times the orchestra stands alone and provides the sounds that punctuate the mockery and abuse of the body as well as the grotesque movements. For instance, toward the finale of the music cue "Schlesinger Swing," a wacky creature appears on top of a flower playing a drum set not only with drumsticks but also with parts of his body (buttocks and foot). The cartoon character moves grotesquely and very fast in perfect sync with the drum solo that is played by the orchestra and ends bonking his head with a drumstick when the last cymbal crash marks the end of the music cue.

Speed is an important characteristic of "Porky in Wackyland." Not only do the characters move faster, but the rhythm of the music and the punctuation of sounds of the slap-of-the-stick also have a faster pace. Such energetic rhythm becomes especially relevant at the moment of the Do-Do Bird's chase toward the end of the animated short. During this period of time (seventy-eight seconds) eight different slapstick gags are piled up, three different music cues are played by the orchestra, several shouts and cries emerge from the dialogue track, and at least ten different sound effects punctuate the physical violence and grotesque movements of the cartoon characters.

During the last thirty seconds of the chase, the orchestra plays Stalling's cue "Captured"—alternating the fast tempo of the flurry of strings with outbursts of brass, trombone slides, and even silences. As five slapstick routines are executed, many sound effects emerge from the soundtrack, punctuating the mockery of Porky's body: the sound effect of a door smash is played when Porky collides with an elevator, the sound of two pieces of wood being struck together is played when the Do-Do hits Porky's face with a slingshot, the sound of a 'wood hit' is played when Porky collides with the buttocks of the Do-Do, and the sound of bowling pins being hit by a ball is played when Porky collides with a brick wall.

An analysis of "Porky in Wackyland" reveals how the complex soundtrack is integral to the slapstick style developed at Termite Terrace. The sophisticated orchestration of music, sound effects, and voices based on the contrast of volumes, musical genres, instrumentation and tempos creates a dynamic rhythm that is in perfect sync with the visual action. Furthermore, my analysis of the soundtrack demonstrates the rich variety of sounds of the slap-of-the-stick that are used for punctuating the mockery and abuse of the body and the grotesque movements of the cartoon characters. From the musical sounds created by certain orchestra instruments, to the vocal sounds made by Blanc, to the sound effects recorded, edited, and selected by Brown, the slapstick comic routines are always enhanced by aural events. Frequently, different kinds of sounds of the slap-of-the-stick (music, sound effects, vocals) are mixed together and mask each other. Other times they stand alone over the silence. Regardless, the sounds of the slap-of-the-stick emerge loudly from the soundtrack in perfect sync with the beat and contribute to keeping the energetic audiovisual rhythm.

In conclusion, the Looney Tunes and Merrie Melodies soundtracks produced at Termite Terrace from 1937 to 1943 update the slapstick tradition with their sophisticated orchestration, tight synchronization to the visuals, and abundance of sounds of the slap-of-the-stick. Due to the collaborative practices and technologies used at Termite Terrace, music, voices, and sound effects are more than a simple accompaniment to comic routines: they are integral to them. The slapstick comic routines acquire the metric rhythm of music, and the music acquires the fragmented structure of the anarchic compilation of gags. The constant flow of sound, the medley of musical genres, and the exaggerated rhythmic punctuation of sounds of the slap-of-the-stick are essential to the fragmented narrative pace characteristic of the Termite Terrace slapstick style.

Works Cited

Barrier, Michael. "An Interview with Carl Stalling." *The Cartoon Music Book*. Eds. Daniel Goldmark and Yuval Taylor. Chicago: A Cappella Books, 2002. 37-58.

Blanc, Mel. *That's not all Folks*. New York: Warner Books, 1988.

Callahan, David. "Cel Animation: Mass Production and Marginalization in the Animated Film Industry." *Film History* 2.3 (1988): 223-228.

Chion, Michel. *Audio-Vision: Sound on Screen*. Ed. and trans. Claudia Gorbman. New York: Columbia University Press, 1994.

Curtis, Scott. "The Sound of the Early Warner Bros. Cartoons." Ed. Rick Altman. *Sound Theory/ Sound Practice*. New York: Routledge, 1992.

Goldmark, Daniel. *Tunes for 'Toons: Music and the Hollywood Cartoon*. Berkeley: University of California Press, 2005.