

THE “NEW” SOUNDS OF THE SLAP-OF-THE-STICK

Termite Terrace (1937-1943) and the Slapstick Tradition

by

Andres Alberto Lombana Bermudez

B.A. Political Science

B.A. Literature

Universidad de los Andes, 2003

SUBMITTED TO THE DEPARTMENT OF COMPARATIVE MEDIA STUDIES IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE IN COMPARATIVE MEDIA STUDIES
AT THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

AUGUST 2008

© Andres Alberto Lombana Bermudez. All rights reserved.

The author hereby grants to MIT permission to reproduce
and to distribute publicly paper and electronic
copies of this thesis document in whole or in part
in any medium now known or hereafter created.

Signature of Author: _____

Program in Comparative Media Studies

August 8, 2008

Certified By: _____

Henry Jenkins

Peter de Florez Professor of Humanities

Professor of Comparative Media Studies and Literature

Co-Director, Comparative Media Studies

Thesis Supervisor

Accepted By: _____

Henry Jenkins

Peter de Florez Professor of Humanities

Professor of Comparative Media Studies and Literature

Co-Director, Comparative Media Studies

(blanc page)

THE “NEW” SOUNDS OF THE SLAP-OF-THE-STICK

Termite Terrace (1937-1943) and the Slapstick Tradition

by

Andres Alberto Lombana Bermudez

Submitted to the Program in Comparative Media Studies
on August 15, 2008 in Partial Fulfillment of the
Requirements for the Degree of Master of Science in
Comparative Media Studies

ABSTRACT

This thesis argues that slapstick is a mode of comedy that has become a tradition because its basic principles of physical violence and disruption, and its conventions of grotesque movement and of mockery and abuse of the body, have been developed across media, cultures, and eras. Accordingly, this thesis examines the comic routines or *lazzi* —independent and modular micronarratives— where the slapstick principles and conventions have been formalized, and explores their different reinterpretations: from *Commedia dell' Arte* to American Vaudeville to American live-action comedy to American animation. Since sound plays a major role inside the *lazzi*, the analysis focuses on the sound practices and technologies that have been used across media to produce comic effects.

In addition, this thesis claims that the theatrical animated cartoons —Looney Tunes and Merrie Melodies— made at Termite Terrace between 1937 and 1943 embody the slapstick tradition, reinvigorate it, and transform it. The thesis explains the production processes (technologies and practices) that led up to the creation of an energetic audiovisual rhythm and the sophisticated orchestration of all the sound elements (music, voices, sound-effects) in complex soundtracks. Finally, an audiovisual analysis of seven animated shorts reveals a sonic vocabulary for depicting the cartoon body and shows the *schizophonic mimesis* that takes place when using it. All in all, the study of the Looney Tunes and Merrie Melodies of this time period reveals the interplay between convention and innovation that characterizes the slapstick style of Termite Terrace, a style that years later became the trademark of Warner Bros. animation.

Thesis Supervisor: Henry Jenkins

Title: Professor, Co-Director Comparative Media Studies

(blanc page)

ACKNOWLEDGEMENTS

I want to express my gratitude to the people who have accompanied and supported my journey and development while producing this project.

To my thesis committee members: Henry Jenkins III, for his guidance, support, and inspiring peripatetic conversations, and for sharing with me his vast knowledge of comedy and popular culture; Stefan Helmreich, for his insights and questions, and for introducing me to the anthropological study of sound; and Martin Marks, for his suggestions and thoughts, and for showing me ways of understanding film music.

To other media studies mentors at MIT: William Urichio, for his enthusiastic feedback and thoughts on film; Jeff Ravel, for his guidance regarding *Commedia dell'Arte* and the history of theater; and Frank Espinosa, for his lessons on animation and comics.

To my music mentors at MIT, who opened my ears to new ways of listening and composing: Tod Machover, Barry Vercoe, and Peter Whincop.

To Daniel Goldmark, for sharing his research on cartoon music and Carl Stalling.

To John Bell, for his stimulating conversations on toy theater and performance.

To my parents: Olguita and Pa, for their unconditional support and love.

To my friends, those who in Cambridge, or at a distance, had with me conversations and discussions on the topic of my research, shared with me their insights, and enjoyed the paradoxes humor and laughter: Huma, Deb, Edu, Santiago, Julian, Roger, Masahiro, Eloisa, Andres, Howard, Beth, Kevin, Juanita, Mike, Henry, Sylvain, Anita, Gishnu, Daniel, Marcela, and the rest of you. Thanks to you all!

(blanc page)

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	5
INTRODUCTION	9
1. SLAPSTICK ACROSS MEDIA	19
1.1. The Slapstick Tradition	19
1.2. The Sounds of the Slap-of-the-Stick	45
2. ANIMATING TRADITION: <i>THAT'S NOT ALL FOLKS!</i>	71
2.1. Lunacy at Termite Terrace (1937 - 1943)	75
2.2. Collaborative Technologies, Collaborative Practices	81
2.3. The Elements of a Complex Soundtrack	87
2.4. The Audiovisual Rhythm of Wackyland	97
3. THE <i>LONEY</i> SOUNDS OF THE SLAP-OF-THE-STICK	110
3.1. Sound/Image Relationships	113
3.2. The Audible Cartoon Body	115
3.2.1. Body Parts	117
3.2.2. Grotesque Swing	129
3.3. Innovative and Conventional	135
CONCLUSIONS	138
APPENDIX	144
WORKS CITED	150

(blanc page)

INTRODUCTION

In May 7th of 2001, during the Colombian Film Festival Toma Cinco that took place at Cinemania Theaters in Bogota, I performed the musical accompaniment for the silent film *Madre* (1924). The sound of my accompaniment was very experimental and glitchy –I was using granular synthesis for creating atmospheric sounds, and sequencing minimal rhythmic patterns with clicks and ultra-short noises. However, I had prepared some sound-effects that sounded like the ones from Warner Brothers and Hanna-Barbera cartoons and had them ready in a digital sampler. During a scene in which a few farmers were herding bulls and cows, I played several “boings,” “pows,” and “zips” that provoked many laughs from the audience in the theater. Although *Madre*, one of the earliest films made in Colombia, was a bucolic melodrama with a classical romantic plot (a pair of young lovers as protagonists), it turned during one minute into a comedy thanks to the sound-effects that I played in a percussive way. The reaction from the audience confirmed my intuition about the comic uses of sounds. Years later, while working on projects as sound designer and as a composer, I have relied many times on cartoon-like sounds to convey humor.

I love humor and laughter. And I believe in the capacity of art —music, poetry, prose, painting, comic strips, films, animation...— to create funny, incoherent, anarchic, and amusing works that can make people laugh. For many years I have been interested in the works of surrealists, Dadaists, silent film comedians, absurd dramaturges, pataphysicists, and animators who have used humor as an essential element of their works.

My passion for animation has a long history. From being a fan when I was a kid to making experiments with stop-motion animation during my youth, I have always been enchanted by the magic of this medium and its potential for freeing our imagination. I grew up during the 1980s and 1990s watching Japanese and American cartoons on color TV, usually on Saturday mornings, but as well during the week if I finished my homework early enough. I became engaged with characters such as Mazinger Z, Gekkō Kamen, Bugs Bunny, Daffy Duck, Optimus Prime, Mickey Mouse, Aquaman, Superman, Woody Woodpecker, Bart Simpson, Marvin the Martian, the Pink Panther, Captain Caveman, Droopy, Tom and Jerry, and many others. Among all of them, the Looney Tunes' characters always grabbed my attention, not only because their imagery was spread in the Colombian popular culture —bumper stickers, towels, mugs, t-shirts, notebooks, posters, and all sorts of merchandise (MADE IN CHINA) was being sold in the streets by informal vendors— but also because the Looney Tunes had plenty of sound. The sound of the symphonic orchestra, the voices of the characters, and the noises of the sound-effects were somehow different from other cartoons. They sounded like little operas, like classical music with a funny twist.

In fact, some of the Looney Tunes and Merrie Melodies music *was* from the classical repertoire. I remember that once, my parents took me to the Leon de Greiff Auditorium to listen to a performance of the National Symphonic Orchestra and I was surprised to realize that I had already listened to the Overture of Rossini's "Barber of Seville" on the TV that morning. While I was listening in the auditorium, in the middle of serious adults who were wearing tight

clothes, I could not stop imagining Bugs Bunny putting hair tonic on the head of Elmer Fudd and giving him massages to the rhythm of the strings.

One of the sound-effects from the Looney Tunes and Merrie Melodies especially engaged my attention as a kid. Growing up in Bogota during the 1980s and 1990s was very intense as regard to the sound of explosions. The late eighties and early nineties were the years of bombs – car bombs, truck bombs, bicycle cart bombs, airplanes blowing up in the air. The drug cartels had declared total war against the Colombian government, and the way to attack was by making explosions in the streets of the major cities in front of government buildings, shopping centers, and the houses of judges and politicians. Although the bomb attacks never directly impacted me, I remember listening to the sounds of those explosions from my house. For instance, I never forgot the bomb that exploded the 6th of December in front of the DAS (Administrative Department of Security). I remember being woken up by the sound of a deep BOOOOOOM!!!! and the vibration of the windows in my room. It was huge. A truck-bomb with more than 500 kg of dynamite had exploded downtown and almost the whole city was shaking because of the blast.

At the same time bombs were disrupting the everyday life of my city, the TV screen was showing Wile E. Coyote being exploded by a roll of dynamite sticks that he put beneath a bridge to capture the Road Runner. KABOOOOOM!!!! was heard in the TV speakers and then the Coyote appeared with his body totally grey as if it were burned out. But the Coyote was not really injured; he was immediately trying another technique to catch his prey. Other Looney

Tunes and Merrie Melodies were also showing similar scenes in which the assault of characters with explosives was laughably absurd. The same thing happened with guns: characters got hit in the face. BANG! BANG! And their faces turned grey or their beaks turned upside down. Instead of the real violence of the streets of my city, the violence of these cartoons was of another kind, it was a comic violence that could only exist on the TV and in the world of the animated cartoons. Furthermore, it was a violence that was accompanied by sounds that were also comical: KABOOM! BANG! BANG! POW! ZIP! did not scare anybody; instead, they sounded funny as even as part of the music.

I am a pacifist. But I enjoy comedic violence. What a paradox! I regret the use of violence in the real world but I appreciate violence as comedy, either in animated cartoons, live action films, comic strips, plays, poetry, and other works of art. There is something that I find riveting in the fictional rendering of chaos, anarchy, disorder, and social transgression, some kind of symbolic play that works as an expression of freedom and is harmless to people. In addition, I am fascinated by the fact that violence as comedy makes audiences laugh regardless of their ages, languages, and cultures, and despite the kind of medium that is used to render it. And because I know that the words, the imagery, and the sounds that are used for rendering this fictional mayhem must have some sort of structural organization and logic that is worth discovering, I decided to study this comedic violence in order to understand its origins and its development across media, eras, and cultures.

Although the scope of my research was ambitious from the beginning, I was not afraid of exploring the ocean of media productions where violence as comedy has been rendered. Since the vast amount of material was so diverse, but still so similar in its comedic uses of violence (gestures and actions), I was quite sure that there existed a tradition, a set of conventions that worked across media, cultures, and periods of time. I dubbed it “the slapstick tradition” in order to emphasize the audio-visual nature of this mode of comedy —The word “slapstick” illustrates perfectly the integral relationship between images and sounds. Even though the term was usually associated with live-action films from the Silent Era, its actually came from the English translation of a comedic and percussive device employed in *Commedia dell’Arte* during the Italian Renaissance. The “batocchio” was translated into English not just as a “stick,” nor just as a “slap,” but as a composite word that carried in its meaning the simultaneity of sound and images.

First of all, I wanted to explore the slapstick tradition in order to understand its conventions, its historical development, and its flow across media. I was sure that I wanted to arrive after my exploration at the world of the Looney Tunes and Merrie Melodies, the American theatrical animated cartoons that I had watched while growing up. I was also sure that I wanted to start from the Italian *Commedia dell’Arte* of the 1600s and 1700s because it seemed to me to be the foundational place of the whole tradition. Although between *Commedia* and the Looney Tunes there was so much water to navigate, such as the Italian circus, the English and French music halls, the burlesque, and the fairgrounds, I decided to trace

a route in which I would visit only other American places where the tradition thrived: vaudeville, silent and sound live-action comedy, and silent and sound animation.

The general questions I wanted to answer in my exploration were: What is the slapstick tradition? What are the fundamental principles and conventions according to which the slapstick media texts are constructed and by means of which they achieve comic effects? Why is sound so important for it? More specific questions I wanted to answer were related to the Looney Tunes and Merrie Melodies: What are the Looney Tunes and Merrie Melodies contributions to the development of the slapstick tradition? How do theatrical animated cartoons capture slapstick? How does theatrical cartoon animation make possible relationships between sound and image which can be used to comic effect?

The structure of this thesis resembles my research questions and goes from the general to the particular, from the slapstick tradition to the Looney Tunes and Merrie Melodies, and more precisely to the cartoons produced between 1937 and 1943 at Termite Terrace. I argue that this specific period of time in the production of Looney Tunes and Merrie Melodies at Leon Schelesinger's Studio – "Termite Terrace," as it was called by its members– is the one where the wild energy and anarchism of the slapstick tradition started to be developed, innovated, and set up as the unique comedic style of these theatrical animated cartoons. Years later, this unique style became the trademark of Warner Bros. animation.

In the first chapter, “Slapstick across Media,” I define the slapstick tradition, identifying its principles of physical violence and disruption, and its conventions of grotesque movement and mockery and abuse of the body. For establishing those principles and conventions I rely on previous approaches to the study of comedy, such as the ones developed by Michael Bakhtin, Henry Jenkins, and Tom Gunning. In order to navigate the tradition across media, I focus on the comic routines where the principles and conventions have been formalized. Thanks to the modularity of these comic routines (structured comic actions and gestures), they have become the basic blocks for building slapstick media texts. By following different reinterpretations of the comic routines one can appreciate the development of the tradition and how its conventions have been innovated. Since sound plays a major role in the comic routines, I spend half of the chapter explaining how aural events have been used for comic effects, how sound technologies and practices have been adapted to such purposes, and what have been the acoustic characteristics of the sounds of the slap-of-the-stick.

In the second chapter, “Animating Tradition: *That’s Not All Folks!*,” I focus on the Looney Tunes and Merrie Melodies in order to explain the contributions of these theatrical animated cartoons to the slapstick tradition. I spend a good portion of the chapter describing the unique convergence of human talents and audiovisual technologies that took place in Termite Terrace between 1937 and 1943. I emphasize the without the creative and collaborative processes that the “termites” developed during these years, innovations such as the creation of an energetic audiovisual rhythm and the sophisticated orchestration of all the sound elements to the beat and to the frame, would probably have been impossible to achieve. In this

chapter I also study the complexity of the soundtracks of the Looney Tunes and Merrie Melodies and explain the practices and technologies used for Carl Stalling (music), Mel Blanc (voices) and Treg Brown (sound-effects).

In the third chapter, “The *Looney* Sounds of the Slap-of-the-Stick,” I analyze the relationships between images and sounds across a sample of seven Looney Tunes and Merrie Melodies: *Picador Porky* (1937), *Porky’s Duck Hunt* (1937), *Daffy Duck and Egghead* (1938), *Porky in Wackyland* (1938), *The Daffy Doc* (1938), *A Tale of Two Kitties* (1942), and *Tortoise Wins Hare* (1942). I especially focus on the sound-effects that punctuate the grotesque movement and the mockery and abuse of the body in order to highlight the *schizophonia* of the cartoon body. This *schizophonia* (a term coined by Steven Feld) consists in the recontextualization of sounds that have been split from their original sources and rematerialized in the bodies of the cartoon characters. I organize these *looney* sounds of the slap-of-the-stick in a vocabulary that can be used for describing the cartoon body, reveal their acoustic characteristics, and argue that they are at the same time conventional and innovative.

As we shall see, the theatrical animated cartoons made at Termite Terrace from 1937 to 1943 represent a high point in the history of the slapstick tradition. The unique comedic style that was being set up in the Looney Tunes and Merrie Melodies of this time, and which would become the Warner Bros. animation style during the next twenty years, follows the conventions of the tradition and at the same time renews them.

We shall see that this tradition of violence as comedy has been alive since Italian *Commedia dell' Arte*, transiting across media, cultures, and eras. Although I will stop my exploration of the rich sea of slapstick in 1943 and in the animation medium, by no means I do want to imply that the tradition ended at that time; instead, I would like to claim that its waters keep flowing inside the global popular culture of our contemporary times. Future studies of the slapstick tradition and the comic uses of sound should be made not only of recent live-action films, theater plays, and television, but also of videogames, computer animation, interactive art, and multimedia performances.

Punch. I no like you playing so well as my own. Let me again. [Takes the stick, and dances as before: in the course of his dance he gets behind Scaramouch, and, with a violent blow, knocks his head clean off his shoulders.] How you like that tune, my good friend? That sweet music, or sour music, eh!
-He! he! he! [Laughing, and throwing away the stick.]

(Collier & Cruickshank, *The Tragical Comedy or Comical Tragedy of Punch and Judy*. 1832)

1. SLAPSTICK ACROSS MEDIA

1.1. The Slapstick Tradition

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 the British puppet shows of Punch and Judy, from the variety theater of American Vaudeville to the comedies and animated cartoons of cinema and television, the spectacles of the slapstick tradition have been popular entertainments, making audiences laugh with the representation of exaggerated physical violence, wacky antics, and mayhem.

The tradition takes its name from a device employed by the professional actors of the *Commedia dell' Arte*, an improvisational performance created in Italy during the sixteenth century. The “batocchio” is a comedic device that consists of two pieces of thin wood that are joined together at one end and that produces a loud slapping sound when struck onto something. The English translation of this noisy and knockabout device is “slapstick” and it is a reduction for “slap-of-the-stick.” However, when a commedia character such as Arlechino uses the device to hit another character’s head or buttocks, the sound it produces is not a simple “slap,” but an amplified “THWACK!”



Compositions of Rethorique (1611): Arlequino with the “batocchio.”

It is precisely during the Renaissance when the slapstick tradition starts to be recognizable as an important mode of comedy due to the popularity of *Commedia dell'Arte* in Italy and in other European countries such as France, England, and Germany. As Mikhail Bakhtin has observed in *Ravelais and his World*, the Renaissance is the period of time where the folk culture humor rooted in the medieval carnival withstands the transition to the modern bourgeois conceptions of the world and the classical ideals of beauty. The improvisational performance of the *Commedia dell'Arte* that takes place in the market place, the fair ground and the *piazza*, reveals the crossroads of these contradictory elements. On the one hand, *Commedia dell'Arte* performance has strong roots in late-medieval entertainment genres and oral practices such as the ones of the clowns, king's buffoons, medicine shows, and jugglers. On the other hand, the

performance has elements of the Renaissance print culture such as the topical situations of the *Commedia Erudite* or Humanist Comedy, the social class organization of the Roman comedies of Plautus and Terrence, and the linear plots of the satyr plays from the classical Greek theater. The mixture of the modern and the pre-modern, the oral and the literate, the vulgar and the decent, which characterizes *Commedia dell' Arte*, becomes a trademark of the entertainments of the slapstick tradition.

The folk culture humor with its carnival spirit, grotesque imagery and unofficial speech provided *Commedia dell' Arte* with a powerful energy that was marginal to the emergent modern print culture and the classic aesthetics. The Renaissance was not interested in recording either the carnival or the grotesque nor the marketplace speech through the printing press; instead, it was interested in rediscovering the classics, and promoting the humanism and the aesthetics of the beautiful. The improvisational nature of the *Commedia dell' Arte* performance and its itinerant condition opened a space where the folk culture humor could flow with certain freedom¹. It was a space where the liberating principle of laughter and the carnival spirit could survive the seriousness and rationality of the bourgeois world. All the entertainments of the slapstick tradition that appeared after the Renaissance have tried to keep this space open, allowing the principle of laughter to be freely expressed.

The principle of laughter, Bakhtin claims, is liberating and destructive, and frees “human

¹ Troupes of Italian professional actors traveled through Europe presenting their spectacle in different countries.

consciousness, thought, and imagination for new potentialities" (49). As Stallybrass and White point out in *The Politics and Poetics of Transgression*, "Carnival gives symbolic and ritual play, and active display, to the inmixing of the subject, to the heterodox, messy, excessive and unfinished informalities of the body and social life. It attacks the authority of the ego (by rituals of degradation and by the use of masks and costume) and flaunts the material body as a pleasurable grotesquerie -protuberant, fat, disproportionate, open at its orifices" (183). Carnival laughter is vulgar and earthy; it is festive laughter that degrades and materializes.

Carnavalesque Themes and Grotesque Realism

The most important category that Bakhtin locates in his optimistic notion of carnival is the one called "grotesque realism". Various carnivalesque themes are located under the symbolic category of grotesque realism. These themes contradict the classical ideas of beauty (fixed, static, finished, complete) and the official (high, centered) modern culture. The theme of the mask, widely spread across popular festivities and popular entertainments, reveals gay relativity and merry negation of uniformity and similarity, it is "related to transition, metamorphoses, the violation of natural boundaries, to mockery and familiar nicknames" (Bakhtin 40). The theme of the material bodily lower stratum consists of the exposure and display of lower regions of the body such as the belly, legs, feet, buttocks and genitals, and orifices such as the mouth, anus, and nostrils. This exposure of the material body is linked to grotesque mockery and abuse. As Bakhtin explains, "the body that figures in all the expressions of the unofficial speech of the people is the body that fecundates and is fecundated, that gives birth and is born, devours and is

devoured, drinks, defecates, is sick and dying” (319). The material bodily lower stratum is also correlated to the theme of grotesque movement. The “grotesque swing” has a topographical logic that consists of a rotation from the upper stratum (head, spirit, reason) to the lower stratum (anus, filth), with an accent in the descent movement. The buttocks take the place of the head and the head takes the place of the buttocks. “Down, inside out, vice versa, upside down, such is the direction of all these movements. All of them thrust down, turn over, push headfirst, transfer top to bottom, and bottom to top, both in the literal sense of space, and in the metaphorical meaning of the image” (Bakhtin 370). Finally, there is the theme of madness in which “men look at the world with different eyes, not dimmed by ‘normal,’ that is by commonplace ideas and judgments” (Bakhtin 39).

The professional actors from *Commedia dell'Arte* developed all these carnival themes through improvisational performances and played a crucial role in the validation of them. As Bakhtin states, “There was a formalization of carnival-grotesque images, which permitted them to be used in many different ways and for various purposes. This formalization was not only exterior; the contents of the carnival-grotesque element, its artistic, heuristic, and unifying forces were preserved in all essential manifestation” (34). The masks of the *Commedia* characters, as well as the comic routines or *lazzi* that professional actors performed, became an important stock of carnival-grotesque imagery, and turned into the foundational conventions of the slapstick tradition.

These conventions, or early agreements, have been transmitted across different popular

entertainments keeping the slapstick tradition alive. For example, the mask of such a *Commedia* character as Pulcinella with long nose as a beak, was adapted centuries later in England to the puppet character of Punch; and the “*lazzo* of the ladder” performed by the Gelosi (the *Commedia* Troupe of Flaminio Scalla) at the end of the 16th century in Italy, was recreated centuries later in America by Charles Chaplin in the silent film *The Pawnshop* (1916), by Oliver Hardy and Stan Laurel in the sound film *The Music Box* (1932), by the Marx Brothers in *Animal Crackers* (1930), by Catsello the cat in the Merrie Melody *A Tale of Two Kitties* (1942), and by a group of ten comedians in the live action film *It's a Mad, Mad, Mad, Mad World* (1963).

***Lazzi*, Gags or Comic Routines**

Lazzi are perhaps the most important and influential legacy of *Commedia dell' Arte*. They are independent comic bits, comic stage business or gags that are inserted inside the plot of a *Commedia* performance. Instead of being subordinated to a larger narrative, these *lazzi* or gags possess their own micronarratives and their purpose is to amuse for a moment. They are based on affective immediacy and exploit all means of producing quick response in the audience. From acrobatics to horseplay, from verbal nonsense to visual tricks, gags are always calling for an emotionally intense response. They do not follow any rational logic nor complete realistic discourses with meaning; they mainly entail brutal shock, surprise, and intense stimulation. As Gordon argues, “*lazzi* allude to any discrete, or independent, comic and repeatable activity that guaranteed laughs for its participants” (5). These comic routines require a great deal of skill from the professional actors. The skill consists of timing and pacing the routine (creation of

suspense and surprise) and in the control of the body for acrobatics. Some of the *lazzi* are dangerous routines such as mock fights, tumbles, falls, slaps, somersaults, hand walking, and even explosions.

If the *Commedia* plots are based on topical situations taken from the *Commedia Erudita* and the classics, the *lazzi* come from the opposite side, from the carnival, the fairground, and the market place. Like many other *Commedia* elements, the origin of the term *lazzi* is not clear. On the one hand, it is possible that the term *lazzi* derived from the Italian expression “l’azione” (the action). On the other hand, it is possible that the term came from the Truscan (an Italian dialect) word *lazzi* that means ribbon. The first definition highlights the importance of visual actions and situations for the comic routines (nonverbal nature). The latter definition makes sense if one thinks in the modular characteristic of the “comic bits,” and in their potential to be inserted inside different plots. This modularity allows the *lazzi* to flow not only across different *Commedia* plots and troupes, but as well across different entertainments and eras. As Tom Gunning claims in his study of the origins of American film comedy, “The *Commedia dell’Arte lazzi* (which provided schemata for many gags which survive into film comedy) were devised precisely as autonomous routines which could be inserted willy-nilly into almost any comic plot, at the whim of the company manager or even an individual performer. Plot development would be shunted aside momentarily, while the *lazzi* action took over the main track” (97).

Gags, comic bits or *lazzi* have become the basic blocks for creating slapstick performances.

This collection of comic routines has become a sort of comic database or vocabulary ready to be reused, remixed and updated by comedians around the world. Although conventional, *lazzi* have let a space open for innovation, reinterpretation and negotiation. As Howard Becker states, "Though standardized, conventions are seldom rigid and unchanging. They do not specify an inviolate set of rules everyone must refer to in settling questions of what to do. Even where the directions seem quite specific, they leave much to be resolved by reference to customary modes of interpretation on the one hand and by negotiation on the other" (31). The flexibility of the slapstick tradition conventions is what has kept the tradition alive and what has allowed artists from different periods of time and different media to create reinterpretations of the *lazzi*.

Especially in relation to the carnival themes of material bodily lower stratum and grotesque movement, the comic routines of *Commedia dell'Arte* have set a standard for the slapstick tradition. It is in the *lazzi* where the mockery and abuse of the body are developed through exaggerated physical violence and disruption. The "*lazzo* of the *batocchio* or slapstick" serves as an illustration of this fact. When a *Commedia* actor pulls out a stick and starts beating his partner, the normal narration of a story is interrupted by a sudden exaggerated violent action that creates a disruption and produces surprise, shock, and laugh in the audience.

Although not all of the spectacles that belong to the slapstick tradition use the same comic

device, all of them develop the basic principles of exaggerated physical violence and disruption.² At the turn of the nineteenth century, American vaudeville performers used a custard pie as a device to mock and abuse the body and generate laughter. Even though the pie that was violently smashed in the face of another character did not produce any amplified noise, the disruption and exaggerated physical violence were there. Actually, during this kind of vaudeville act, the amplified noise came from a drummer in the orchestra who was in charge of making sounds to accompany the comic actions of the performers.

American Vaudeville

Comic routines or *lazzi* from the slapstick tradition arrived in America via the Italian circus, the English and French music halls, the burlesque, the fairgrounds, and the silent French film comedies of stuntmen (*cascadeurs*). During the final decades of the nineteenth century and the beginning of the twentieth century, while fast social, cultural and economic changes were happening in the United States of America, the slapstick tradition encountered a fertile field to flourish in American vaudeville and silent cinema. It was precisely during this transitional period of time (from rural to urban, from pre-modern to modern), when a new kind of humor emerged in this nation opening spaces for the flow of carnival-grotesque realism in American popular entertainments. This “New Humor,” as Henry Jenkins explains in *What Made Pistachio Nuts?*, was the humor of the new immigrant masses that populated new urban centers.

² These two principles can be associated with what Eisenstein calls “attractions.” As Donald Crafton points out in his essay *Pie and Chase: Gag, Spectacle and Narrative*, “Eisenstein also referred to those moments as ‘emotional shocks,’ and insisted that they are always psychologically disruptive (for example, the gouging out of an eye)” (110).

It was vulgar, earthy, anti-bourgeois, anti-rational and anti-refined. It had only one justification: to provoke laughter. Therefore, all the means of producing laughter were valid. Since the “New Humor” did not need to address social, moral or ethical questions, it could easily align with the liberating carnival laughter and the grotesque realism. The defenders of this “New Humor” pitched it “as the cure for the mental stress, emotional fatigue, and sensory starvation of urban experience” (Jenkins 45).

The centrality of laughter for the rapid changing American society made possible the emergence of the pseudoscience of “affective mechanics” in which the experts mastered what made people laugh. Vaudevillians were masters of the “mechanics of emotion” and they found a great resource for this knowledge in the gags of the slapstick tradition. Exploring the emotional reflexes of the audience, vaudevillians concluded that audience response was visceral. Therefore, intense stimulation, crude shock, and immediate sensation were needed in order to get the payoff, the laughs from the audience. Brett Page, who wrote a manual for vaudevillian writers in 1915, recommended the use of comic business of the “slap-stick” kind. According to Page, “Every successful two-act, every entertainment-form of which acting is an element... prove beyond the shadow of a doubt that what audiences laugh at –what you and I laugh at- is not words, but actions and situations” (qtd. in Crafton, “Pie and Chase...” 108).

Henry Jenkins, who systematically describes the aesthetics of vaudeville performance, points out the distinction between them and the classic aesthetics of melodrama and bourgeois

theater. Jenkins writes, “The difference was variously characterized in terms of a different performer-spectator relationship, a fragmented structure, a heterogeneous array of materials, and a reliance upon crude shock to produce emotionally intense responses” (63). The conventional and modular slapstick gags, rich in carnival-grotesque imagery and physical violence and disruption, matched perfectly the vaudeville aesthetics and were reinterpreted and updated by vaudeville comedians. For instance, the bashes in the head that the *Commedia* character Coviello gives to Pulcinella when performing the “*lazzo* of fruits and kisses,” are reinterpreted in vaudeville, and instead of giving slaps in the head, vaudeville comedians stick two fingers into another’s comedian eyes.

Another example of reinterpretation of conventional slapstick gags is the one made by W.C. Fields of the “*lazzo* of the tooth extractor.” This comic routine was originally performed by the *Commedia* character Arlechino, who, disguised as a dentist, extracts four good teeth of Pantalone, using ridiculous tools such as a large pair of pliers while the victim cries out in pain. *The Dentist* (1932), starring by W.C. Fields, directed by Leslie Pearce, and produced by Mack Sennett, provides an audiovisual record of the kind of vaudeville act that Fields used to perform on stage. In one scene, acting as a dentist, Fields tries to extract a painful tooth from a woman (Elise Cavanna) and practically engages in an erotic wrestling match. A tall woman wearing a one-piece dress and stockings sits down in a dentistry chair. As Fields stands in front of her body and gets closer to her mouth she opens her long legs and wraps them around the dentist’s waist. Since the bad tooth does not come out, Fields ends up carrying the woman out of the

chair in this erotic position while still pulling on the tooth with the pliers. Tired, Fields sits in the dentist chair to rest, fans himself, and continues holding the pliers attached to the tooth while the woman is lying on the floor. After this brief pause, Fields stands up and carries the woman again as he continues tugging at the tooth. Finally, the woman sits down in the chair and Fields gives up trying to extract the bad tooth.

American Silent Film Comedy

However, parallel to the developments of the slapstick tradition in the fertile and varied fields of American vaudeville, the tradition also thrived in the American silent film comedy. As David Madden notices in *Harlequin's stick, Charlie's cane*, the roots of American silent film comedy can be found in “popular entertainment forms that had kept *Commedia dell'Arte* routines, formulas, plots, characters, costumes, and masks alive” (136). Those popular entertainments are, of course, the ones where the slapstick tradition has been developed: circus, vaudeville, music-halls, burlesque, and the fairground. Besides that, the roots of American comedy can also be linked to the emerging popular graphic art of the beginning of the 20th century where the “New Humor” was being developed in the form of comic strips. The graphical representation of gags inside the panels of a comic strip portrayed conventional slapstick gags with extreme clarity and economy. In general, as Henry Jenkins has said, there existed a flow of content among the popular mass media system that was emerging at the turn of the century in the United States of America. From comedy acts in variety theaters, to comic strips in newspapers, to films on the screen, the gags and the settings were borrowed and adapted systematically.

Tom Gunning has also observed, that the origins of American film comedy are linked to what he calls, inspired by Sergei Eisenstein, “cinema of attractions.” This kind of cinema puts emphasis on exciting spectacle, direct stimulation, surprise, and shock, instead of narrative development. As Gunning states, the cinema of attractions is “a dominant tendency in early cinema which addresses spectators with a visual display, rather than a developed narrative action” (94). The conventional gags of the slapstick tradition, with their exaggerated physical violence and disruption, were an ideal resource of inspiration for this kind of cinema.

Gunning identifies the short film comedies made in France by the Lumière Brothers at the end of the nineteenth century as the first examples of the “mischief gag” films, “short films consisting of a single shot, chronicling a gag or bit of mischief, and frequently featuring a youthful rascal” (Gunning 89). These very short films (one minute long) inspired a whole genre of films from 1896 to 1905 that consisted of one single shot of a gag or comic routine that was basically “a brief scene of fairly harmless aggression” (Gunning 94). The “mischief gag” films were truly expressions of the slapstick tradition, and developed many of the conventional carnivals-grotesque themes. A clear example of the body mockeries and abuses that many of the rascals perform against adults in “mischief films” are the filling of hats with ashes (*Let Uncle Reuban Show You How* by American Mutoscope & Biograph in 1904) and the throwing of water in the face (*L'Arroseur arrose* by the Lumière Brothers in 1895).³

³ These comic routines can be linked to the “lazzo of the flour” and the “lazzo of spitting” from *Commedia dell'Arte*. Both gags can also be found in comic strips from the end of the 19th century. For instance, the gag of the water in the French comic strips of A. Sorel entitled “Fait Divers” (1887), and Georges Colomb “Christophe” entitled “Un Arroseur Public” (1889).

As the film medium was being developed during the first three decades of the twentieth century, advancements in film technology facilitated movie pioneers to create longer films, and to shoot and edit them in creative ways. The longer comedy shorts (two reels) maintained their preference for gags and comic routines instead of a more narrative oriented plot development. Gags were strung together, one after the other, creating chains of comic routines that were usually tight with the simple plot of a chase. New comic devices were used to render physical violence and disruption in the gags of the American silent film comedies and they certainly innovated the slapstick tradition. Locomotives born from the industrial revolution were humorously transformed into mischievous machines. Mockery and abuse against the human body, started to be a matter of uncontrolled mechanical machines such as cars and trains.⁴

Although many studios in the U.S.A. were making film comedies during the teens and the twenties, a particular film studio stands out as the one where the slapstick tradition was systematically cultivated and renovated. The Keystone studio of Mack Sennett was the place where all the major comedians of the silent era, coming from vaudeville, circus, and music-halls, met, improvised and nurtured. As James Agee points out in his article "Comedy's Greatest Era," Keystone was the training school of Buster Keaton, Charlie Chaplin, Harold Lloyd, Harry Langdon, Ben Turpin, and Fatty Arbuckle. In the Keystone comedies the gag library or database of comic routines was updated in terms of time and speed. Camera tricks and film

⁴ As Tom Gunning says, "Silent American comedy developed a form which drew its inspiration from gags rather than plotting. These gags have their origins in acts of anarchy, infantile revolts against authority and property. But their explosive counterlogic also found embodiment in devices of balance and trajectory, antimachines which harness the laws of physics to overturn the rules of behavior. Simultaneously revolt and engineering, these devices mine the fascination that spectators of the industrial age had with the way things work, the operational aesthetic" (103).

montage techniques sped up the conventional slapstick gags.⁵ As Agees notices, "Sennett's comedies were just a shade faster and fizzier than life. According to legend (and according to Sennett) he discovered the sped tempo proper to screen comedy when a green cameraman, trying to save money, cranked too slow. Realizing the tremendous drumlike power of mere motion to exhilarate, he gave inanimate objects a mischievous life of their own, broke every law of nature the tricked camera would serve him for and made the screen dance like a witches' Sabbath" (14).

In the early Krazy Keystone Comedies (1910s), many of the conventional gags of the slapstick tradition were reinterpreted and updated with the new possibilities of the film montage and fast pace editing. The speed and rhythmic display of the gags on the screen was certainly an innovation in the tradition. As Douglas Riblet notices, "Common bits of comic business in Keystone films included a variety of cruel assaults on the human body: kicking unaware victims' asses; poling pins into asses; burning someone's flesh with a cigarette...; biting another character's nose; spitting a mouthful of water into another character's face;...horseshoes, bottles, bricks and other objects hurled at character's heads. (The ass and the head were the favored targets of knockabout abuse.)" (172). Although some of these knockabouts gags are conventional adaptations of *Commedia dell'Arte's lazzi* (for instance the "Lazzo of Spitting"), and others are innovative reinterpretations of them (for instance the "Lazzo of the Enema" turns into pricking a pin on the buttocks), all of them develop the

⁵ Keystone comedies were shot at 12 to 16 frames per second and then speed up in the projectors, showing the films at 16 frames per second.

conventional carnival-grotesque theme of the lower bodily stratum, and the abuse and mockery of the body through exaggerated physical violence.

The silent film comedies from the teens and the twenties have become one of the most representative spectacles from the slapstick tradition. Actually, the term “slapstick” turned out to be a whole category for referring to this kind of silent film comedies. Commentators, scholars and the trade press of the movie industry have been referring to them in this way. “Silent slapstick” is full of physical and mechanical knockabout, frantic-fight leaps, pratfalls, kicks, and mayhem. The limitations of the medium in its infancy, such as the lack of dialogue, boost the skills of the film comedians who became masters of acrobatics, pantomime, mimicry, dancing and clowning.

As Agee writes, “When a silent comedian got a hit on the head he seldom let it go so fatly. He realized a broad license, and a ruthless discipline within that license. It was his business to be as funny as possible physically, without the help or hindrance of word. So he gave as figure of speech, or rather of vision, for loss of consciousness. In other words he gave us a poem, moreover, that everybody understands” (10). Expressive poses and postures, stunts, antics and gymnastics, turned into poetry, comic poetry of body motion. Silent clowns showed emotions through their bodies, “they discovered the beauties of comic motion which are hopelessly beyond reach of words” (Agee 10). Such beauties can be linked to the comic motion that the character of Arlechino developed back in the days of *Commedia dell’Arte* and, therefore, can be considered as innovations in the slapstick tradition conventions. Such poetry of the body can be

appreciated in the engravings and paintings that depict Arlecchino in expressive poses and postures such as walking in hands, or doing backflips.

American Sound Cinema

At the end of the 1920s, when the development of film and sound technologies made possible to record and synchronize moving images and sound, the poetry of silent comic motion lost its protagonist in live-action. Only few of the silent film clowns were able to transit into sound film. Besides that, the appearance of feature films during the 1920s and the consolidation of the Hollywood classical norms for building coherent narratives relegated the slapstick comic spectacle to the marginality of short comedies and animated cartoons. The American film industry found a new group of clowns in vaudeville theaters that were able to perform physical violence and disruption, combining spoken language and antics.

In the thirties, the films of the Marx Brothers, Laurel and Hardy, and the Three Stooges, were the place where the slapstick tradition flourished in what has been dubbed by critics and scholars “anarchistic comedies.” Each of these clowns reinterpreted the conventional slapstick gags allowing the physical violence and disruption to emerge in their films. For instance, the very conventional and foundational “*Lazzo* of the batocchio or slapstick” was developed in the Marx Brothers film *Monkey Business* (1931) and in the Laurel and Hardy’s film *Sons of the Desert* (1933). In the first one, Harpo Marx, “Naturally the most fascinating and surrealistic character in Hollywood” (Dali 54), the brother that had no voice and relied in pantomime for his acting, takes part of a *Punch and Judy* puppet show and is hit not only by the puppets

with their little slapsticks but as well by one actor with a giant slapstick. In the second one, Laurel and Hardy acting as members of a fraternity, get hit in their buttocks with the huge slapsticks that other fellows are hanging in the middle of a celebration.



Sons of the Desert (1933): Stan Laurel and Oliver Hardy.

American Silent Animation and Graphic Narrative

While sound film started to lose the emphasis in comic motion and became more narrative and talk oriented during the late twenties and through the thirties, the animation medium called the attention of the movie industry and the audience thanks to its ability to render comic motion synchronized to sound. Animation had emerged as a popular entertainment during the first years of the twentieth century, and had developed many of the carnival-grotesque themes, such as the lower body stratum and the grotesque swing, since the

very pioneering works of Emile Cohl and Winsor McCay. For instance, the stick figure clown that appears in Cohl's *Fantasmagotie* (1908) makes flips in the air, hits with his pointed hat the belly of a fat stick figure, catch the buttocks of a stick figure dandy with a fishing cane, gets hit in the face with a cork from a bottle of wine, stands on his hands, and does a pratfall from a window of a house. Similar conventional slapstick gags appear in McCay's *Little Nemo* (1911), as when two of the characters (Flip and The Imp) make pratfalls, backflips and, toward the end of the film, explode in many pieces while driving a car. Beyond the conventions, the possibilities of squashing and stretching the bodies of characters in ways that were impossible to display in a human body started to be developed in the animation medium since these early films. This fact reveals one of the most important innovations that animation brought to the slapstick tradition.

Early animators were inspired by vaudeville, circus, burlesque, silent film comedies, and, of course, by the graphic humor of comic strips.⁶ During 1910s, the first commercial-cartoon film releases were adaptations of popular funnies. *Mutt and Jeff*, created by Bud Fisher in 1908, started to be animated by the studio of Charles Bowers in 1916; *Krazy Kat*, created by George Herriman in 1913, was animated by the studio of William Randolph Hearst (International Film Service) in 1916;⁷ *The Katzenjammer Kids*, created by Rudolph Dirks in 1897, began to be animated by the International Film Service in 1917. Each one of these comic strips had

⁶ The grandfathers of the medium, Emil Cohl and Winsor McCay, were talented cartoonists. Two of the most enduring American animators, Walt Disney and Friz Freleng, started their prolific careers as illustrators for Kansas City theaters. A big portion of the personal that populated the animation studios came directly from the graphic world of comic strips and humor magazines.

⁷ Hearst was also a leading newspaper publisher and magnate.

developed a graphical approach to humor that consisted of displaying in few panels, with clarity and precision, knockabout sight gags that followed the conventional exaggerated physical violence and disruption of the slapstick tradition.

For instance, in *Mama Katzenjammer is so strong! Ach, Yes!* (1901) the mockery and abuse of the body are displayed in the last two panels of the strip.⁸ In the first two panels, the mischievous kids set up a comic device that consist of a dumbbell tied to four ropes that are attached to a bucket, a vase and two picture frames. The dumbbell is located in the floor and the four objects are located in a high shelf. In the third and fourth panels, Mama appears and is asked (the text appear in a balloon that is near to the head of one kid) to lift the heavy dumbbell. In the fifth panel, Mama is portrayed lifting the dumbbell and being hit by all the objects that were in the shelf (dented lines, stars and exclamation marks point into her head, while curved lines come from the bucket and surround her body). In the same panel the two kids appear laughing, at each side of their victim. In the sixth and final panel, Mama is portrayed hitting the buttocks of one kid with a stick (dented lines point to the posterior part of the kid) while the other stands aside crying (with drops coming our of his eyes). The structure of the whole strip follows a linear logic that consists of the set up of the mockery device and ends in the display of violent actions against the body of the characters. The use of dented lines, stars and exclamation marks in the last two panels of the strip emphasize the disruptive quality of such actions and exaggerate the mockery of the bodies.

⁸ Sunday half-page. April 21, 1901. St. Lois Daily Globe-Democrat.

Another example of how the slapstick tradition was developed graphically can be found in the *Krazy Kat* comic daily strip of January 17, 1918. In this strip the mockery and abuse of the body are displayed in the last fifth panel where Ignatz mouse is portrayed throwing a brick into the head of Krazy cat. The body of the cat appears floating in the air horizontally with a brick near to the head. Horizontal motion lines or “zip-ribbons” represent the trajectory of the brick through space. In the middle of the motion lines the word “ZIP” appears in capital letters, and, above the head of the cat, the word “POW” appears in a sort of cloudy-balloon that has three dented and vertical lines in its bottom (these dented lines are like exclamation marks). In contrast to the final one, the first four panels of the strip don’t represent any physical violence or disruption. Instead of that, they display a dialogue between the two characters that is calm, short and funny. The bodies of Krazy and Ignatz appear in the center of the first, second, third and fourth panels, standing on the ground with their faces pointing at each other while word balloons appear at the very top of the panels linked to the heads of each character with thin long lines. Even if the funny dialogue gives the reader the punch line of a verbal joke in the fourth panel, it is in the fifth panel where the physical violence and abuse of the body are displayed. The last panel subverts the reader’s expectations creating the conventional disruption and shock of the slapstick tradition.⁹

When comic strips started to be translated into theatrical cartoons during the 1910s in the U.S.A., they were providing more than characters to the new medium, they were also supplying basic structures to represent scenes visually, and therefore, graphic conventions to narrate

⁹ The “brick on the head” became the trademark of Krazy Kat comic strip, and had many different variations.

slapstick gags.¹⁰ As Norman Klein points out in *Seven Minutes: The life and Death of American Animated Cartoon*, the funnies gave to the silent animation of the teens a “graphic narrative” that was characterized by flatness, lines and typographic language (dialogue, sound-effects). The backgrounds and the characters of silent animated cartoons looked exactly as the ones of the comic strips that inspired them, they were simplified drawings with lines. As Leonard Maltin says, “Movement was spare, dialogue (in comic strip balloons) was at times overabundant, and cinematic innovations were few. They were ‘living comic strips’”(17). In contrast to the static panels of a comic strip that showed disconnected moments of a scene that the reader had to connect in his mind, the animation medium brought life to the drawings by means of the speed with which thousands of frames were projected on the screen, producing the illusion of continuous motion.¹¹ The graphic conventions for displaying exaggerated physical violence such as dented and motion lines, stars, and exclamation marks, were reproduced in the animated cartoons to emphasize and exaggerate the disruptive nature of the slapstick gags.

For example, in the theatrical animated cartoon *Krazy Kat Goes A-Wooing* (1916) the “brick on the head” panel is rendered in motion four different times with the use of stars and dented lines that emerge from the parts of the body that the bricks impact. However, instead of just showing one static image of sudden violence, the animation medium was able to display the immediate reaction and movements of the abused body and as well of the graphic conventions

¹⁰ As Francis Lacassin points out, “The comic-strip page demonstrably corresponds to the film sequence, or to the act of a play... The daily comic strip of three or four images is comparable to the cinematic scene” (11).

¹¹ Panels printed on a page are in fact similar to frames photographed on film, both of them are framed images. The difference relies in the number of framed images that the audience has to read and the speed in which the audience does it. As Scott MacCloud explains, “Comic panels fracture both time and space, offering a jagged staccato rhythm of unconnected moments ...But *closure* allows us to connect these moments and mentally construct a continuous, unified reality” (67) .

(the dented lines and stars also move). Following the conventions of the slapstick tradition, the body of Krazy makes multiple backflips in the air after receiving a brick on the head and ends lying down on the ground. When he tries to recover and stand up, he receives three consecutive brick impacts in his buttocks. After the last impact Krazy does a sort of pratfall and ends sitting down on the ground. Many of the theatrical animated cartoons from the teens and twenties display the same sort of treatment of the carnival themes of body lower stratum and grotesque swing accompanied with the use of graphic humor conventions.

However, towards the end of the 1910s and the early 1920s, original animated characters were developed in the studios of Max Fleischer, Paul Terry, Walter Lantz, Walt Disney and Pat Sullivan. Characters such as Felix the Cat created by Otto Mesmer in Sullivan's studio, Koko the Clown created by the Fleischer brothers, and the many animals of the Aesop's Fables created by Paul Terry, explored new approaches to slapstick gags, backgrounds and a more lifelike motion¹². In fact, such invention as the Fleischers' *rotoscope* in which live-action film is traced over, frame by frame, on a piece of paper by an artist, demonstrates how animators were trying to render motion more accurately and fluid.¹³ Koko the Clown was a result of this technique, and more exactly of *rotoscoping* film footage of Dave Fleischer disguised as a clown. *Out of the Inkwell*, the animated series where Koko appeared, showcased the animation techniques the Fleischers were able to experiment with, and as well, multiple reinterpretation of slapstick gags.

¹² The studio of Pat Sullivan was even able to produce an animated cartoon of Charles Chaplin. Otto Mesmer was the animator in charge of reproducing in the comic motion of Chaplin in drawings.

¹³ "The idea of the machine was elementary, although its construction was not: A camera projects a piece of live-action film, one frame at a time, onto a light table, enabling an artist to trace the rear-projected image onto a piece of paper. The artist then turns a crank to proceed to the next frame and make his next drawing" (Maltin 84).



Out of the Inkwell: The Cure (1924) : Koko the Clown extracts a rhinoceros' tooth.

For instance, such conventional comic routine as the “*Lazzo* of the tooth extractor” was reinterpreted and innovated in *Out of the Inkwell: The Cure* (1924). In this animated short, Koko and his rabbit assistant try to extract not only the tooth of animated animals (a lion, a dog, a rhinoceros, an oyster, a pelican, a walrus) but as well the tooth of a real human being, more precisely the tooth of Max Fleisher. Thanks to the combination of live action footage and animation, and as well to “clever editing and juxtaposition” (Maltin 86), the Fleischers were able to put in the same scene a human character and a an animated cartoon, and to recreate comic routines in which the animated characters mock and abuse the body of human beings and vice versa. This style was certainly influenced by the slapstick tradition.

Theatrical Animated Sound Cartoons

Although during the silent period animation matured its language and techniques, and was able to reinterpret slapstick routines rendering motion in ways that a human performer could never have achieved, it was not until the coming of sound that the medium fully captured the attention of the audience and the film industry; particularly important was its sophisticated way of synchronizing sound to the moving images. In Disney's *Steam Boat Willy* (1928), cartoon characters and backgrounds move in perfect synchronization to the music, while slapstick gags, such as kicking the buttocks, spitting, and throwing a bucket of water into a face, are enhanced with the sound of whistles and percussion instruments. As Klein explains, with the coming of sound "New visual gags were possible. Inanimate objects could not only look alive, they could sound alive as well....Music replaced text as the ideogram....The graphic ideogram was replaced by syncopation" (11).

In contrast to live-action, animation transited to sound easily and assimilated very well the rhythmic discipline of music. The comic motion that was lost in live-action talkies was boost in the animated cartoons thanks to the sophisticated way of timing the cartoon movements to the rhythm of the music. Sound enhanced the comic routines, as Maltin points out, sound "opened new vistas to the animated cartoon and imposed discipline where once had been chaos" (27).

The slapstick tradition flourished during the first years of the talkie cartoon but was relegated to a marginal role in the mid-thirties. The successful and acclaimed Walt Disney studio started to set up the standards of American animation by moving away from the piling of

gags (anarchic story) towards a more melodramatic, realistic and character motivated approach. As Klein has observed, “In the mid-thirties, a moral element is added to cartoons, which was relatively absent earlier. In order to add moral instruction, cartoon studios turned toward domestic melodrama, which also resembled the stories in live-action cinema, and made primary use of fully animated faces and gestures” (134).

The majority of animation studios in the U.S.A. were influenced by the melodramatic approach. The anarchy of the slapstick comic routines that did not require any moral or causal justification was replaced by stories of family life in which the cartoon characters appeared dressed like children and acted following well-constructed plots. However, during the final years of the thirties, the wild energy of slapstick was revived again in the animation medium with the Looney Tunes and Merry Melodies produced by the Leon Schlesinger studio. The theatrical animated cartoons that featured Porky Pig, Daffy Duck and Bugs Bunny were openly anti-Disney and developed systematically the slapstick gags, reinterpreting them in innovative ways.¹⁴

Although the slapstick tradition have been followed and updated after the 1940s, flourishing in such media as live-action and animated films, television, and videogames, I have limited my research to prior decades in order to focus on the conventions that preceded the theatrical animated cartoons produced by the studio of Leon Schlesinger from 1937 to 1943. So far I have been able to show historical evidence of how these conventions have been developed

¹⁴ The way in which this innovation took place in the Looney Tunes and Merry Melodies is studied and explained in the second and third chapters of this paper.

in *Commedia dell' Arte*, American vaudeville, live-action silent and sound films, and the theatrical animated cartoons. I have demonstrated that popular entertainments from different periods of time and cultures have relied on the same principles of physical violence and disruption to construct comic texts. The comic routines, *lazzi*, or gags in which the carnival themes of bodily lower stratum and grotesque movement are developed, have been re-interpreted across media and have been updated. It is precisely the reinterpretation of these comic routines and conventions which makes slapstick comedy a tradition.

1.2. The Sounds of the Slap-of-the-Stick

A very important aspect of the *lazzi*, comic routines, or gags, is the way in which aural events are combined simultaneously with visual actions. Sound has the capacity of aiding the apprehension of visual movements that sometimes, due to the violence and suddenness, happen very fast. As Michel Chion claims, "owing to the eye's relative inertia and laziness compared to the ear's agility in identifying moving figures, sound helps to imprint rapid visual sensations into memory" (122). The slapstick tradition has used the power of the audio-visual simultaneity to create a comic effect. Aural and sight senses of the audience are stimulated at the same time in order to exaggerate, comically, the physical violence and disruption of the gags. When Arlechino hits the buttocks of Pulcinella with the "batocchio" the audience hear an amplified "TWACK!". When a comedian falls in a vaudeville act the percussionist in the orchestra plays a drum roll. When a brick hits the face of a silent film clown either the drummer or the organist plays the sound of a "crash box" full of nails, screws, and other metallic items. When Daffy hits

Porky Pig's head with a mallet, the recorded sound of a hammer hitting an anvil emerges from the soundtrack.

What I call “sounds of the slap-of-the-stick” are the different sounds that have been used across media to enhance the physical violence and disruption of the gags. All of them have a relation of synchronicity with the carnival-grotesque visual actions. 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.¹⁵ 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.¹⁶ In these *sync points* the audiovisual effect of *synchresis* becomes prominent. As 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.

Audio-visual synchronization turns out to be a conventional practice used for comic effects. Even if the sounds of the slap-of-the-stick do not correspond to the reality of the visual event, when they are heard in sync with the visuals they create a new composite of aural and

¹⁵ The abrupt coincidence of a sound and a visible impact creates an audio-visual point of synchronization. As Michel Chion explains, a Point of Synchronization, or sync point, is “a salient moment of an audiovisual sequence during which a sound event and a visual event meet in synchronicity” (58).

¹⁶ “They give the audiovisual flow its phrasing, just as chords or cadences, which are also vertical meetings of elements, can give phrasing to a sequence of music” (Chion 59).

sight sensations. Sound adds value to the visual action, to the image. As Chion describes, "through the phenomenon of added value, it [sound] interprets the meaning of the image, and makes us see in the image what we would not otherwise see, or would see differently" (34). The comic effect is achieved because the sound we hear when a body is being mocked or abused is not the sound that a real human or animal body would produce but a very amplified, percussive and material sound.¹⁷ The visual violence and grotesque movements become funnier because the bodies seem to be more concrete and more physical.

Exploring a Database of Comic Routines: Spotting Sync Points

An interesting way of studying the sounds of the slap-of-the-stick is by spotting points of synchronization in the comic routines across media. The database of gags can be consulted in order to understand how sound technologies available at different periods of time have affected the conventional sound practices of the tradition (audio-visual sync). I have identified five comic routines that have been spanned *Commedia dell'Arte* to vaudeville, silent and sound film, and theatrical cartoon animation: the "*lazzo* of the tooth extractor," the "*lazzo* of the ladder," the "*lazzo* of water," the "*lazzo* of the batocchio," and the "*lazzo* of somersaults."¹⁸

¹⁷ As Michel Chion has described, "A sound of voices, noise, or music has a particular number of materializing sound indices, from zero to infinity, whose relative abundance or scarcity always influences the perception of the scene and its meaning. Materializing indices can pull the scene toward the material and concrete, or their scarcity can lead to a perception of the characters and story as ethereal, abstract and fluid" (114). Materializing Sound Indices (M.S.I) "are the sound's details that cause us to 'feel' the material conditions of the sound source, and refer to the concrete process of sound's production" (114).

¹⁸ Although I have spotted numerous reinterpretations of these *lazzi*, I will not be able, given the scope of this project, to analyze all of them deeply. In some cases I will just concentrate my analysis on a few of them. However, I have decided to reveal here the complete mapping of my exploration and to accompany it with some visual evidence.

The “*lazzo* of the tooth extractor” that appears in Flaminio Scala’s scenario *The Dentist* (1611) and in one engraving from the *The Recueil Fossard* (circa 1580), can be appreciated in Charlie Chaplin’s *Laughing Gas* (1914), Fleisher Brothers’ *Out of the Inkwell: The Cure* (1924), Laurel and Hardy’s *Pardon Us* (1931), W.C. Fields’ *The Dentist* (1932), and The Three Stooges’ *All the World’s a Stooge* (1941).



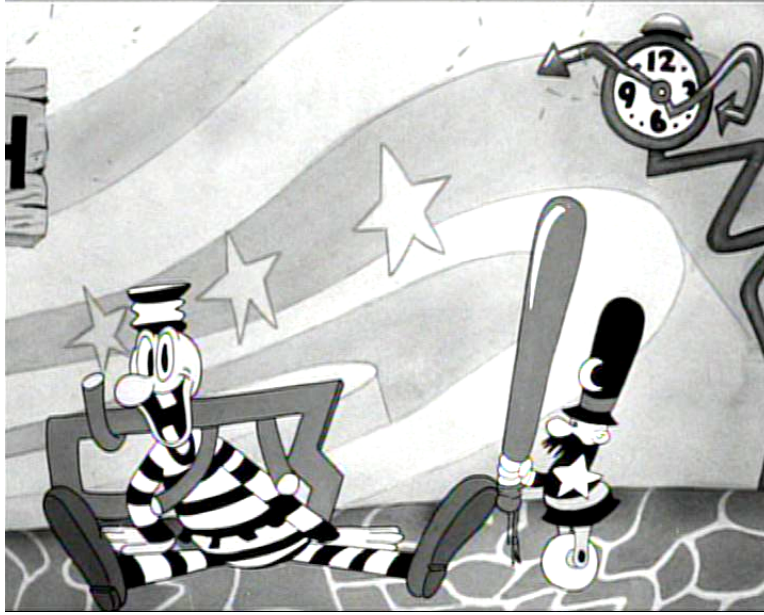
The Recueil Fossard (circa 1580): *Lazzo* of the Tooth Extractor.

The “*lazzo* of the ladder” that appears in Scala’s scenario *The Fake Magician* (1611) is recreated in Chaplin’s *The Pawnshop* (1916), Laurel and Hardy’ *The Music Box* (1932), and the Merrie Melodie *A Tale of Two Kitties* (1942).



A Tale of Two Kitties (1942): *Lazzo* of the Ladder.

The popular and foundational “*lazzo* of the batocchio” that appears in many Scala’s scenarios and engravings from *The Recueil Fossard* (circa 1580) is re-worked in Marx Brothers’ *Monkey Business* (1931), Laurel and Hardy’s *Sons of the Desert* (1933), and the Looney Tune’ *Porky in Wackyland* (1938).



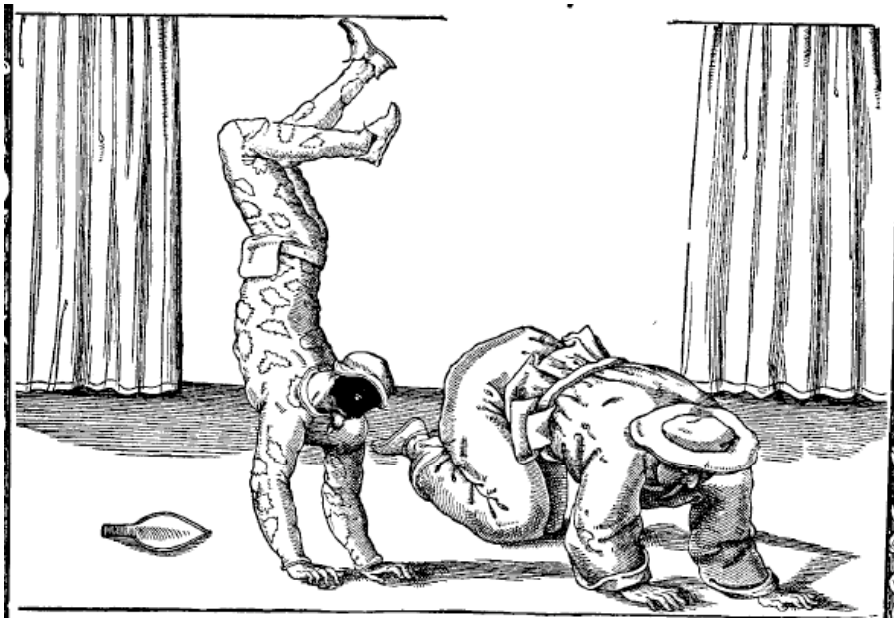
Porky in Wackyland (1938): *Lazzo of the Batocchio*

The “*lazzo of water*” (circa 1700) re-interpreted in Lumier’s *L’Arroseur Arrose* (1895), Laurel & Hardy’s *Sons of the Desert* (1933), Marx Brothers’ *Duck Soup* (1933), Walt Disney’s *Steam Boat Wille* (1928), and the Merrie Melodie *A Tale of Two Kitties* (1942).



L’Arroseur Arrose (1895): *Lazzo of Water*

The “*lazzo* of somersaults” that is represented in one engraving from the *The Recueil Fossard* (circa 1580) can be followed in Buster Keaton’s *Sherlock Jr.* (1924), Jack Durant and Mitchell Durant in *Stand Up and Cheer!* (1934), and the Looney Tune’ *Porky in Wackyland* (1938).



The Recueil Fossard (circa 1580): *Lazzo* of Somersaults

“Noises,” “Cries,” “Laughs,” “Shouts” and “Weeps”

Although the records of *Commedia dell’Arte* are very few due to the impossibility of fixing the improvisational performance in the printed page and the lack of audiovisual recording technologies during the sixteenth and seventeenth centuries, some significant printed documents are useful for identifying points of synchronization in the *lazzi*. These printed materials describe the comic routines and provide clues about the sounds that the professional

actors produced when performing the comic routines. My primary sources are the visual evidence from *The Recueil Fossard* (circa 1580) and *Compositions de Rhetorique* (1601), and the textual evidence of Flaminio Scala's *Il Teatro delle Favole Rappresentative* (1611), which is a compilation of fifty two scenarios.¹⁹

A *Commedia dell'Arte* scenario contains specific instructions for the improvisation of the professional actors. The scenario indicates the story or plot, outlines who is required to be in the stage, and notates what kind of actions and speech genres the actors have to perform. The scenario is basically the blueprint for the organization of the actors, a kind of rough map that has many empty spaces ready to be filled during the performance. When one is spotting points of synchronization in a scenario, one must rely in the hypothetical staging of the actions described in words. Many of the words that Scala used in his scenarios carry an aural impact. When one reads “noises,” “crying,” “laughing,” “shouting” and “weeping” in the printed text, one can imagine the kind of sounds that the professional actors produced on the stage when they were performing.

Scala's scenario *The Fake Magician* (1611) outlines one of the most famous comic routines from the slapstick tradition: the “*lazzo* of the ladder”. At the end of the first act, one reads,

ARLECCHINO

Arlecchino comes out with the ladder. The wine has come, he says, and then

¹⁹ In some cases I have complemented this sources with the compilation of *lazzi* (1550-1750) made by Mel Gordon in the book *Lazzi: The Comic Routines of the Commedia dell'Arte*. Although the visual documents of *The Recueil Fossard* (circa 1580) and *Compositions de Rhetorique* (1601) can be found in several *Commedia dell'Arte* studies, I consult them in Duchartre's *The Italian Comedy*.

stumbling many times, he sets the ladder at Flaminia's window. The Captain makes him hurry. Arlecchino climbs to the top of the ladder.

POLICEMEN

At the moment, policemen with lanterns enter, making a great deal of noise. Arlecchino is frightened, falls off the top of the ladder, and runs off, followed by the Captain. The policemen chase after him, and here the first act ends.

Although the basic descriptions of actions such as “stumbling,” “climbing,” “falling off,” “running of,” and “chasing” open spaces for the performance of comic motion and acrobatics, they do not recall specific uses of sound. The inclusion of the word “noise” and the phrase “at the moment” reveals a point of synchronization in this *lazzo*. The visual action of policemen entering the stage with lanterns accompanied by the “great deal of noise” is the audio-visual event that frights Arlecchino and makes him “fall off.”²⁰ The use of “great deal of noise” across different *lazzi* reveals the importance that amplified and exaggerated sounds played in *Commedia dell' Arte* for enhancing the physical violence and disruption of the comic routines. These concrete loud noises could have been produced not only by the use of the “batocchio,” pig bladders, and kitchen tools that the professional actors had available during the improvisational performances, but also by the actors voices (e.g., exaggerated shouts, cries, and laughs).

Drums, Cymbals, Keyboards and Sound-Effects

In American vaudeville, drummers have practiced audio-visual synchronization by

²⁰ One can imagine that this audio-visual event also disrupts the attention of the audience.

matching the comedians' actions on-stage with the sounds of cymbals, drum rolls and noisemaking devices. Their most important responsibility has been to "catch the falls" of a comedian in real time. As Rick Altman points out, "When a vaudeville comedian takes a fall, the drummer is expected to heighten the comedy by producing appropriate sound in sync with the fall. For example, a simple pratfall might elicit a rim shot on the cymbal, a pie in the face might call for a blow to the bass drum, while a cross-stage slide might be accompanied by a descending run on a xylophone or slide whistle" (Silent Film Sound 237). Located in the corner of the orchestra pit, the vaudeville drummer has not only had some of the classic percussion instruments at his disposition but as well different sound effect devices or "traps" that have produced noises such as "crashes" and "whistles." The variety of sounds at his disposition and the non-realistic aesthetic of vaudeville, have permitted the drummer to experiment with the incongruous matching of sounds and visual actions. The success of his live performance has been evaluated by both audience and theater owners in terms of the accurate synchronization of sounds and visual impacts.

The sound practices of vaudeville drummers made a transition to the silent film accompaniment during the first decade of the century and the early teens. Drummers joined the pianist in the nickelodeons and brought the conventional "catching the fall" technique to the movie theaters.²¹ New sound effect "traps" were developed during this period of time, allowing the drummers to expand their repertoire of sounds. Although sound-effects had been developed

²¹ As Lastra points out, "The use of effects and piano introduced a performance-based aesthetic of sound to the average film and to the mainstream of cinematic practice.... Sound was ...one aspect of the exhibition that, being discursive and performative, addressed audiences directly and offered the structural conditions for shaping audience response....[S]ound retained and continued to develop a mode of sonic 'attractions' maintaining a direct relationship of performer/audience copresence" (104-107).

before in the world of theatre (backstage sound men), the development of mechanical technologies and the birth of the film industry boosted the supply and demand of noisemaking devices. The need for having a rich variety of sounds ready to be played by just one person (the drummer as a single-man orchestra) was solved by the invention of self-contained sound-effect cabinets or “toy” counters. These apparatuses were mechanical systems full of multiple traps that produced complex sounds by mechanical automation.

Some of the most sophisticated sound-effects systems were the French “Cine Multiphone Rousselot,” introduced in 1907; the British “Allefex,” introduced in 1908; and the American “Excela's Soundograph,” introduced in 1910. To illustrate the rich variety of sounds that these devices reproduced, it is worth looking at the list of sounds that a “trap” drummer from Pittsburg could play using the Soundograph:

“One or more horses in a walk, trot or gallop, over paved streets, on a bridge, or on soft background, at the will of the operator; locomotive and train; thunder storm; steamboat; hoisting engine; wash of the surf; rain; running water; automobile; fire apparatus in action; strike of a clock; ringing of telephone bell or door bell; sleigh bells; ambulance call; patrol and trolley gong, etc; the crash of breaking glass or dishes; the falling of heavy articles; strong wind blowing; the fire of arms from a single shot to fusillade of an army; rumbling of heavy wagon on cobblestones; air brake and many other effects” (qtd. in Altman, *Silent Film Sound* 155).²²

Among all the sounds described in the previous list, the “crash of breaking glass or dishes,” and the “falling of heavy articles” stand out for their loud, percussive, and concrete qualities.

²² Originally in “Soundograph,” *Moving Picture World* (5 Feb. 1910): 177.

The matching of the crash sound with the visual impact of a brick on the head of a silent clown disrupts and shocks the visual and auditory senses of the audience and exaggerates the physicality of the gag by materializing the human body (especially the head) displayed on screen. Other sound-effects with high comic possibilities were the sound of a “baby cry” and the “nose-blow” (sound of a man blowing his nose). Although they were available as single “traps” and were included in some sound-effect cabinets as well, these two sounds are not mentioned in the previous description of the Soundograph.

A hybrid of a vaudeville drummer and a pianist was born with the introduction of the cinema organ by the Wurlitzer Company in the U.S.A.²³ Since the new keyboard instrument had a counter of sound-effects inside, it allowed the organist to turn into a one man orchestra who not only was able to provide continuous music for entire films, but also the percussive punctuation for the visual impacts of slapstick gags.²⁴ As Rick Altman points out in *Silent Film Sound*, “By 1920s organs became an accepted part of the cinema program. Handling all musical duties in small theaters, in large venues the organ typically provided a solo, accompanied the comedy plus the newsreel or scenic, and spelled the orchestra or provided bridging music during the feature” (336). Besides using the sound of the different traps for comic punctuation, organists could also make musical effects that were common in the operas and melodramas. Musical effects such as glissandos, fast arpeggios, tremolos, and loud chords could be played in the keyboard to accompany the visual physical violence and grotesque movements displayed on-

²³ Since the teens the organ was a protagonist in the movie theaters programs and abandoned its links with the church traditions.

²⁴ Some of the most hilarious sound-effects played with a cinema organ were duck squawks, the pig squeals, car horns, whistles, and train screeches.

screen.

Due to the open possibilities of *synchresis* for matching any kinds of sounds to the visual actions, many drummers and organists were criticized for mocking films.²⁵ A whole debate around the appropriate uses of sound-effects arose in the film industry. Through the trade press, producers, exhibitors and film experts campaigned to standardize film sound accompaniment. Musical suggestions and cues fixed the standards for matching music and sound-effects to certain types of scenes and specific film genres.²⁶

The place where the industry marginalized the comic uses of sound was, of course, the comedy genre. Cue sheets for comedies were characterized by the abundance of sound-effects. For instance, Rick Altman notices that in a James C. Bradford's cue sheet for the film *Smith's Modiste Shop* (directed by Mack Sennett) half of the cues are sound-effects. The suggestions prompt, "catch shots from boy's sling-shot, catch effect of squashing high hat, catch cracking of ink bottle, use ratchet for meat chopping machine effect, catch dog barking, rain effects throughout" (qtd. in Altman, *Silent Film Sound* 385). In another cue sheet published by Bradford for the film *So's Your Old Man* (starring W.C. Fields), eight separate effects stand out: "a glass smash as a hammer strikes a windshield, further glass crashes to accompany brick throwing, train effects, a flower pot crash, the rip of heavy cloth to imitate the tearing of a cap lining, the crushing of a straw hat, a pistol shot, and the flop of a bird" (qtd. in Altman, *Silent*

²⁵The accusations against the "Jackass Music" of drummers and organists went from the use of too many sound-effects (making noises for everything that appeared on the screen) to calling attention to their sounds and not to the film narrative, from playing the sounds too loud to missing the exact points of synchronization.

²⁶Musical suggestions, musical settings, musical programs, musical plots, and musical cues were published in the Edison Kinetogram, the Vitagraph's Bulletin of life Portrayals, Film Indexes, Moving Picture World, and Motion Picture News. They were basically lists of recommended music and sound-effects, cued to specific spots in a film.

Film Sound 385). As one can see in these cue sheets, the conventional slapstick synchronization of visual violence with percussive, concrete and loud sounds was legitimized by the film industry. Such disruptive and shocking noises as the crashes of glasses or flowerpots and the shots from a gun became some of the standard sounds for accompanying slapstick gags.

Although there are not audio recordings of the sound practice of vaudeville drummers and organists, the visual records are available and can be analyzed. When watching these silent films, one can imagine, based on the printed documents available, how the sounds of the slap-of-the-stick were added to the visual actions projected on-screen. For the purpose of illustrating how this performance worked, I look at the “*lazzo* of the ladder” reinterpreted by Charlie Chaplin in the *The Pawnshop* (1916) and highlight the synch points of visual violence and grotesque movements.



The Pawnshop (1916): Charlie Chaplin falling.

The conventional comic routine occurs in the sidewalk of a street, in front of a pawnshop. Charlie appears on the top of a ladder he has set up for cleaning the billboard of the store. He moves back and forth with the ladder in order to reach the billboard with the piece of cloth he has in his left hand. Although Charlie seems in control of the dangerous swing, he loses his balance progressively. The appearances of another pawnshop assistant who passes close to the ladder with a bucket of water, and of a policeman who is shown alone in a corner of the street, trigger Charlie's loss of balance. When the pawnshop assistant enters the scene, the organist could have changed the rhythm of the music and drummers could have played a few hits on the snare. When the policeman is shown alone being surprised and worried, either the drummer or the organist could have played a siren or a whistle from their traps. Immediately after the policeman appears on screen, Charlie starts to make longer swings with the ladder and exaggerated gestures with his hands. Finally, Charlie falls off and does a sort of half backflip when he hits the ground (his legs remain stretched). To accompany the fall-off (grotesque movement) the drummers could have played a drum roll while the organist could have played a glissando (from high to low notes). To accompany the impact on the floor, the drummer could have played a cymbal crash and the organist a broken chord. Both of them could have also played one of the "crashing" sound-effects available in their traps.

Film accompaniment for theatrical animated cartoons of the silent period followed the same conventions that were established for live-action comedies. Both entertainments shared not only similar kind of places in the film bill but also the same kind of music accompaniment for the slapstick gags. *Musical Accompaniment of Moving Pictures*, a standard book edited by

Edith Lang and George West in 1920, illustrates this fact emphasizing the conventional use of sound-effects. In the chapter entitled “Animated Cartoons and Slap-Stick Comedy” Lang and West state, “Nowhere does success, the ‘getting across’ of a picture, depend so much on special effects as it does here. It may be stated candidly that these effects, and the best among them, are not always purely musical.... a battery of traps and other accessories are really needed to emphasize in a comic manner the action on screen”(18-19).

Sound-on-Film, Close-Up Perspective and *Schizophrenia*

The coming of sound on film at the end of the twenties and its development through the thirties allowed a tighter audiovisual synchronization and a complex editing of sounds.²⁷ Even though exact synchronization was possible with the Vitaphone system in 1927 (*The Jazz Singer* stands out as the first mythical “talky”), the complex mechanism of phonographs attached to projectors and the impossibility of editing sound on disc rendered the Vitaphone system obsolete. In contrast, the “Photophone” system (sound-on-film) introduced by the R.C.A. in 1928 became the standard for the movie industry.²⁸

The advances in the control and reproduction of sound led up to the creation of new technologies for sound mixing, editing, and dubbing. In 1930 the sound Moviola was available and allowed film editors to cut and splice the sound-on-film and to synchronize it to exact points in the picture track. As the silent Moviola did for film decades before, the new machine

²⁷ Although sound on film was available in 1924 with the Phonofilm developed by De Forest, the technology was not adopted by the film industry until Fox Studios used the RCA’s Photophone.

²⁸ Sound and image were recorded optically side by side on the same film. The record of the sound on one side of the film track consisted of black and white patterns. Sound on film allowed sound editors to cut, splice and rearrange the frozen sound.

opened the possibilities of sound montage and encouraged the construction of soundtracks from cut-ups of sound-shots, the creation of aural events out of fragments. In addition, the “rubber numbers” (footage numbers or sequentially numbered frames) that were included in the bottom of the sound and film tracks facilitated the exact synchronization of sound and images. Finally, the introduction of the dubbing technology during the thirties facilitated the process of re-recording and re-mixing different sound on film tracks (music, dialogue and sound-effects) into a single soundtrack.

Some of the sound practices from vaudeville and silent film accompaniment such as “catching the fall” adapted very well to the possibilities of the new sound recording technology, other ones such as the continuous accompaniment of music were marginalized to musicals and animated cartoons. As Altman states, “Silent film sound practices were neither wholly transferred to the new medium, not entirely transformed” (Silent Film Sound 392). The conventional sound accompaniment of slapstick gags based on the synchronization of visual violence and grotesque movements with percussive, concrete and loud sounds, was definitely improved and developed in sophisticated ways thanks to the new technologies. On the one hand, new sounds could be recorded, edited and reproduced (e.g. human shouts, screams and cries; real gun shots, spurs of water and crashes).²⁹ On the other hand, the simultaneity of the visual and aural events could be calculated with precision and did not depend anymore of the live performance of a drummer, a pianist or an organist.

²⁹ Sound recording technologies permitted the return of human voice shouts, screams and cries, to the slapstick comic routines. As I have mentioned before, the human voice was used in *Commedia dell'Arte* performances for exaggerating the physical violence and disruption of the *lazzi*.

However, the recording and reproduction of sound during the thirties was conditioned by a very important cultural change, the emergence of a modern soundscape, a new aural environment that was characterized by a lack of reverberation and electric loudspeakers. Not only were movie theaters modified in order to allow the clear (noiseless, non reverberant) reproduction of sound through loudspeakers but also the sounds were recorded in special conditions, in isolated sound film studios with amplified microphones. As Emily Thompson notices, "in deciding what sound film should sound like, filmmakers functioned in a larger cultural sphere. The decisions they made reflected not only the conditions of their own industry, but also the larger soundscape in which that industry flourished" (9). The modern soundscape was ubiquitous in 1930 in the U.S.A. Telephones, radio loudspeakers, amplified phonographs, public address systems, microphones, and acoustically designed buildings, created a new kind of aural environment, in which the sounds were clearer, noiseless and electrically reproduced.

The aural standards of the new modern soundscape, with its emphasis in the scientific and engineering control of the sound signal, conditioned the practices of the film industry, and, therefore, the characteristics of the sounds of the slap-of-the-stick. As Thompson points out, "sound engineers focused almost exclusively on collecting a uniformly 'close-up' sound signal. The goal was to capture the actor's voice clearly and directly, and this was accomplished by following the players closely with moving microphones suspended from booms" (279). The "close-up" signal that directional microphones were able to capture and amplify was in fact a

characteristic of telephones, public address systems, radio broadcasts and electrical phonographs.

The sounds of the slap-of-the-stick were innovated and acquired a new “radio sound perspective.”³⁰ Many sounds from standard “traps” and sound effect cabinets were recorded with the new “close-up” quality becoming clearer and louder when reproduced through loudspeakers. New sound-effects were also recorded directly and closely from their actual sources. For instance, the sounds of glass breaking or of a gunshot were recorded in an isolated studio using real glasses and guns. Some of these new sound-effects were even created by using materials that did not correspond to the aural event they were representing.³¹ For example, scraping a piece of rubber over a wooden table created the sound of a car screech.

In order to illustrate how “new” sounds of the slap-of-the-stick were used in live-action comedies I have selected the “*lazzo* of the ladder” reinterpreted by Laurel and Hardy in *The Music Box* (1932). In this scene, the comic duo is trying to move a crated piano from the ground to a balcony using a ladder and a pulley system. While Laurel stands in the second floor balcony and pulls one of the ropes from the pulley system, Hardy climbs the ladder following the trajectory of the piano and pulling another rope. As soon as the piano is secure in the balcony, Laurel unties the ropes and drops the pulley. The pulley bangs the head of Hardy who is still on the ladder. The sound of two metallic objects being hit against each other is heard very

³⁰ The film industry, as Rick Altman has noticed, standardized a “radio sound perspective,” a close-up sound quality achieved by means of placing mikes close to the speakers and other sources of sound, removing unwanted noises, and reducing the level of reverberation.

³¹ The foley artist was born. This artist was able to record sounds that were heard as representations of aural events.

loud. Hardy screams, “AAAAAAA!!!!” and then falls off the ladder. When they hit the floor the sound of a big crash is heard. This is not the sound of a ladder and a human hitting the ground, but a combination of the sound of many heavy metallic objects being dropped and the sound of breaking dishes or glasses. Hardy then crawls like a baby, making painful sighs, and touches the little hat he has on his head with his left hand.



The Music Box (1932): Oliver Hardy climbing a ladder.

The “close-up” quality and radio perspective of the sounds recorded and edited for the previous scene enhances the physical violence and disruption of the comic routine in a way that silent film accompaniment could have never done. The sounds come at exact synch points exaggerating the fall (breaking of glasses or dishes), and the mockery and abuse of the body (“AAAAAAA!!!!” ; metallic objects hitting against each other). Their clarity, loudness and perfect synchronization to the visual action represents an innovation in the sounds of the slap-

of-the-stick. Among all these sounds, the hitting of two metallic objects against each another calls my attention not only because it shows how *synchresis* operates as a comic effect (incongruous matching of images and sounds), but also because it reveals how the new technology allows the recontextualization of sounds that have been split from their sources. The fact that the recorded noise of two metallic items can be removed from its original source and rematerialized in the context of a visual action of mockery and abuse of the body, reveals the sort of *schizophonic mimesis* that sound-on-film recording technology makes possible.

As Steven Feld argues, *schizophonic mimesis* refers to the interactive and extractive practices that sound recordings allow.³² Although Feld coined this term while studying pop sampling and world music, the practices of splitting sounds from their sources, recontextualizing and reinventing them, can be also appreciated in the making of film soundtracks. Especially in films where the slapstick tradition is developed, *schizophonia* appears as the standard for configuring the sonic identity of the bodies that are mocked and abused. Thanks to the use of sound-on-film recordings of concrete, loud and percussive noises, the body gains physicality, turning more material and more exaggerated. Although this kind of grotesque body had already been described sonically in silent film accompaniment, vaudeville and *Commedia dell' Arte*, it is until the coming of sound-on-film recording technology that the

³² "I coin the phrase "schizophonic mimesis" here to point to a broad spectrum of interactive and extractive practices. These acts and events produce a traffic in new creations and relationships through the use, circulation, and absorption of sound recordings. By "schizophonic mimesis" I want to question how sonic copies, echoes, resonances, traces, memories, resemblances, imitations, duplications all proliferate histories and possibilities. This is to ask how sound recordings split from their source through the chain of audio production, circulation, and consumption (...) stimulate and license renegotiations of identity. The recordings of course retain a certain indexical relationship to the place and people they both contain and circulate. At the same time their material and commodity conditions create new possibilities whereby a place and people can be recontextualized, rematerialized, and thus thoroughly reinvented" (Feld 13).

sounds can be frozen, edited and separated completely from their original sources.³³

In animation, the new sound technologies acquired a major role. The artificiality of the medium facilitated creative explorations of the sound practices. Even when the post-production technologies were not available, the animated cartoons were able of producing soundtracks where sound-effects, dialogue and music were synchronized to the visuals in stylized ways (mickey-mousing).³⁴ That fact is what called the attention of the film industry to animation, what made Walt Disney be acclaimed by the critics as the “the wizard of sound.” (Klein 8) Thanks to adopting continuous music accompaniment as the standard for the sound era, theatrical animated cartoons acquired the rhythmic discipline of music for timing the movement of the characters and the comic routines.³⁵

Although during the early days of the talky cartoon the sounds used for accompanying visual impacts and grotesque movements were sound-on-film recordings of “traps,” when re-recording and sound editing technologies were developed through the thirties, new sounds of the slap-of-the-stick emerged in the animation medium. As in some of the live-action comedy films, *schizophonic mimesis* was practiced systematically and the body of the animated cartoon was described sonically with different recordings of noises that had been split from their original sources.³⁶ New “close-up” recordings of amplified aural events such as the stretching of

³³ Although it can be said that the sound-effect traps that drummers and organist played during the silent period were already doing this kind of separation of sound from their sources due to the way in which noises were reproduced, the material source of the sounds remained inside the traps.

³⁴ Exact timing of the sound to the images was made before the images were drawn and before soundtrack was recorded. It was like having the possibility of post-producing at the time the production process was just starting.

³⁵ The sounds of the slap-of-the-stick started to be organized rhythmically following the tempo of the music.

³⁶ Due to the artificiality of the animation, *schizofonia* became more prominent than in any other medium.

rubbers, explosions, metallic springs, and airplanes were used for depicting the cartoon body abuses and grotesque movements.

The “*lazzo* of the ladder” reinterpreted in the Merry Melody *A Tale of Two Kitties* (1942) illustrates how the animation medium took advantage of the sound technologies to create complex soundtracks rich in sounds of the slap-of-the-stick. Two anthropomorphized cats act in this conventional comic routine: a tall one named Babbit, and a short and fat one named Catstello (take-offs of the vaudeville, radio and live-action comedians Bud Abbott and Lou Costello). The scene starts with Catstello climbing a giant ladder that is set up near to a tree. The cat climbs fast and immediately falls smashing his body to the ground. The sound of a low-pitched “POW” is heard very loud when the cat hits the floor. This sound could have been made by impacting a big piece of rubber or by slowing down the speed of a “BOING!” recording.³⁷ Besides hearing a sound effect at the moment of the impact, we also hear the sounds of the orchestra strings playing a running down arpeggio.

Catstello recovers from the fall and refuses to climb the ladder again, but Babbit pushes him to go up and ends pricking his buttocks with a needle. As soon as Catstello’s body is abused, he yells and goes up like a rocket. The sounds we hear are a very loud “Hooo hooo hooo!” made by the voice actor Mel Blanc, and the orchestra sounds of a fast flurry of strings (while the pricking and the going up) and then a few notes in the xylophone later (when reaching the top of the ladder). When Catstello is at the top of the ladder, he tries to catch the little bird but fails. He loses his balance and ends up breaking the ladder in two pieces that

37

become giant stilts. Although Catstello begins to walk in the stilts, he manages to lose one and then is left standing on just one, wobbling from one side of the screen to the other. A wider framing of the scene is shown, and Babbit appears holding the stilt from the ground. Catstello glides down the stilt while the sound of a slide whistle going from high to low pitch emerges from the soundtrack. Immediately after that, the nursery rhyme “Rock-a-bye Baby” played by a piccolo flute accompanies the action of Babbit carrying Catstello in his arms. Catstello asks Babbit how he ended on his arms. The answer that his pal gives him is a slap in the face that is accompanied by the sound of two pieces of thin wood being smacked against each other or, in other words, the sound of the foundational “batocchio” or “slapstick.”

As one can see and hear, the soundtrack of the previous theatrical animated cartoon is way more complex than the sound that accompanies interpretations of the same comic routine in other media. Besides hearing the sounds of the slap-of-the-stick in the innovative close-up radio perspective, these sounds are very varied and the origin of some of them can be traced back to *Commedia dell' Arte* (“batocchio”), vaudeville and silent film accompaniment (slide whistle). The “POW” that we hear when the cartoon body falls into the ground appears as a very “new” sound of the slap-of-the-stick and although it is difficult to determine how it was made, the truth is that whether it was produced by hitting a piece of rubber or by reducing the speed of a “BOING!”, this sound could have only been produced with the technologies of the sound era. Not less important is the use of the exaggerated and uneven comic voice of Mel Blanc for accompanying such violent action as the one of pricking the buttocks with a needle. And finally we cannot forget the continuous presence of music through the whole scene and the

punctuation of some of the physical violent action with musical effects (e.g. flurry of strings, arpeggios).³⁸

So far I have demonstrated the importance of sound practices and technologies for the slapstick tradition. The *lazzi*, comic routines or gags are enhanced by the use of sounds that are played on synch with the visual actions of mockery and abuse of the body and grotesque movements. The perfect synchronization of aural and visual events creates the comic effect of meeting elements of different natures (*synchresis*) and imprints physicality to the visual actions we see on stage or on screen.³⁹ Although multiple sounds of the slap-of-the-stick have been used across media for enhancing the physical violence and disruption of the gags, most of them have had the characteristics of being loud, percussive and concrete. Most of them have been noises and have been grouped under the category of sound-effects. “New” sounds of the slap-of-the-stick have been emerging thanks to the development of technologies and, although I have stopped my little history of their innovations at the early 1940s, they have continued to be renewed until our days.

³⁸ Although there is still more to say about how theatrical animated cartoons innovated the sounds of the slapstick tradition by the creation of a very complex soundtrack, I have to reserve those observations and analysis to the second and third chapter of this paper.

³⁹ That is the reason why “catching the fall” turned into the standard practice in vaudeville and silent film accompaniment and why perfect synchronization was systematically developed in the sound era. Actually, that is the reason why the Commedia dell’Arte “batocchio” functions as a comic device, because it secures hearing a loud and amplified “TWACK!” at the exact time a body is being hit.

Servant. Oh dear! Oh, my head!

Punch. And oh, your tail, too. [Hitting him there.] How do you like that, and that, and that? [Hitting him each time.] Do you like that music better than other? – This is my bell, [Hits.] this my drum, [Hits.] this my fiddle, [Hits.] and this is my trumpet, [Hits] there! A whole concert for you.

(Collier & Cruickshank, *The Tragical Comedy or Comical Tragedy of Punch and Judy*. 1832)

2. ANIMATING TRADITION: *THAT'S NOT ALL FOLKS!*

As alluded to in the previous chapter, 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 reinterpretation of comic routines and the construction of complex soundtracks rich in sounds of the slap-of-the-stick. In contrast to the classical standards (naturalism, melodrama, cuteness) that Walt Disney's studio established for the animation industry in the first half of the 1930s, Schlesinger's studio began to explore, systematically, the carnival-grotesque imagery and the physical violence and disruption of slapstick gags. The new approach did not disappear after 1943; it was matured, stylized, and became the trademark of Warner Bros. animation for the next twenty years.

Looney Tunes and Merrie Melodies have not gone unnoticed by animation critics and scholars. Since the 1960s, rich scholarship has focused on these theatrical animated cartoons. As Timothy R. White has observed in "From Disney to Warner Bros: The Critical Shift," the anarchism of Warner Bros. animation spoke to the new generation of the 60s. To the critics that followed the Auteur Theory, "Warner Bros. cartoons were seen as similar to the European art films that, coincidentally, gained favor at the same time. Disney's work, on the other hand, was too much like the classical Hollywood cinema" (White 42). Thanks to the possibility of identifying authorship in Warner Bros. animation, and as well to the innovative approach

developed in these animated cartoons, critics started to compare Looney Tunes and Merrie Melodies' directors to European film figures such as Godard, Antonioni, and Buñuel, writers such as Kafka and Brecht, and painters such as Ernst, Magritte and Manet. Greg Ford and Richard Thompson, for instance, compared in different articles Tex Avery's "devices of distanciation" to the "Brechtian distancing devices." In 1982, J. Hoberman published an essay in which he called Avery "the Manet of vulgar modernism" and highlighted the "distancing formalism" of the cartoons Avery directed.

At the end of the 1970s, the rise of formalist criticism in media and film studies motivated new readings of the Warner Bros. animation. In 1977, Kristin Thompson and David Borwell did a formalist analysis of the Merrie Melody *Duck Amuck* (1953) —highlighting its comic fantasy, its unconventional use of animation techniques and its playful narrative form. In *Of Mice and Magic: A History of American Animated Cartoons* (1980), Leonard Maltin dedicated an entire chapter to the Warner Bros. and, combining historical facts and brushstrokes of formalist analysis, analyzed several shorts directed by Avery, Tashlin, Clampett, Freleng and Jones. A few years later, Steve Schneider published an entire book dedicated to the history of the studio, the cartoon stars, the different directors, and a complete filmography of Looney Tunes and Merrie Melodies.

In the 1990s, a renewed interest in animation studies was accompanied by several critical readings of the Warner Bros. animated cartoons. Norman Klein's book *Seven Minutes: The Life and Death of the American Animated Cartoon* (1993) has entire chapters dedicated to the

unique style of some of the directors who worked in the studio. One chapter, for instance, is dedicated to what Klein calls “The Zip-Crash School” or the anarchic comedy style developed by Tex Avery and Bob Clampett.⁴⁰ In *Understanding Animation* (1998), Paul Wells analyzed several Looney Tunes and Merrie Melodies, calling attention to their modernism (especially the cartoons directed by Tex Avery and Chuck Jones) and to their connection with vaudeville aesthetics. *Reading The Rabbit* (1998), an entire book dedicated to Warner Bros. animation, included two essays focused on comedy. In “From Vaudeville to Hollywood, From Silence to Sound,” Hank Sartin analyzed the connections to vaudeville performance (especially the musical acts) and the early Looney Tunes and Merrie Melodies (1929-1934). In “The View from Termite Terrace,” Donald Crafton brought to light the caricatures and parodies of Hollywood live-action films and stars made by the Warner’s team.

Post-modern criticism during the nineties also highlighted the comedic style and self-reflexivity of the Warner Bros. animation. In their essay published in *A Reader in Animation Studies* (1997), Terrance R. Lindvall and F. Matthew Melton argued that the theatrical animated cartoons directed by Chuck Jones, Tex Avery, and Bob Clampett develop aspects of postmodernism such as intertextuality and playfulness.⁴¹

All this aforementioned criticism has not really dealt with a very important element of the Looney Tunes and Merrie Melodies—the music. Although in *Film Music: A Neglected Art*

⁴⁰ Klein argues that after 1937, these two directors developed an anti-melodrama approach that focused on the anarchic fast piling up of gags.

⁴¹ They allude to the connection of intertextuality and playfulness with Bakhtin’s notion of carnival.

(1977) Roy Prendergast pointed out the important role of cartoon music in animation and its connections with the neoclassical style (Comic Opera or Opera Buffa), it was not until the publication of *The Cartoon Music Book* in 2002, and *Tunes for 'Toons* in 2005, that the music of Warner Bros. animation was analyzed deeply. Most of the criticism focused on the figure of Carl Stalling and his unique composing style. In one of the essays from *The Cartoon Music Book*, Kevin Whitehead argues that Stalling developed a fast-paced “polyglot signature style” that mirrored the hectic narrative rhythm of the cartoons. In another essay from this book, John Corbett described the tight synchronization with the visuals, the stylistic heterogeneity, and the “suddenness” of Stalling’s scores as characteristics of the “cartoon music aesthetics”.⁴² In addition, Daniel Goldmark, whose *Tunes for 'Toons* (2005) stands out as the most complete analysis of American cartoon music made until now, spent a whole chapter explaining the compositional techniques that Stalling practiced in Warner Bros., providing rich biographical and historical information. Goldmark revealed the cultural importance of Stalling’s scores (especially the use of musical quotes) and clarified how they functioned with Warner’s storytelling style.

However, my reading of the Looney Tunes and Merrie Melodies builds on this criticism and tries to situate these theatrical animated cartoons inside the wider history of the slapstick tradition. I argue that from 1937 to 1943, the audio-visual conventions of the tradition were developed and updated in the studio of Leon Schlesinger. This innovation was possible thanks to the convergence, in an environment of artistic freedom, of a unique team of human talents

⁴² “[M]usic and sounds are constantly interrupting one another, interrupting themselves, cutting off flows, and breaking continuity” (Corbett 283)

and the emergence of new audio-visual production technologies. The seeds for what has become known in animation as the “Warner Bros. style” were planted during this period of time. The anarchic, grotesque, and carnivalesque seeds carried the basic principles and conventions of the slapstick tradition, and as they grew, they transformed the conventions and matured them in sophisticated ways.

2.1. Lunacy at Termite Terrace (1937 - 1943)

Although the vaudeville gag and performance style (especially musical numbers) inspired some of the animated cartoons made at Leon Schlesinger Productions before 1935, the cartoons were still imitations of Disney’s logical fantasies and realistic drawings.⁴³ The directors of the first Looney Tunes and Merrie Melodies, Hugh Harman and Rudolf Ising, had worked for Walt Disney before and carried with them the Disneyesque aesthetics and production practices. As Leonard Maltin explains, “The passionate desire to keep up with Disney, and plagiarize him at the same time, made for a self-defeating process, because Disney was an innovator who insisted that each cartoon be better —and different— than the last one. One can trace the improvement in Disney’s cartoons year by year in the 1930s there is virtually no progress during Harman and Ising’s span of four years”(226).

⁴³Hank Sartin argues that during the early thirties vaudeville influenced the cartoons made in Schlesinger’s studio. He says, “... animators used vaudeville performer types, ... emphasized virtuosity of performance, flat, staged compositions, and the emotional immediacy of the entertainment. Vaudeville and its performance traditions were a temporary solution to the problem of how to use sound and how sound might change the structure of the cartoons” (69).

Due to the economic restrictions that Schlesinger imposed on the animators for maximizing his profits, Harman and Ising quit and moved to MGM in 1933. They took the character of Bosko (the studio's star) with them and left Schlesinger with the name of the series and two members of the initial crew, Isadore Freleng (who had previously worked with Disney as well) and a young Californian boy named Robert Clampett. Although Schlesinger found more animators in the market and tried to reorganize his studio as soon as he could, it was not until 1935 that things really started to be set up for the coming of an innovative animation style.

In 1935, Leon Schlesinger hired Fred "Tex" Avery, a wild gagman from Texas who had worked as animator and director in Walter Lantz's studio. A team of talented young artists such as Charles "Chuck" Jones, Robert "Bob" Clampett, and Robert Cannon, was assigned to work with Tex, and they were isolated in a building separated from the main Leon Schlesinger Productions plant. This building was a little cottage at the Warner Bros. Sunset Boulevard lot, a former dressing room for live-action actors. Tex and his crew dubbed this place "Termite Terrace" due to its ongoing infestation problem. It was there where the comic style of the Looney Tunes and Merrie Melodies started to be defined. In Termite Terrace, the carnival-grotesque realism of the slapstick tradition —with all its physical violence and disruption, wacky antics and knockabouts— flourished. As Leonard Maltin states, "What went on was the development of a new style of cartoon making, built on a foundation of enthusiasm and the desire to do things that were new, wild, and imaginative"(230).

The perfect complement to the young boys of Termite Terrace arrived in 1936 when sound-effects man Tregoweth Edmond “Treg” Brown and music composer Carl W. Stalling were hired by Leon Schlesinger. As a former organist in movie theaters and cartoon music pioneer (he was in charge of scoring Disney’s first Silly Symphonies), Carl Stalling adapted very well to the comedy style that started to be developed in the studio. The same happened with “Treg” Brown, whose wild imagination allowed him to record, edit and select many “new” sounds of the slap-of-the-stick. In 1937, the constellation of innovators was completed when radio actor Mel Blanc, the “man of a thousand voices,” joined the studio and started to provide vivid and exaggerated voices to the cartoon characters.

“What the heck has all this laughter got to do with the making of animated cartoons?”

A clear determination to make theatrical animated cartoons that would make people laugh triggered the creative exploration of comic routines by the team of directors, animators, writers, music composer, sound effect man and voice actor. The environment of artistic freedom inside Termite Terrace facilitated this purpose. The studio owner, Leon Schlesinger, who was interested only in making money and did not care about what the studio crew made as long as it gave him profits, allowed great artistic freedom.⁴⁴ Many of the studio members have referred to

⁴⁴ When Warner Bros bought the studio in 1944 and Leon Schlesinger retired, the freedom had already been established as a culture and the new bosses had to accustom to it even if they didn’t understand it. Edward Selzer was the person from Warner who became the boss. “Like Schlesinger, he had no knowledge of, or fondness for cartoons, but he tended to interfere more than his predecessor ever did. Chuck Jones recalls the time that Selzer walked into a story session when he and his comrades were laughing over a freshly minted gag and the producer

this fact. Tex Avery claimed that Schlesinger “didn’t disturb us. We were all alone out there and he knew nothing of what went on” (qtd. in Maltin 230). Bob Clampett stated, “Leon gave us directors almost complete freedom within a set budget and schedule. Short deadlines, short money, but he let us make the pictures without interference. And he let us try new ideas” (Barrier, “An Interview with Bob Clampett,” 35). Mel Blanc also said, “Termite Terrace denizens had free artistic rein, so long as budgets were adhered to and the finished product generated profits” (76).

However, even though an unrestricted atmosphere existed in Termite Terrace, as many of the members of the studio have pointed out, this freedom has to be understood in the context of the Hollywood system, its many pressures and constraints. The cartoon was a marginal product in this system. The status of the cartoon in the film bill was not that of a high art product but that of a secondary short fiction narrative that depended on recognizable stars to lure the audience.⁴⁵ There were short deadlines and short money for the studio crew. As Donald Crafton suggests when explaining the position of Schlesinger’s workers in Hollywood, “Perhaps the best image for their relation to the industry was the witty one they coined themselves: they were quite a bit like termites, minute pets, labor-intensively tunneling within the infrastructure of Hollywood” (Crafton, “The View from Termite Terrace,” 120).

Although all the artists that worked in Termite Terrace during these years contributed to

snapped, ‘What the hell has all this laughter got to do with the making of animated cartoons?’” (Maltin 256)

⁴⁵ As Smooding has explained, the animated cartoons were screened as part of a “film bill were live-action short subjects, newsreels, coming attractions, feature-length films, and, frequently, live acts, each one of them shown several times through the day, every day” (44).

the lunacy of the studio style, two directors in particular, Tex Avery and Bob Clampett, stand out as the ones who developed the wackiest, wildest, craziest, and more carnival-grotesque approach. The Looney Tunes and Merry Melodies directed by Avery and Clampett are characterized by a radical attack to the classical ideas of beauty.⁴⁶ The attack led by these two “termites” undermined the cuteness and sentimental seriousness of the classical aesthetics of Hollywood cartoons at that time (logical development of story, “well” constructed plots, cute characters with proportionate bodies, melodrama, safe fantasyland), and opened a space where the themes of carnival-grotesque realism could be fully addressed.

Gags were the most important weapons to destroy the classical norms of well constructed plots and narrative closure. When Avery arrived to Leon Schlesinger Productions, he was determined to create as many gags as he could and to get as many laughs from the audience as possible.⁴⁷ Bob Clampett worked closely with him from 1935 to 1937 when both were members of the same animation unit. While directing the cartoons, Avery became the mentor of Clampett (who was an animator) and pushed him to develop a gag-based approach to the cartoons. Clampett’s fascination with visual exaggeration, extreme character postures, wackiness and speed, complemented perfectly the requirements of the piling up of gags and the

⁴⁶ The classical aesthetics were fixed as the Hollywood standard during the early thirties by Walt Disney. As Dank explains, “Classical norms of story and style may seem unnecessary requirements for animation, and yet the Hollywood cartoon was generally circumscribed by a set of limits —even of gravity and perspective— akin to its live-action counterpart. As in some live-action comedy, this form stretched to incorporate direct address to the camera, blackout gags, and hyper-expressive performances, but was commonly contained within the causal, linear frameworks of classical narration, a rather regimented star system, and a series of genres often borrowed (and parodied) from live-action cinema” (5).

⁴⁷ Tex Avery, a gag-man by nature who came from the middle of the country, had inherited the folk culture humor of the slapstick tradition from vaudevillians, fairground entertainers and circus clowns. As Maltin observed, “He was probably his own best gag-man, but he inspired the official Warner’s writers to stretch their imaginations as fast as they would go” (239).

anarchic narrative.

In 1937, after two years of having working together, Avery and Clampett made *Porky's Duck Hunt*, a Looney Tune that revealed the first symptoms of Termite Terrace's lunacy and slapstick style. In this theatrical animated cartoon, the simple plot of a hunt was used for tying up thirteen different gags. The basic premise of this kind of story was that the prey had to foil the hunter; more precisely, an "anti-prey" or "screwball" character had to foil a young dupe hunter.⁴⁸ As Norman Klein explains, the "anti-prey" or "anti-matter" was "absolutely in control of gravity, space, time, even the future of the story" (173). The "anti-prey" not only made possible incoherent, implausible and anarchic situations but also facilitated the piling up of gags without any causal logic during the seven minutes of the cartoon short. Although Daffy Duck was the epitome of the "anti-prey" anarchic behavior from 1937 to 1943, other characters designed by Clampett such as the Dodo Bird of *Porky in Wackyland* (1938) behaved also in a truly crazy, lunatic and carnival-grotesque way.⁴⁹

Furthermore, Avery and Clampett realized the possibilities of fast comic motion and

⁴⁸ In *Porky's Duck Hunt* the "anti-prey" is Daffy Duck, while the dupe hunter is Porky Pig. Daffy Duck appeared in this cartoon for the first time on the screen, and although he did not have a name yet he introduced himself as "just a crazy, darned-fool duck." Bob Clampett designed the duck with a long bill, black body, wet-foot and gave him big crossed eyes in the style of Ben Turpin, the famous comedian from Keystone silent films. Daffy's eccentric eyes were just a reflection of his manic character.

⁴⁹ The behavior of the "anti-prey" corresponds that of the "Clown" in the typology of anarchic comedy characters developed by Henry Jenkins in *What Makes Pistachio Nuts?* As Jenkins explains, "The clown personifies change, encapsulating all that is rebellious and spontaneous within the individual, all that strains against the narrow codes of social life....The Clown is a liminal figure, an outsider, a social vagrant or conversely, a representative of the lowest orders of the social hierarchy....[T]he clown in anarchistic comedy embraces the freedom that comes from straddling cultural categories....[T]he clown is driven by desire — desires of the body for food, drink, sexuality, or more abstractly, for pleasure and creativity— and the clown refuses to accept rules that block gratification" (221-226).

started to animate the actions of the cartoon characters in fewer frames. By making more uneven transitions of movement, from one extreme pose to another, motion became more exaggerated, faster and wilder.⁵⁰ Taking advantage of the possibilities of speed, Tex Avery and Bob Clampett contrasted the paces of the different gags they stitched together—one slow followed by one super fast—in a single cartoon short. This intense contrast made the gags more shocking and anarchic, and at the same time helped the gags to stay together in a fragmented narrative. From 1937 to 1943, one can find examples of such energetic and wild pace in *Picador Porky* (1937), *Porky's Duck Hunt* (1937), *The Daffy Doc* (1938), *Porky in Wackyland* (1938), *A Tale of Two Kitties* (1942), and *Tortoise Wins by a Hare* (1943).

As the Warner Bros. style matured, the personalities of the cartoon characters started to be fixed, the madness of the anti-prey was reduced and the narrative development became more organized. However, the lunacy of the “termites” was already spreading as a virus inside the studio and the predilection for slapstick gags (even with less anarchic piling up) continued to be the main characteristic of the Looney Tunes and Merrie Melodies until 1963.

2.2. Collaborative Technologies, Collaborative Practices

The artistic freedom of Termite Terrace was complemented with a system of strong collaboration among all the studio members. As Leonard Maltin has pointed out, “cartoons

⁵⁰ Taking out frames became a technique that Avery and Clampett used. This technique was similar to the one that Mack Sennett used for filming the Keystone clowns at different speed than the one of the projector.

were produced in a true spirit of collaboration, with creative input by directors, writers, animators, the composer, the voice actors, and the sound-effects man going into each film” (240). This collaboration happened at both the human and the technological level and was crucial for the definition of the innovative slapstick style of the Looney Tunes and Merrie Melodies.

Gag Meetings

At the human level, the collaboration was exemplified in what was known as the “gag meeting,” a kind of brainstorming or jam session.⁵¹ In the “gag meetings,” writers, directors, layout artists, animators, the music composer, the sound effect man, and the voice actor, got together in a room, showed the stories and characters they were working on and threw gags to make them more and more funny. As Mel Blanc says, “These creative meetings thrived on collective inspiration. The visual rendering of a character enabled me to settle on an appropriate voice, which in turn helped the animators to refine physical characteristics. Together, writers, artists, and voice-men imbued a mere sketched animal with a distinct personality” (77). Chuck Jones has also explained that “there was a point when any one of us started a picture and we had a premise that we thought would work. Then the other writers and directors would meet in a room. We would throw gags at that premise, unselfishly” (qtd. in Maltin 240).

At the technological level, sophisticated tools that allowed the standardization of the production process reveal the strong collaboration among the “termites”. Tools such as the

⁵¹“We’d all get together on gags, in what they called a gag meeting.” (Barrier, “An interview with Carl...” 41)

exposure sheet, the bar sheet and the click track, were artifacts where the visual and audio technologies converged prior to the final stage of the animated cartoon in a film reel. These technologies facilitated the tight production schedule —three cartoons had to be released for theatrical projections on a monthly basis— and made possible a way of laboring in which layout artists, animators, directors, music composer, sound effect man and voice actors could work on their tasks in parallel.⁵²

Exposure Sheets

The exposure sheets were pioneered since the early days of cel animation and became a standard of the industry.⁵³ Exposure sheets 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 and facilitated the parallel way of working. At the same time, background artists were making the landscapes, animators

⁵² As Chuck Jones explains, “In our place, one of the things that always helped enormously was that we always worked parallel.” (Maltin 240)

⁵³ “Cels are translucent sheets of celluloid where areas of the cartoon are drawn. Depending on the technique utilized, either the area of the cartoon to remain immobile or the area to be animated is drawn onto the cel, while the corresponding moving or still area within the frame will be drawn on paper over which the cel is laid for photography.” (Callahan 223)

were drawing the key poses of the characters, in-betweeners were drawing the character movements, the sound-effect 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. As Carl Stalling noticed, "I had exposure sheets for the films, with the picture broken down frame by frame, sort of like a script, and twelve of the film frames went through the projector in a half second. That gave us a beat....I just recorded from our beat, without seeing the picture. By the time they had the picture ready, I had the recorded music ready" (Barrier, "An Interview with Carl...", 43).

Bar Sheets

Bar sheets were similar to the exposure ones; they described very precisely the timing of the cartoon. However, bar sheets had a plus: they provided more detailed information about the sound because they had space for writing down musical notation (the basic melody appears in a staff), important parts of the dialogue (such as screams and shouts) and sound-effects. Bar sheets looked like a composite of a music 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.⁵⁴

Carl Stalling knew bar and exposure sheets very well. As a former composer for Disney's cartoons he was used to score cartoons using these tools before arriving at Leon Schlesinger Productions.⁵⁵ Through his years at Termite Terrace, Stalling became a master of timing the

⁵⁴ In fact, they have the word "bar" in their name because in musical notation, vertical lines (bars) are used to separate segments of time with defined number of beats.

⁵⁵ Stalling worked with Disney from 1926 to 1933. Among the scores he composed during this time is the one of the first Silly Symphony, *The Skeleton Dance* (1929). Walt Disney pioneered Bar Sheets since 1928 in order to

music to the visuals using bar and exposure sheets and influenced the way animators approached to audiovisual synchronization. As Daniel 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. It also enabled Stalling to compose the score without seeing the cartoon.” (20) Since the timing of the action and the music were defined collaboratively from the very beginning of the animated cartoon production, the audiovisual synchronization became very tight.

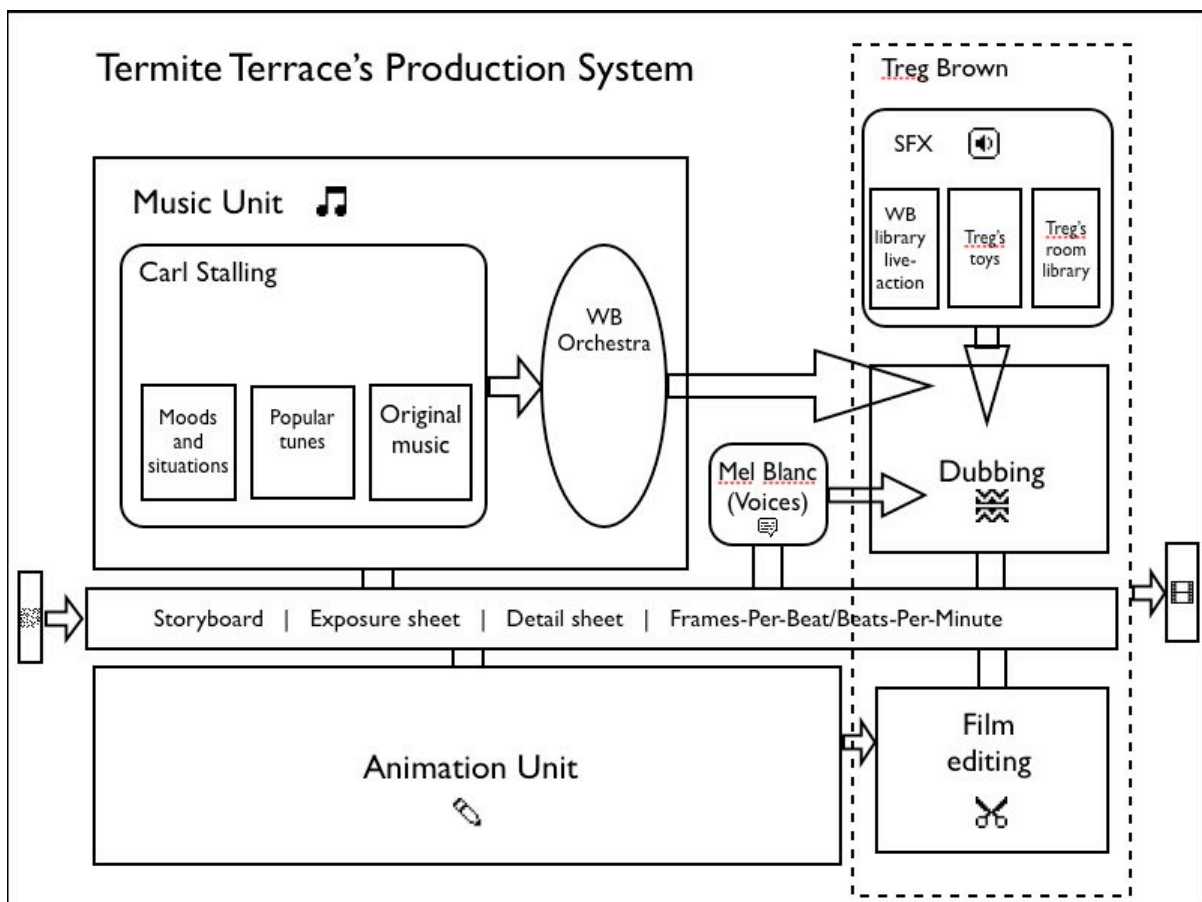
Click Track

The development of bar and exposure sheets motivated the creation of the click or tick track. This tool was a sort of metronome that the musicians from the Warner Bros. orchestra listened to while they played the scores. As Carl Stalling explains, “Perfect synchronization of music for cartoons was a problem, since there were so many quick changes and actions that the music had to match.” Because the musical timing was tight to the number of frames, the ticks of the track that the musicians listened while playing were like sonic marks of certain number of frames. As Stalling said, “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

achieve exact synchronization of the music to the visuals, and thanks to them he was acclaimed for his sound animated cartoons.

listened to the clicks through that.” (Barrier, “An Interview...”43)

Collaborative practices such as the gag meetings and collaborative technologies such as the click track, bar and exposure sheets, made possible a sophisticated orchestration of all audio (dialog, sound-effects and music) and visual elements with the beat and the frame. Thanks to these tools, the sound became integral to the animated cartoons and was not just a mere accompaniment.⁵⁶



Production System: simplified description of the practices of the “termite” denizens.

⁵⁶Chuck Jones once said, “The music was never ornamental or merely supportive to the imagery, but integral.”

2.3. The Elements of a Complex Soundtrack

It was not a coincidence that at the same time Looney Tunes and Merrie Melodies started to be organized without logical narrative development (compulsive piling of gags), the soundtracks began to be hectic ensembles of a variety of tunes, sound-effects, and voices. During these years, Carl Stalling, Treg Brown and Mel Blanc started to work together in Termite Terrace, bringing with them unique approaches to music (silent film accompaniment), sound-effects (film editing and foley art) and voice characterization (radio comedy). These approaches complemented perfectly the slapstick style that was emerging in the studio and boosted it. Thus, as argued in Chapter 1, the complex soundtracks that Stalling, Blanc, and Brown helped to create, from 1937 to 1943, stand out as important innovations in the slapstick tradition.

Carl Stalling's Music

Carl Stalling has emphatically remarked that his compositional method for cartoon music was based on a unique kind of improvisation. In the only interview that he ever granted, he said "I had played in theaters for about twenty years before sound came in. We improvised all the time, on the organ. I've had to put music out for the orchestra, for features, but for comedies and newsreels we just improvised at the organ. So I really was used to composing for films before I started writing for cartoons. I just imagined myself playing for a cartoon in the theater, improvising, and it came easier" (Barrier, "An interview with Carl...", 51). Stalling's improvisation has to be understood not as the one of jazz players or avant-garde musicians but as a very structured practice that was standard during the silent film era and that Stalling adapted to the theatrical animated cartoons.

When Stalling says, "I improvised at the theaters, and that's composing, but it's not writing down" (Barrier, "An interview with Carl..." 40), he is referring to an "improvisation" that relies heavily on the composer's retrieval of information from music catalogues and music sheets. 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).

In the early years of his career as silent film accompanist in Kansas City, Stalling had access to cue sheets and music suggestions that exhibitors and producers provided for specific films, and as well to thematic musical catalogs (also called "cue books"). These catalogs had well-known musical works arranged for piano and indexed according to the mood and situations that they were most often associated. For example, the catalog *Motion Picture Moods for Pianists and Organists (A Rapid-Reference Collection of Selected Pieces)* arranged by Erno Rapee in 1920, provides fifty two different moods and situations such as battle, calls, chase, dances, festival, funeral, grotesque, gruesome, happiness, horror, humorous, hunting, love-themes, lullabies, misterioso, orgies, oriental, passion, pastorale, race, sadness, and western. The work of the film accompanist consisted in selecting the appropriate musical mood for matching the visual action displayed on-screen and manipulating the feelings of the audience.

At Termite Terrace, Stalling had at his disposition not only the film musical catalogues that contained plenty of Public Domain works (usually pieces from the classic and romantic

periods, and popular folk songs) but also a huge catalogue of popular tunes that the Warner Bros. owned and encouraged him to use. In fact, Leon Schlesinger initially pitched the animated cartoons made in his studio as places to showcase the Warner Bros.' songs.⁵⁷ Since the Warner Bros. started to control various publishing houses from Tin Pan Alley (DeSylva, Brown & Henderson, Remick, Advanced, Harms T.B. Harms, M. Witmark & Sons), an extensive library of favorite and catchy melodies was available, free of copyright issues, for Stalling to use in his compositions.⁵⁸

Carl Stalling used the music catalogues as if they were databases or libraries. He extracted snippets of the music he found on the catalogues that he already knew quite well. Since there were not computers available, Stalling had to retrieve the right musical piece from his human memory and select the specific segment that he wanted to adapt for his scores. After that, he proceeded to arrange and adapt the music in playful ways.⁵⁹ For instance, he stopped and started the pieces at weird points, twisted them up, shortened and elongated them very creatively (ear stretching exercises), and arranged them to a big number of musical instruments.

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 range from swing

⁵⁷ The Merry Melodies series were created in 1933 with this specific purpose. By contract, a verse and a chorus of the title song had to be included in each cartoon of the series.

⁵⁸ Economic reasons also guided the use of these popular songs owned by Warner in the scores Stalling composed. As Scott Curtis argues, "Warner Bros. invested \$8.5 million to buy up a number of publishers affiliated with Harms Music, Inc. Only months previously, the studio had spent \$1 million in cash to acquire Witmark and Sons, 'perhaps the oldest established popular music house' (Variety, August 21, 1929;5). Such Acquisitions meant considerable savings in royalties and taxes (by holding the copyrights to the songs used), and they also could be used as a bargaining chip for booking films in the theater of rival studios" (193).

⁵⁹ As some scholars have noticed, this method of composing is an early example of what would become years later pop sampling.

tunes to lullabies to lyrical and abstract melodies. In all of them, Stalling relied heavily in the timber 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 provided the punctuation to the physical violence and grotesque movements of the comic routines. For instance, he used the trombone slide for a character tumbling or falling and violent outbursts of brass and percussion when a character was being hit with a mallet in the head.

Perhaps the best way to realize how eclectic the music of the Looney Tunes and Merrie Melodies can be is to look at the cue-sheets that Stalling wrote for each cartoon short. In those cue-sheets one can find information about the titles, composers, and publishers of each song.⁶⁰ Although some cue-sheets have more songs than others, all of them document very well the medley of genres that Stalling created combining his original cues with the ones from music catalogues. The cue-sheet for *Porky's Duck Hunt* (1937), for instance, has a total of thirty-seven cues of which ten are Stalling's originals, eleven are Public Domain folk songs ("A Hunting We Will Go" is cued nine times), thirteen are copyrighted popular tunes from Warner's catalogue, and only one is a public domain classic piece ("William Tell Overture" by Rossini). In contrast, the cue-sheet for *Porky in Wackyland* (1938) has only sixteen cues of which seven are Stalling's originals ("Schlesinger Swing" stands out as a very jazzy tune that lasts more than a minute), seven are copyrighted popular tunes from Warner's catalogue, one is a public domain folk song ("Mulberry Bush" by unknown composer), and one is a Public Domain classical piece (again a snippet of "William Tell Overture"). A more balanced cue-sheet, is the one for *The Tale of Two*

⁶⁰ Many of the Stalling cue-sheets can be consulted in the Warner Bros. Archive at University of Southern California. In the Appendix of this thesis I have included examples of the three cue-sheets that I mention.

Kitties (1942) which has a total of twenty-three cues of which eight are Stalling's originals, twelve are copyrighted popular tunes from Warner's catalogue, and three are public domain folk songs (the nursery rhyme "Rock-A-Bye Baby" is cued one time).

At the production phase of music recording, Stalling conducted the Warner Bros. orchestra (a 50-piece ensemble) and supervised recording sessions of usually two hours for a single cartoon.⁶¹ The music was recorded in a sound-on-film track optically by means of electricity, more exactly 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.

Overall, the music of the Looney Tunes and Merrie Melodies has many changes in style, orchestration, dynamics, and texture. All these changes make the form and structure of Stalling scores disordered and fragmented. As Daniel Goldmark has stated, "Instead of building a trajectory toward a traditional climax and denouement, Warner Bros. cartoons constantly introduce new gags and shtick, equal in intensity to move the story forward. Similarly, Stalling's scores have no emotional arc, instead carefully complementing and conveying whatever joke is being perpetrated at a given moment in the narrative" (16). As with the piling of gags that constitute a cartoon short, the music does not have clearly defined exposition, climax, and

⁶¹ As Daniel Goldmark has revealed, there existed a contract between Warner Bros. and Schlesinger, in which Warner "agrees 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 shall be done under the supervision of a musician and of a technician employed by Schlesinger"(21).

conclusion.

John Corbett has pointed out as well that this kind of music is very “visual” and has become a paradigm of “the cartoon music aesthetic”. Corbett explains that Stalling’s music has a persistent “suddenness” that goes hand in hand with the one of the visuals where gags are sequenced in chain one after the other, stitched together at a very fast pace and without any coherent logic.⁶² Due to the short length of the theatrical animated cartoons (seven minutes), the “suddenness” becomes one of the major characteristics not only of the music but also of the other elements of the soundtrack, the voices and the sound-effects.

Mel Blanc’s Voices

The music, however, was just one of three key elements in the complex Looney Tunes and Merrie Melodies soundtracks. Mel Blanc, “the man of 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 ability of his sound engineers to manipulate the pitch of sound-on-film recordings, Blanc gave voice and personality to almost all of Warner Bros.’s animated characters.⁶³ From 1937 to 1943, Blanc created the voices of cartoon stars such as Porky Pig, Bugs Bunny, Daffy Duck, and Tweety Bird. After 1944, his vocal repertoire

⁶² By “suddenness” Corbett understands abrupt changes in consequence, the feeling that the narrative implies one direction but incongruently ends in another one.

⁶³ “An engineer sped up the voice slightly on a variable-speed oscillator. Lines were recorded at eighteen percent below normal speed, and then were played back conventionally, raising the pitch but retaining the clarity. The same machine was also utilized for Porky Pig and three subsequent characters, Henery Hawk, Speedy Gonzales, and Tweety, the latter of whom was recorded at twenty percent below” (Blanc 96).

expanded to the voices of Yosemite Sam, Sylvester Cat, Pepe le Pew, Foghorn Leghorn, Wile E. Coyote, Marvin the Martian, Tasmanian Devil, and Speedy Gonzalez. All of these voices fitted naturally with the animated cartoons.

Mel Blanc's background in the entertainment business was crucial for providing personality to the cartoon characters. If Carl Stalling brought the sound practices of silent film accompaniment to Termite Terrace, Mel Blanc brought the sound practices of the radio comedians.⁶⁴ Mel Blanc was a master of mimicking accents, whether Bugs Bunny's Brooklyn jive, Speedy Gonzales's Mexican staccato, or Pepe le Pew's French drawl. He could also comically exaggerate speech problems such as a lisp (Daffy, Silvester) and stuttering (Porky) to impress in the cartoon characters a unique sonic identity that the audience could immediately recognize.

Pictures of the recording sessions reveal how Mel Blanc became almost like a cartoon character when he was performing the dialogues. The exaggerated and grotesque gestures of his eyes, mouth, and whole face document his acting abilities. Indeed, Blanc was an actor and, as he has said in his autobiography, he practiced the Stanislavski's "Method Acting" in which a performer has to become the character he is representing. For applying this method in animation, Blanc had sometimes to research the way animals behaved in real life. Porky's voice, for example, came after spending a whole afternoon in a Californian farm watching and

⁶⁴ Blanc did a prolific work on radio. He was a regular in different series: The Abbott and Costello Show, The Burns and Allen Show, Fibber McGee and Molly, The Jack Benny Show, The Judy Canova Show, Al Pearce and His Gang, The Adventures of Ellery Queen, The Adventures of the Cisco Kid, The Al Jolson Show, Baby Snooks, Blondie, The Bob Hope Show, The Camel Comedy Caravan, The Chesterfield Supper Club, G.I. Journal, The Tommy Riggs & Betty Lou Show, The Great Gildersleeve, Icebox Follies, Icebox Follies, Nitwit Court, The Joe Penner Show, Pointe Sublime and in 1946 headlined his own weekly radio sitcom, The Mel Blanc Show.

studying pigs. Only after that, Blanc was able to “translate a stout-bodied omnivore’s grunt into a comical cartoon voice” (Blanc 67).

An important characteristic of the voices Mel Blanc recorded is that they are very concrete.⁶⁵ Besides giving personality to the cartoon characters, the voices also provide the characters 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 to reality. In the slapstick comic routines, when the cartoon characters are displayed mocking and abusing their bodies or executing grotesque movements, the concrete quality of Blanc’s voices becomes more prominent. For instance, when Daffy performs crazy backflips and acrobatics in *Porky’s Duck Hunt* (1937), *Daffy and Egghead* (1937) and *The Daffy Doc* (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 movements of the cartoon character.

Treg Brown’s Sound-Effects

However, although the music and dialogue tracks contain some sounds of the slap-of-the-stick (e.g. cymbal crashes, piano glissandos, shouts, 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

⁶⁵ Mel Blanc understood the potential of his vocal chords when speaking in front of an electrical amplified microphone, and was able to do voice acrobatics such as changing the timber as he pleased.

punctuated the exaggerated physical violence and grotesque movements displayed on the screen.

Treg Brown explored systematically the comic potential of synchresis and was able to create many incongruous relations between sounds and images. Noises such as plastic crumples, spins, squishes, whooshes, zips, squeaks, water squirts, plastic stretches, balloon spins, scratches, train rumbles, metal scrapes, wood rattles, cardboard rips, metal rolls, wood hits, metal hits, bulb horns, footsteps, explosions, sirens, crackles, door creaks, crunches, buzzes, whips, whistles, whizzes, bells, boings, bonks, bounces, and metal crashes became hilarious when Brown used them to punctuate the slapstick gags. For instance, the sound of a bulb horn could be played when a cartoon character bites someone's nose; or the sound of a siren could be played when the bodies of cartoon characters are inflated as if they were balloons.⁶⁶

Treg Brown developed several methods for making the sound-effect track. One of these methods consisted in recording the sounds of mechanical noise-making devices or "traps" from the silent film era such as horns, whistles, and crashes. Although these "traps" were residual apparatuses from the early twentieth century, their sounds acquired a new "close-up" quality (free of reverberation) when they were recorded on sound-on-film using electrical amplified microphones.⁶⁷ This new quality facilitated the exaggeration of their volume at the production process of dubbing (re-recording) of the final soundtrack.

⁶⁶ The bulb horn can be heard in *Daffy Duck & Egghead* (1938) and in *Porky's Duck Hunt* (1937). The siren sound can be heard in *The Daffy Doc* (1938).

⁶⁷ In the second part of Chapter 1, I explain with more detail the implications of the electrical recording of sounds, the "close-up" radio perspective, and the modern soundscape that emerged in the U.S.A. during the 1930s.

Another method that Treg Brown developed was rooted in the practices of sound-effects men from radio and foley artists from live-action films. This method consisted in 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 coconut shells (cut in half) on a wooden table, and then use that recording as a representation of a horse trot. As Mel Blanc has pointed out, the imaginative work of Brown consisted in “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). Although similar practices were used before in the backstage of melodrama and silent film itinerant exhibitions, the difference with this method was the use the new “close-up” quality of the recordings.

In addition, Treg Brown practiced some alternative methods that were common among *music concrete* composers and avant-garde sound artists such as the cutting and splicing of sound-on-film-tracks and the changing of sound’s pitch by means of altering the speed of reproduction.⁶⁸ Because sounds were frozen in sound-on-film tracks, Brown was not only able to cut and splice them and make sound montages but also able to store different recordings and used them for later cartoon soundtracks. As Carl Stalling explained, “Treg had thousands of sound-effects on short reels, and he would make up a whole soundtrack out of these, as well as adding new ones for each cartoon” (53). All these sound-effects on reels were not only noises

⁶⁸ These practices were inspired by film editing techniques from the silent era. Treg Brown learned them perhaps through his job as film editor.

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 for Two Kitties* (1942) when Catstello is falling and making backflips in the air was likely selected from the soundtrack of a live-action film.

Besides implementing different sound practices and building a great collection of sound-on-film recordings, Treg Brown also used exposure and bar sheets for making the sound-effects track. Exposure and bar sheets not only warranted the perfect audiovisual synchronization but also facilitated the sophisticated orchestration of the sound-effects with the music. Thanks to them, the “new” sounds of the slap-of-the-stick that Brown created were organized according to the tempo of the music and became important rhythmic marks in the soundtrack.

All in all, the construction of the Looney Tunes and Merrie Melodies soundtracks was possible due to the sound practices that Carl Stalling, Mel Blanc, and Treg Brown brought to Termite Terrace—as well as the technologies that they had at their disposition, and, of course, their talents. The final mixture of the music, dialogue and sound-effects tracks, during the postproduction process of dubbing (re-recording), ended in the creation of a complex soundtrack rich in sounds of the slap-of-the-stick.

2.4. The Audiovisual Rhythm of Wackyland

In order to illustrate how all the elements of the complex soundtracks were sophisticatedly

orchestrated, let us examine the Looney Tune *Porky in Wackyland* (1938) directed by Bob Clampett. Besides providing a great example of how music, dialogue, and sound-effects worked together, this theatrical animated cartoon also shows how the anarchic compilation of gags and the fast and fragmented narrative pace were enhanced by the constant flow of sound, the medley of musical genres, and the exaggerated rhythmic punctuation of sounds of the slap-of-the-stick.

The story of *Porky in Wackyland* is quite simple; an intrepid explorer tries to catch a unique wild bird in an unknown land. Although Porky goes hunting one more time as in *Porky's Duck Hunt* (1937), he is not going to a lake with a rifle and a dog to wait until his prey appears. Instead, Porky takes a more active role; he pilots an airplane and flies from the U.S.A to Darkest Africa (more exactly to a “?” spot in the Darkest Africa). Porky does not carry any weapon, he just has a picture of the Dodo and has decided to play the role of an explorer. After landing in the uncanny “?” spot in the map, he enters Wackyland and finds a topsy-turvy world full of oddities. One of the citizens of this crazy world is the unique Dodo bird, an “anti-prey” that moves incredible fast, mocks and abuses the body of Porky Pig, and has control of gravity, time and space. At the end, 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 and at least fourteen slapstick gags are

stitched together with the plot of a hunt. The contrast between slow and fast-paced gags creates a dynamic audiovisual rhythm that is fluent and energetic. Thanks to this contrast, the soundtrack has a rhythmic tension that accentuates not only the surprising and shocking emergence of the slaps-of-the-stick sounds but also the changes in music. Music cues change in genre and orchestration and different sounds of the slap-of-the-stick are constantly punctuating the physical violence and the grotesque movements displayed on-screen.⁶⁹ The variety of the sounds of the slaps-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 Mel Blanc's shouts and screams (AAAAARRRG!, Yahooo!, uuuUUU!...), to musical effects (cymbal crashes, high xylophone's notes, outbursts of percussion and brass). The orchestration of such 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 feeling of speed of the cartoon.

Welcome to Wackyland: “It Can Happen Here”

The first slapstick comic routine that is displayed in the cartoon reveals how the dynamic audiovisual rhythm works. After landing in the “?” spot of Darkest Africa, Porky enters Wackyland tiptoeing. The music cue we hear at this moment is an original Stalling composition called “The Dodo Hunt” that lasts for fifteen seconds. The cue consists of a slow melody played in plucked cellos that is in perfect synchronization with the tiptoeing of Porky. Suddenly, a loud, rough, and guttural cry (AAARRRRRGGG!!!) emerges from the soundtrack while the

⁶⁹ The sixteen music cues that appear in the cue sheet are six Tin Pan Alley tunes from the Warner's Catalogue, one classical music piece (Rossini's “William Tell”), one folk song (“Mulberry Bush”), one swing piece (“Schlesinger Swing”), several abstract and dramatic melodies.

orchestra plays a flurry of strings.⁷⁰ This is the beginning of the music cue named “Wackyland,” an original and very dramatic Stalling composition that is played very fast by the string section of the orchestra for approximately thirty-five seconds. Porky, scared by the shout, jumps out of the airplane and does flips in the air while a monster comes out of a giant mushroom jungle. The monster walks towards Porky, and when he is right in front of him, suddenly stops shouting and makes a very high-pitched cry (“OOOOP!”). At this moment, the very short music cue “Mulberry Bush” (six seconds) starts to be played. The monster stops moving as a ferocious gorilla and instead starts to move as a woman humming—in a high-pitched voice—the melody of the folk song “Here We Go Round the Mulberry Bush.”⁷¹ While the monster sings and returns to the jungle, the xylophone and cellos follow the melody of the song in the background.

During these previous fifty-six seconds, the music cues change three times—moving from a slow melody of plucked basses and strings to a dramatic flurry of strings to a childlike melody of xylophone and cellos. The transitions between the music cues are punctuated by Mel Blanc’s disruptive shouts and screams. Such vocal sounds evoke the slap-of-the-stick by exaggerating the physical violence and grotesque movements displayed on-screen. Furthermore, since the dialogue track has a “close-up” perspective, the shouts and screams mask the musical accompaniment and become the prominent sounds when they emerge from the soundtrack. For instance, when we hear the “AAARRRRRRGGG!!!” at the beginning of the comic routine,

⁷⁰ Probably made by over dubbing the dialogue track. In other words, by duplicating it. This technique was popular after the invention of the dubbing machine and the mixing console.

⁷¹ The humming goes “la la lala! lala lalala!....” in a high pitched voice probably made by speeding up the dialogue track.

we can barely listen to the dramatic flurry of strings played by the orchestra because the dialogue track is placed in the foreground masking the music track.

Another example of sounds of the slap-of-the-stick emerging from the dialogue track can be appreciated minutes later in the cartoon when the Dodo Bird introduces himself to Porky Pig. At this moment, a very unique music cue, “Add Libbing,” indicates the improvisation of the voice actor during three seconds while the orchestra remains in silence. Mel Blanc recoded a very modulated “uuuuuuUUUUU!” that goes together with the visual action of the Dodo 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 slap-of-the-stick that accompanies the loss of Porky’s balance and gravity and the following fall back to earth.

Swinging

Many sounds of the slap-of-the-stick emerge from the sound-effect track and they also mask the sound of the music track thanks to their “close-up” perspective. During the music cue called “Schlesinger Swing” (one minute and fifteen seconds) one slapstick comic routine is punctuated by the sound of a metal hitting an anvil. This gag is inserted inside a long panorama of Wackyland without any logical narrative development.⁷² After forty seconds of displaying

⁷² A variety of oddities moving to the hot rhythm of the swing music are shown while the camera pans across the surreal landscape of Wackyland. The musical “swing” was not only in synchronization with the images but as well in synchronization with the American popular culture of that time. As Barry Putterman explains, “a musical style of orchestrated jazz suddenly galvanized the United States, quickening its gait, creating pulsating new dance movements, and providing the historical name ‘The Swing Era,’ which became the shorthand catchphrase for the sassy new viewpoint that became our national mood” (31).

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 in 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 a 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.

Although sometimes Treg Brown's sound-effects and Mel Blanc's voices mask the sound of the orchestra, other times the orchestra stands alone and provides the sounds that punctuate the mockery and abuse of the body and the grotesque movements. For instance, toward the finale of the music cue "Schlesinger Swing," a wacky creature appears on the top of a flower playing a drum set not only with drumsticks but also with parts of his body (buttocks, foot). The cartoon character moves grotesquely 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. Other examples of this kind of slap-of-the-stick sound provided by the orchestra can be found in the comic routine of the Three Stooges monster and in the comic routine of the Dodo Bird standing on hands. In the first instance, the visual action of punching Moe's face is punctuated by the sound of a high-pitched note in the xylophone. In the later one, the outburst of brass played by the orchestra punctuates both the grotesque

movement of the Dodo and the mock of Porky's body (the "anti-prey" hand-stands on the head of Porky Pig who is lain down on the floor).

The Three Stooges Monster: BOING! TWACK! SLAP!

The comic routine of the Three Stooges monster, which appears without any logical narrative development in *Porky in Wackland*, turns to be an important example of the audiovisual innovation developed at Termite Terrace. Although the gag imitates the physical violence that made famous the Three Stooges in their live-action films (poking eyes, bonking head, pinching nose), the possibilities inherent in medium of animation renovate the comic routine and push it towards a more fantastic and surreal universe. Caricatures of the heads of Larry, Curly, and Moe appear attached to one single grotesque body that has a big chest, two strong arms, a tiny waist, skinny legs, a mini skirt, and female underwear.⁷³ When the three-headed monster abuses each of his faces with his big hands, the noses, eyes, mouths, and necks squash and stretch in ways that could only be rendered in animation. In addition, the sounds of the slap-of-the-stick that punctuate the mockery and abuse of the monster's body are very varied, from the sound of a note in the xylophone, to the sound-effect of rubber stretching, to a mixture of musical effects and sound-effects.

During the Three Stooges comic routine, the orchestra plays the beginning of "The Dodo Bird," a Stalling's original music cue. This cue does not have a defined genre such as the hot jazz of the "Schlesinger Swing." Instead, it changes continuously from one music style to another.

⁷³The right face corresponds to Larry, the one in the middle to Curly, and left face is the one of Moe.

When the Three Stooges monster enters the scene coming out from behind an igloo, the orchestra plays a phrase in the cellos (as a steady bass line) and some high notes in the xylophone (a simple melody). Some seconds later, the monster starts to speak a sort of gibberish or nonsense that has been made by speeding up the sound-on-film recording. With the aforementioned lone and loud high note on the xylophone, the monster proceeds to punch Moe's face with its right hand. Subsequently, the strings in the orchestra play an arpeggio that goes from low to high notes while the monster addresses the audience with its speeded-up gibberish. Suddenly, the style of the music changes abruptly to a happy and jazzy melody played by the strings as a little cartoon character enters the scene. With a childlike voice, the little character translates for the viewer: "He says his mama was scare by a pawn broker sign."

As soon as the little character leaves the scene, the music changes again to the bass line played by the cellos and the Three Stooges monster starts again the slapstick routine. The monster abuses his faces five different times. First, the left hand punches Larry's face while a high note on the xylophone is played together with the sound-effect of releasing a metallic spring. Second, the left hand pokes the eyes of Curly's face while a high note of the xylophone is played together with the recorded sound of a "BOING!".⁷⁴ Third, the right hand pinches the nose of Moe's face while the sound-effect of snapping a rubber band emerges from the soundtrack. Fourth, the right hand slaps Moe's face while the sound-effect of hitting a wooden block is played. Fifth, the right hand pokes the eyes of Curly's face while the sound of an outburst of percussion and brass is mixed with the sound-effect of two flat pieces of wood being

⁷⁴ This sound was probably made with a standard noise-making device popular during the Radio Age: the "Boing Box." A strange square banjo looking box that "had only one string, that when plucked made a loud and comedic 'boooooing' sound" (Mott 118).

struck. All these sonic punctuations of physical violence are nicely orchestrated with the bass line that the cellos have been playing in the background, and they emerge synchronized with the music beat.

The Chase

Speed is an important characteristic of *Porky in Wackyland*. Not only do the characters move faster but also the rhythm of the music and the punctuation of sound-effects have a faster pace.⁷⁵ The contrast among fast and slow gags, different musical genres, a variety of voices, and diverse sound-effects creates a dynamic audiovisual rhythm that is certainly fast. Such energetic audiovisual rhythm becomes especially relevant at the moment of the chase —perhaps the most conventional narrative device for exploring the comic possibilities of speed.⁷⁶ In *Porky in Wackyland* the actual chase of the Dodo Bird last for only one minute and eighteen seconds. However, during this short period of time 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 sounds-effects punctuate the physical violence and grotesque movements of the cartoon characters.

Porky Pig starts chasing the wild bird right after the Dodo scares him with a cry (“uuuuUUUU!”) while the orchestra plays a music cue from the Warner’s catalogue named “Octoroon” by Harry Warren. The Dodo begins to move very quickly in a surreal landscape

⁷⁵ Even the dialogue is speeded up as in the gibberish spoken by the Three Stooges monster.

⁷⁶ The chase, as Norman Klein states, “is a very orderly state of anarchy, because it is completely ruthless ... *is the collision of improbables meeting on a field where only greed and invasion operate*. The more levels of collision in a single gag, the funnier it is” (164).

and appears in different places of the screen saying “YAHOOO!” several times. Suddenly, the music cue changes to Stalling’s original “The Chase” and Porky starts running from the left side of the screen pursuing the Dodo across the flat surface of Wackyland. The Dodo makes a flip over a curved tree, and the sound-effect of a slide whistle emerges from the soundtrack masking the sound of the orchestra. Porky cannot do the flip and ends collapsing beside the tree and then lying down on the ground. Afterwards, an outburst of brass emerges from the soundtrack while the Dodo handstands on Porky’s head.

A slow down of the pace occurs subsequently and the music cue changes again to Harry Warren’s “Octoroon.” As an “anti-prey” in control of time and space, the Dodo is king and magician of the topsy-turvy world. He stops running and performs a sort of magic act drawing a door in the middle of nowhere while the string section of the orchestra plays the slow waltz melody of “Octoroon.” Abruptly, the Dodo shouts hysterically and the music cue changes to Stalling’s “Captured”, which begins with an outburst of brass. Porky appears in the scene running from the left side of the screen and collides with the door while the sound-effect of a wood hit is played. The flurry of strings from the orchestra increases and the Dodo shows up in a window that has appeared magically next to the door. The Dodo attracts the attention of Porky with the vocal noise “burururururu!”, and when the pig approaches to the window the bird goes out through the door and gives him a kick in the buttocks. The sound-effect that emerges from the soundtrack is again the one of a wood hit.

As one can appreciate in the part of the chase I have described so far, the constant changes

not only occur very fast in the visual action but as well in the soundtrack. For the rest of the chase (thirty seconds), the orchestra continues playing Stalling's "Captured" —alternating the fast tempo of the flurry of the strings with outbursts of brass, trombone slides, and even silences. As five more slapstick routines are piled up until the end of the chase, 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 Dodo hits Porky's face with a slingshot; the sound of a wood hit is played when Porky collides with the buttocks of the Dodo; and the sound of bowling pins being hit by a bowling ball is played when Porky collides with a brick wall. Furthermore, when the orchestra makes small silences, some sound-effects emerge from the soundtrack for accompany the visual action of an elevator going up (the sound of mechanical pulleys and electronic bells) and the movement of the Warner Bros. logo coming from the horizon (electric guitar slide).

All in all, this analysis of *Porky in Wackyland* reveals how the complex soundtrack is integral to the slapstick style that was developed at Termite Terrace from 1937 to 1943. 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. Such energetic audiovisual rhythm is what helps to structure the non-logical development of both the music and the narrative. It gives order to the narrative's disorder by means of a constant audiovisual flow.

One of the most important aspects of their innovation within the slapstick tradition is the creation this unrelenting audiovisual rhythm that does not cease during the seven minutes of the theatrical animated cartoon. Not only are the slapstick comic routines rendered without the limitations of physical laws that the animation medium makes possible, but also they acquire the rhythmic discipline of music. Therefore, the slapstick style of the Looney Tunes and Merrie Melodies becomes a synthesis of this fantastical, surreal, and absurd universe — rendered with drawings in motion and the rhythmic orchestration of musical genres, sound-effects, and voices.

Furthermore, the analysis of the complex soundtrack of *Porky in Wackyland* demonstrates the rich variety of sounds of the slap-of-the-stick that were used at Termite Terrace for punctuating the mockery and abuse of the body and the grotesque movements of the cartoon characters. From the musical sounds made by certain instruments of orchestra, to the vocal sounds made by Mel Blanc, to the sound-effects recorded, edited, and selected by Treg Brown, the slapstick comic routines are always enhanced by aural events. Frequently, different kinds of sounds of the slap-of-the-stick (musical, sound-effects, vocal) are mixed together and mask each other. Other times they just stand out 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 the hectic audiovisual rhythm of the cartoon as a whole.

Doctor. Hold, Mr. Punch! I don't want any physic, my good sir.

Punch. Oh, yes, you do; you very bad: you must take it. I the Doctor now. [Hits him] Now do you like physic? [Hits.] I will do you good. [Hits.] This will soon cure you. [Hits.] Physic! [Hits.] Physic! [Hits] Physic! [Hits.]

(Collier & Cruickshank, *The Tragical Comedy or Comical Tragedy of Punch and Judy*. 1832)

3. THE *LONEY* SOUNDS OF THE SLAP-OF-THE-STICK

In the Looney Tunes and Merrie Melodies, some musical effects played by the orchestra (e.g., drum rolls, cymbal crashes...), some voices performed by Mel Blanc (shouts, cries, screams...), and some sound-effects recorded, edited, and selected by Treg Brown (zips, boings, metal hits...) function as sounds of the slap-of-the-stick. I have dubbed this group of sounds, “the *looney* sounds of the slap-of-the-stick” in order to facilitate their study and highlight both their conventional and innovative characteristics.

First of all, the *looney* sounds of the slap-of-the-stick follow the conventional slapstick logic of audiovisual synchronization (e.g., *Commedia del'Arte*'s “batochio,” vaudeville drummers’ “catching the fall” technique) and emerge from the soundtrack at exact points of synchronization when the physical violence and grotesque movements are displayed on-screen. By doing so, they enhance the slapstick gags and produce a comic effect thanks to the phenomenon of *synchresis*.⁷⁷

Furthermore, the *looney* sounds of the slap-of-the-stick have the conventional slapstick characteristics of being concrete, and loud. On the one hand, they are rich in details that reveal the material conditions in which they were created and make us feel their concrete presence in the setting. When one listens to them carefully one can identify (or at least guess) the substance

⁷⁷ As 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. I have explored this phenomenon more deeply in 1.2. The Sounds of the Slap-of-the-Stick.

that caused the sound (wood, metal, paper, cloth, plastic, rubber, voice...), and also the manner in which the sound was produced (friction, impact, uneven oscillations, puff, speed-up of a recorded sound...).⁷⁸ On the other hand, these sounds have a very loud volume that calls one's attention to them immediately, exaggerating even more the violence and disruption of the comic routines.

It is important to point out that, thanks to being loud and concrete, the *looney* sounds of the slap-of-the-stick provide physicality, gravity, and weight to the drawn images that pass quickly on the screen. The sounds have the important role of aiding the apprehension of fast visual movements that our eyes cannot perceive.⁷⁹ A brief sound event that lasts for a quarter of a second is totally heard by our ears and impacts fully our sensory experience. Without sound, the slapstick comic routines of the animated cartoons do not impress very well in our minds, they go too fast and do not have the same sensory impact, they lose physicality.⁸⁰ The *looney* sounds of the slap-of-the-stick ground the cartoon drawings to reality giving them an audible corporeality that is concrete and loud. That reality is, of course, a very comic and fantastical one, a carnival-grotesque reality.

However, although the *looney* sounds of the slap-of-the-stick follow conventions, they also introduce certain innovations in the slapstick tradition, such as the close-up perspective. This

⁷⁸ When one listens to them inattentively, one just feels a sort of percussive punctuation, a disruption in the sonic flow.

⁷⁹ Persistence of vision, the basic visual principle of animation, illustrates the limitations of human eyes. This principle consists in the illusion of movement created by images passing very quickly in front of our eyes.

⁸⁰ As Chion states, "sound -ineffable and elusive sound- so clear and precise in our perception of it, and at the same time so open-ended in all it can relate -infiltrates the reassuring, closed and inconsequential universe of the cartoon like a drop of reality, a tiny, anxiety-producing drop of reality" (122).

particular innovation is determined by the sound technologies of the end of the 1930s (sound-on-film, microphones, loudspeakers, radio, telephone, phonograph, public address systems...) and can be appreciated in some live-action comedies of that period of time as well.⁸¹ The close-up perspective means, on the one hand, that the sounds are recorded with a low level of reverberation by placing microphones close to the sources of sound. On the other hand, it means that when the sounds are reproduced they are heard always in the foreground of the soundtrack, clearly and well defined. Among all the *looney* sounds of the slap-of-the-stick, the sound-effects are the ones that illustrate this innovation best. Thanks to the close-up perspective, almost imperceptible noises such as the ones produced by snapping a rubber band or by releasing a metallic spring can be recorded and then reproduced very loud.

Another innovation that the technologies of the Sound Era determined is what I have called “*schizophrenia* of the cartoon body.” This *schizophrenia* is inspired by Steven Feld’s notion of *schizophonic mimesis* as the recontextualization of sounds that have been split from their original sources.⁸² Because aural events were frozen on sound-on-film, they could be cut, separated from their original sources, and situated in a totally different context such as that of the animated cartoons. *Schizophonic mimesis* is especially relevant in the selection and edition of the *looney* sounds of the slaps-of-the-stick that are sound-effects. Noises such as the hammer striking an anvil, the screech of a car, or the approach of an airplane, are split from their original sources and contexts and are rematerialized in the cartoon universe. The *schizophrenia* of the

⁸¹ The short films of the Three Stooges and some of the shorts made by Laurel and Hardy are exemplary in the use of sounds that have close-up radio perspective quality. Although this quality was first an innovation, it became the standard in Hollywood for many years. Even today the close-up perspective is one of the sound standards.

⁸² As I explained in Chapter 1, *schizophonic mimesis* became first an innovation, and then the standard practice for configuring the sonic identity of the slapstick bodies in live-action film comedies and theatrical animated cartoons of the Sound Era.

cartoon body consists, therefore, in the recontextualization of sound-on-film recordings of noises for depicting sonically the bodies of the animated cartoons characters.

The rich variety of sound-effects that was introduced in the Looney Tunes and Merrie Melodies from 1937 to 1943, demonstrates the importance of *schizophonia* and close-up perspective for defining the slapstick style of Termite Terrace. Although these two innovations were determined by the sound technologies of the Sound Era and also could be found in some live-action film comedies and theatrical animated cartoons from that period of time, they were explored more systematically by the boys of Termite Terrace (especially by Treg Brown) and became a trademark of the unique Warner Bros. animation style.

3.1. Sound/Image Relationships

The organization of the *looney* sounds of the slap-of-the-stick in the soundtrack enables two basic relationships between images and sounds that complement each other very well. On the one hand, images and sounds can establish an isomorphic relationship in which the rhythm of the visual images (visual movement) is the same as the rhythm of the sounds.⁸³ For instance, when in *Porky's Duck Hunt* (1937) the sound of an electric guitar slide is heard at the same time Porky Pig emerges from the waters of a lake, the sound is describing the trajectory, the movement displayed on the visuals. As Chion explains, "What is being imitated is the trajectory

⁸³ As Scott Curtis explains, "An 'isomorphic' use of sound occurs when the sound and image have the same 'shape'... The term isomorphic recognizes not only the specific features of sound, but also the inseparability and equality of sound/image relationships" (201).

and not the sound of the trajectory, drawing on a universal spatial symbolism of musical pitches" (121).

On the other hand, sounds and images can establish an iconic relationship in which the sounds are analogous to the visual events. For instance, the recorded sound of an anvil being struck by a hammer can be analogous to the visual action of bonking the head of a cartoon character with a wooden mallet. Or the recorded sound of two flat pieces of wood being struck against each other (the amplified "TWACK!" of the "batocchio" or slapstick) can be analogous to the action of hitting the face of a cartoon character with a slingshot.

The isomorphic and iconic relationships between images and sounds have been a convention of the slapstick tradition since the early days of silent film accompaniment. For instance, vaudeville drummers built, in real time, the iconic relationship between the crashing of metals made with a "trap" (mechanical noisemaking device) and the action of smashing a pie in a comedian's face. Organists in movie theaters created, also in real time, the isomorphic relationship between a glissando and the fall of a silent clown from a ladder. Since the comic routines, *lazzi*, or gags of the slapstick tradition are so systematic in their conventional gestures and actions, the isomorphic and iconic relationships between images and sounds have been standardized.

However, the space for innovation has always been open in the slapstick tradition, and comedians, musicians, and artists from different periods of time have taken advantage of the

possibilities of the new media and new technologies to go beyond the conventions in their reinterpretations of slapstick gags. When they have avoided establishing isomorphic and iconic relationships between images and sounds, they have been able to explore a third kind of relationship that I would like to call “anarchic.”

In the anarchic relationship, sounds and images do not have the same rhythm nor anchor each other with an analogy. Instead, sounds and images meet together in a more arbitrary, incongruous, and fantastical way. An example of this anarchism can be found in *Porky in Wackyland* (1938) when the sound of car screech emerges from the soundtrack at the time Porky Pig makes backflips in the air.

3.2. The Audible Cartoon Body

For studying more closely the specific characteristics of the *looney* sounds of the slap-of-the-stick, rediscovering their relationships with the images, and illustrating the *shizophrenia* of the cartoon body, I have selected seven animated cartoons from the period of 1937-1943. This sample of Looney Tunes and Merrie Melodies is very rich in its deployment of sounds and contains many instances of slapstick in the most conventional sense. Three of these shorts are directed by Tex Avery: *Picador Porky* (1937), *Porky's Duck Hunt* (1937), *Daffy Duck and Egghead* (1938). And four of them are directed by Bob Clampett: *Porky in Wackyland* (1938), *The Daffy Doc* (1938), *A Tale of Two Kitties* (1942), and *Tortoise Wins Hare* (1942).

My study is informed by the audiovisual analysis approach developed by Michel Chion, and it attempts to discover the visual and sound elements of the animated cartoons separately and then to see how they work together. By applying the “masking method of observation” that consists in several screenings of a sequence (with sound, without images; with images, without sound; with images and sound together), one is able to identify the independent characteristics of images and sounds and become aware of how they work together. When listening to the soundtrack without images, one can appreciate the “consistency” of the sound, the degree of interaction between different audio elements (voices, music, sound-effects), its texture, timbre, vibration, and also its possible causes (how the sound was produced). When viewing the images without sound, one can spot the important points of action that require carefully synchronization (synch points) and also the rhythm and pace that the images have. When hearing and watching at the same time, one can appreciate the rhythmic (isomorphic), iconic (analogous), and anarchic relationships between sounds and images.

In order to organize the results of my analysis I have grouped the *looney* sounds of the slap-of-the-stick in two categories: body parts and grotesque movements. In the first one, I have arranged the sounds that emerge from the soundtrack when the cartoon bodies collide, squash, stretch, or are being hit in specific parts of their bodies. In the second one, I have sorted the sounds that are heard when the cartoon characters move grotesquely making backflips, flips,

and falls. In both categories, the sounds provide a concrete acoustic materiality to the cartoon body that is based on *synchresis* and *schizophonic mimesis*.⁸⁴

Although such categorization of the *looney* sounds of the slap-of-the-stick can appear as a standard vocabulary for depicting the body of the cartoon characters, this vocabulary is flexible and remains open to innovative and unpredictable uses of sounds. My intention here is to reveal how the conventional gestures and actions of the slapstick gags are punctuated with sounds that have certain acoustic characteristics. I believe that there is a system to depicting the cartoon body, but this system is flexible. Such flexibility can be appreciated in the fact that, among my sample of Looney Tunes and Merrie Melodies, different sounds are used for depicting the same body part or the same grotesque movement.⁸⁵

3.2.1. Body Parts

When different parts of the cartoon body are abused and mocked, the images and sounds usually establish an iconic relationship. Generally, the analogy is between a loud percussive sound and the visual display of impacts and collisions. The percussive sounds are appropriate because they create tension; they are pure conflict, physical collision of objects. Other times, the mockery and abuse of the body parts is of the nature of a squash or a stretch and the

⁸⁴ Although the notion of *schizophonic mimesis* is clearer in the use of sound-effects, I have decided to include also the musical effects provided by the orchestra in this analysis. As we shall see, the musical effects are rematerialized in the cartoon body even if they also remain part of the musical background (the musical cue).

⁸⁵ If sometimes I just describe one kind of sound for a body part or a grotesque movement, it is due to the limitation of my sample of shorts. It seems that the more Looney Tunes and Merrie Melodies one can analyze, the more variety of sounds one can find for the body parts and grotesque movements.

relationship that sounds and images establish is isomorphic. Thus, the sounds are usually glissandos that describe the movement of the body part.

The Head

As I mentioned before, the percussive sound of hammering an anvil can be analogous to bonking the head of the cartoon body. Although this sound has been recorded with close-up perspective inside an isolated studio, its original context belongs to the blacksmith's workshops where objects such as horse shoes are forged from iron or steel. The loudness of this sound has never been unattended by humans because it is over 100 db and can cause ear damage.⁸⁶ As Murray Shaffer has pointed out, "Up to the time of the Industrial Revolution, the sound of the blacksmith's hammer was probably the loudest sound a solo human hand ever produced—a brilliant tintinnabulation" (58). Besides being very loud, the sound of striking an anvil with a hammer is characterized by a natural resonance of enharmonic high frequencies. .

Since we hear such a loud sound at the exact moment the head of a cartoon character is hit with a mallet, a truncheon, or a hammer, the physical acoustic qualities of a heavy steel anvil are rematerialized in the cartoon body, giving it concrete presence and rough materiality. Examples of this iconic relationship and audiovisual synthesis (*synchresis*) can be appreciated in *The Daffy Doc* when Daffy bonks Porky's head with a wooden mallet in order to bring him inside the "STITCH IN TIME HOSPITAL"; in *Porky in Wackyland* when a crazy prisoner who is holding the bars of a cell window with his two hands is hit in the head by a policeman with a

⁸⁶ Any sound over 85 decibels (dB) can cause hearing damage, depending on the amount of time exposure.

truncheon; and in *Picador Porky* when an absurd kind of whistle-hammer reverses its movement and hits the head of the time keeper.



The Daffy Doc (1938): Daffy bonks his own head in order to consult clones of himself.

Due to the natural resonance of the anvil, the sound produced by the blow (almost a staccato) continues vibrating for at least two seconds with unevenly distributed frequencies. That resonance can be analogous to the fantastical multiplication of the cartoon body. When in *The Daffy Doc*, Daffy decides to make a consultation with two clones of himself, he has to strike his own head with a mallet. At the exact time he hits his head, the loud sound of hammering an anvil is heard. Then, as the sound continues vibrating, two phantasmagorical replicas of Daffy emerge from each side of his body.

Sometimes the head of the cartoon body seems to be made of a lighter material but still a metallic one: a thin and rounded crash cymbal. The iconic relationship that is built consists in linking the impact of an object on the cartoon head with the sound produced by striking a crash cymbal with a drumstick. The loud and brilliant sound this strike produces is characterized by a combination of low and high unharmonious frequencies that resonate making a “SSSSshhhh” or “SSSSss.” We can find this analogy in *A Tale of Two Kitties* when the little Tweety Bird strikes the head of the fat kitty Catstello with a club, and in *Porky in Wackyland*, when a wacky drummer hits his own head with a giant timpani mallet.



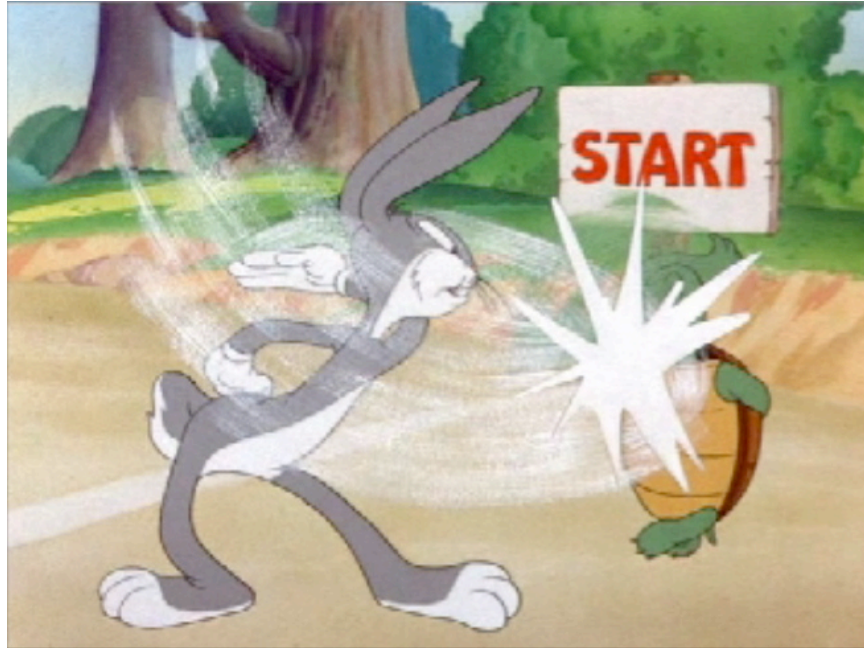
Picador Porky (1937): Heads like maracas and castanets.

At other times, the cartoon head can make the sound of wooden maracas. This sound is percussive and has the rich texture of many bright and ultra-short hits. Since the maracas are

usually played by shaking them rhythmically, they can establish at the same time both iconic and isomorphic relationships with the images. An example of that occurs in *Picador Porky* when two characters, holding each other's necks, move their heads rhythmically in perfect synchronization with the sound and rhythm of the maracas. The double relationship (isomorphic and iconic) also appears in *Picador Porky* when the percussive and rhythmic sound of wooden castanets is heard at the same time two characters rhythmically strike their heads together. The sound of the castanets is percussive, short, and has indefinite pitch.

The Face

Occasionally the face of the cartoon body resonates as a loud "TWACK!" The iconic relationship is created between the sound of two flat pieces of wood being struck against each other and the visual action of smacking in the face. This sound is a loud, sharp crack, very rich in frequencies enharmonically distributed. Actually, this sound is the one made by the foundational device of the tradition: the "batocchio" or slapstick. Thanks to the close-up perspective, such traditional noise is renovated with the electric power of amplifiers and microphones. The wooden face of the cartoon body can be heard in *A Tale of Two Kitties*, when Babbit smacks the face of his pal Catstello, and in *Tortoise Wins Hare* (1942) when Bugs Bunny slaps the face of Cecil Turtle right before they start a race.



Tortoise Wins Hare (1942): Bugs Bunny slapping face of Cecil Turtle.

Once in a while, as when the left hand of the Three Stooges monster punches one of his faces, we can hear a mixture of sounds: a metallic spring being released and a high note being played on the xylophone. In this case, the iconic relationship is built between the percussive sound of the xylophone and the punch, while the isomorphic relationship is established between the resonant sound of the spring and the elastic movement of the face. In this stylized combination of sound-effect and musical-effect, the noise of releasing a metal spring attracts my attention because, although the sound has been recorded in a studio with close-up perspective, its original context is that of a mechanical machine—from a pocket watch to an automobile. Because its original context is so different from the one in which it is rematerialized, but at the same time its resonance is so similar to the movement of the face, the comic effect of such unharmonious sound becomes more hilarious.



Porky in Wackyland (1938): Three Stooges monster punching one of his faces.

The Nose

The nose of the cartoon body can be like a bulb horn. This happens when the visual action of honking the nose becomes analogous to the sound produced by squeezing a rubber bulb horn and hence an iconic relationship is established. Such a sound originally belongs to the context of vehicles such as bicycles, cars, trucks, trains, and boats. In that context the horn signals the presence of the vehicle. The sonic symbolism of the horn can even be interpreted in a wider context, such as that of the ancient hunting horns (indicating different sorts of prey) and the modern post horns (indicating different kinds of mail).⁸⁷ The comic effect of the horn sound is achieved then by the displacement of such an archetypal context of signaling an alert to the

⁸⁷ Due to this historical fact the sound of the horn can be catalogued as an archetypal sound. As Murray Shaffer has pointed out, “Only sound symbols which are carried forward century after century qualify for this distinction, for they knit us with ancient ancestral heritages, providing continuity at the deepest levels of consciousness” (47).

ludicrous context of the nose of a cartoon character. We can hear such hilarious recontextualization in *Daffy Duck and Egghead* and in *Porky's Duck Hunt* when Daffy bites with his beak the bulb-shaped nose of Egghead and the pig nose of Porky.

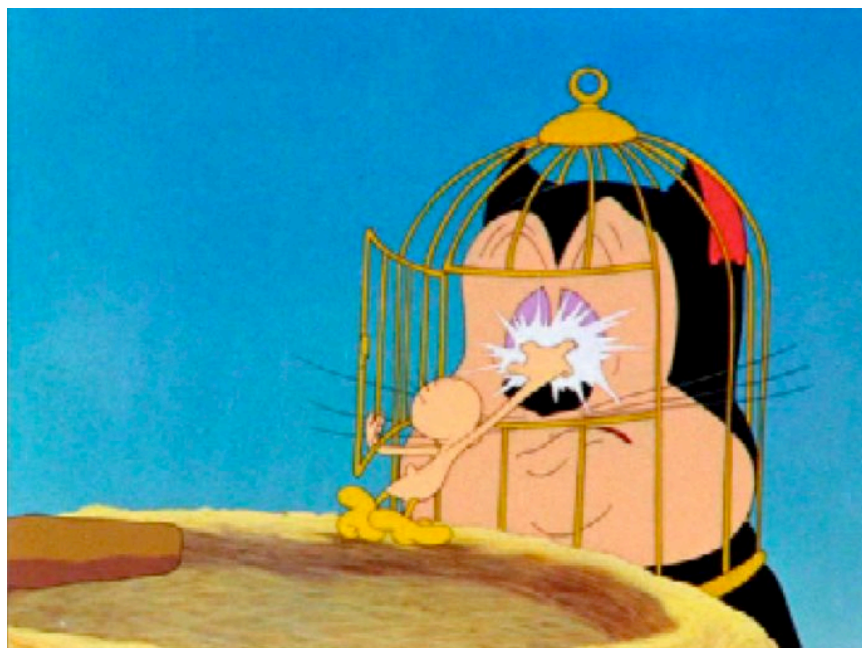


Daffy Duck and Egghead (1937): Daffy honking the nose of Egghead.

At times, when the nose of a cartoon character is stretched and released, it can be analogous to the sound of snapping a rubber band. For instance, when in *Porky in Wackyland* the right hand of the Three Stooges monster stretches and then violently releases the nose of one of his faces, we hear that sound as a very loud and percussive impact. The original context of that sound is difficult to determine since it can be as varied as an office or a childish game. In any case, the sound we hear is clearer (in close-up perspective) and more amplified than the one we can normally hear in its original contexts.

The Eyes

Poking the eyes of a cartoon character can be analogous to plucking the string of a “Boing Box.” For instance, when the Three Stooges monster pokes the eyes of one of his three heads in *Porky in Wackyland*, the sound we hear is a loud and resonant “BOOOOOOOIIING!” Since the “Boing Box” device was created for comedic purposes during the Radio Age, it is difficult to define the original context of the “BOOOOOOOIIING!”⁸⁸ Perhaps one can say that this sound has always been out of context, or that it has always been in the comedy context.⁸⁹ Whatever is the case, its materiality is very noticeable due to its unevenly distributed frequencies, its loudness, and its long resonance.



A Tale of Two Kitties (1942): Twetty Bird poking Catstello's eyes.

⁸⁸ A strange square banjo-looking box that “had only one string, that when plucked made a loud and comedic ‘boooooing’ sound” (Mott 118).

⁸⁹ A memorable use of the “BOOOOOOOIIING!” was produced in 1951 by United Productions of America in the short *Gerald McBoing-Boing*.

At other times, poking the eyes can be in an iconic relationship with the sound of smashing a door, as when Tweety Bird jabs Catstello's eyes in *A Tale of Two Kitties*. The percussive and loud sound of such a violent smashing usually belongs to a domestic context where it can mean the end of a discussion or the farewell after a fight.

The Mouth

The major orifice in the face of the cartoon body, the mouth, sometimes is abused by being stretched. In *Picador Porky*, when a ferocious bull pulls a plunger that has been attached to his mouth, his mouth stretches while the sound of an electric guitar slide emerges from the soundtrack. Therefore, the images establish an isomorphic relationship with the guitar sound that goes from low to high pitch smoothly.⁹⁰ Since jazz musicians played the first electrically amplified guitars during the 1930s, it can be said that the original context of this sound belongs to jazz performances.

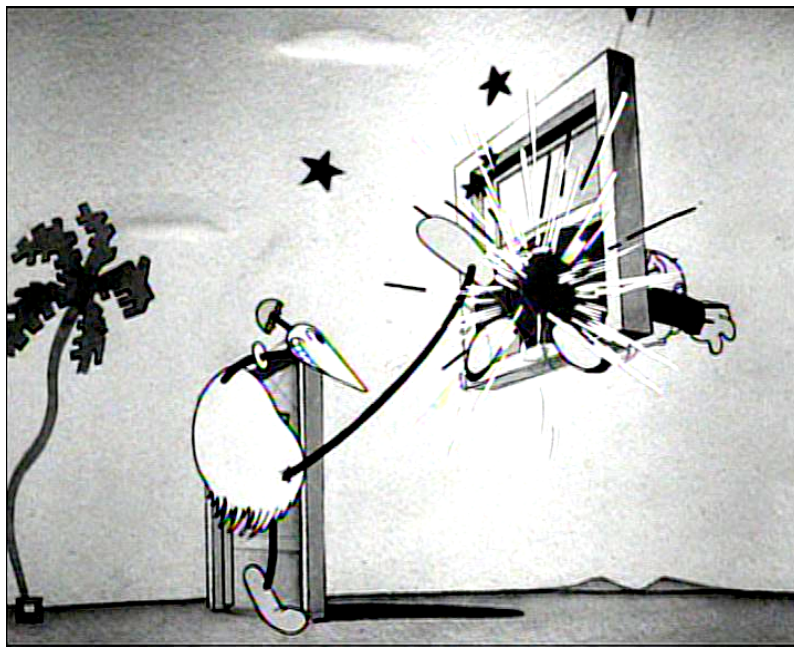


Picador Porky (1937): A furious Bull stretching its mouth.

⁹⁰ The sound of the electric guitar slide, as Carl Stalling has explained, was made by strumming a chord and sliding the hand down. That sound became the conventional sound for the opening of all Looney Tunes and Merrie Melodies. This is the sound one hears when the WB logo is emerging in the middle of the screen.

The Buttocks

Going lower in our description of the parts of the cartoon body, we encounter the buttocks, one of the most conventional places for mockery and abuse in the slapstick tradition. Frequently, the action of kicking the buttocks can be in an iconic relationship with the sound of a tom-tom drum being hit with a drumstick. Examples of such use of the tom-tom sound can be heard in *The Daffy Doc* when Dr. Quack kicks Daffy's buttocks, sending him straight to the iron lung, and in *Porky in Wackyland* when the Dodo kicks Porky Pig's buttocks right at the moment Porky is trying to get through a window. The characteristic of this sound is that it has indefinite pitch and that its frequencies are neither too low nor too high. In addition, this sound has little resonance and its original context is the one of the jazz bands —although one could also say that this sound belonged to pre-modern cultures where drums similar to the tom-toms were used in rituals.



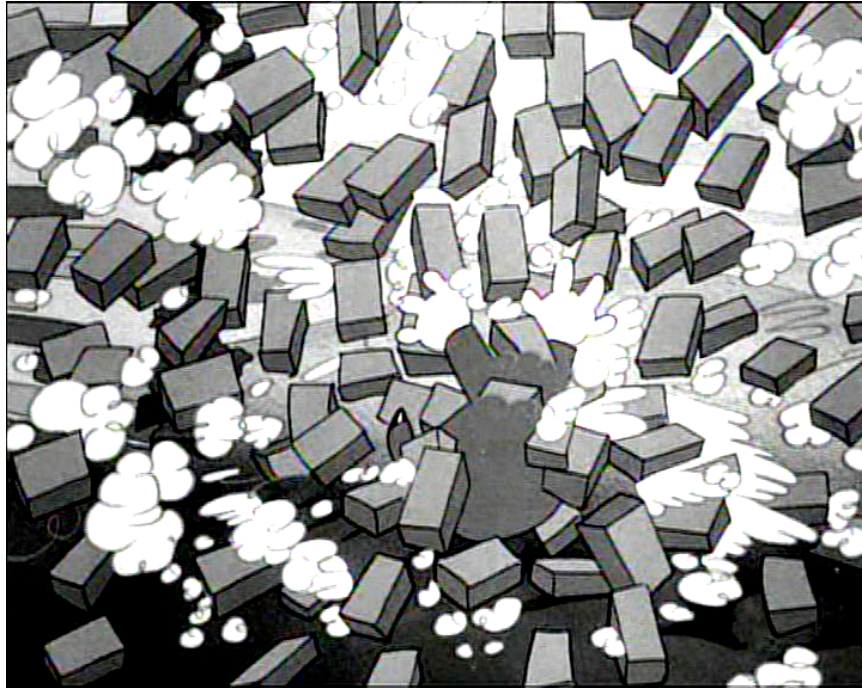
Porky in Wackyland (1938): Dodo Bird kicking Porky's buttocks.

The Whole Body

The grotesque cartoon body as a whole makes different percussive and loud sounds when it collides against other objects. Often, an iconic relationship can be established between the visual action of the body crashing into a wall and the sound of many metallic objects dropped on the floor. This is, for instance, the sound one hears in *Tortoise Wins Hare* when Bugs Bunny collides with a wall.⁹¹ In *A Tale of Two Kitties* the same kind of uneven crashing sound is heard twice, first when Catstello hits the ground after a huge fall, and moments later when an anvil that falls from the roof of a house smashes Catstello's whole body. In the latter, the crashing sound is louder (perhaps having been overdubbed in the final mix of the soundtrack) and has a longer resonance. Although it is difficult to establish the original context of such a violent sound, one can easily imagine this sound happening in a factory or in a warehouse.

Rarely, the iconic relationship can be created between the sound of a heavy bowling ball striking several pins and the visual action of the cartoon body crashing into a brick wall. This is the case in *Porky in Wackyland*, when Porky collides against the wall that the Dodo has put in the middle of a flat landscape. This loud sound belongs originally to the context of bowling and it is characterized by a powerful percussive impact —ball striking several wood pins (usually ten) — that is followed by several short percussive impacts among the wooden pins.

⁹¹ The uneven and noisy sound of the crashing of metals is complemented with a glissando in the xylophone. The crashing sound masks the sound of the orchestra instrument but still lets the high-pitched notes of the xylophone be heard.



Porky in Wackyland (1938): Porky collides with a brick wall.

Other sounds the whole body can make when it collides are the sound of a smashing door, as when in *Porky in Wackyland* Porky Pig hits with his whole body the door that the Dodo has drawn in the middle of nowhere; and the traditional “TWACK!” of the “batocchio” as when in *A Tale of Two Kitties* the body of Catstello crashes into the roof of a house after a long fall.⁹²

3.2.2. Grotesque Swing

The movements that the cartoon body makes are very fast and have the topographical logic of the “grotesque swing” that consists in a rotation from the upper stratum (head, spirit, reason) to the lower stratum (anus, filth). The visual actions that display such grotesque movement are

⁹² Since I have already described these sounds in previous parts of the body I will not expand my explanation about them here.

usually in an isomorphic relationship with the sounds, although in some rare cases they can be quite anarchic.

Backflips: Rotations

Occasionally, an isomorphic relationship is created between the sound of a slide whistle played fast and repeatedly (going from high to low pitch and vice versa), and the images of the cartoon body doing backflips. For instance, in *Porky in Wackyland*, when Porky makes such acrobatic movements in the air after having collided with the Dodo's buttocks, we hear those fast variations in the pitch. As the body of Porky moves, rotating from bottom to top several times, the sound goes up and down repeatedly. The sound of a slide whistle belongs to a comedy context and although it has been used in some jazz and classical pieces, it remains associated with childhood play. The fact that this kind of whistle has become a comedic device illustrates the comic effect that changing the pitch of a wind instrument very fast can have. Such glissandos in the whistle turn out to be as grotesque as the rotations of the body.⁹³

⁹³ The trombone also has the capacity to create such glissandos, but it cannot make them as fast as the slide whistle.



Porky in Wackyland (1938): Porky making backflips.

Infrequently, the backflips of the cartoon body make the sound of a car screech. This happens in *Porky in Wackyland* when Porky Pig rotates in the air after having been scared by a very loud horn sound. The relationship between images and sounds is anarchic because neither is the car screech analogous to the rotations nor is the screech describing the trajectory of the body. The recontextualization of this sound exaggerates even more how arbitrary is the anarchic relationship, because its original context is that of a violent aural event that happens on a highway or in a street.

Flips: Going Upside Down

The fantastical action of running upside down sometimes is in an isomorphic relationship with sounds that smoothly vary their pitch from low to high describing the grotesque trajectory

of the cartoon body. For instance, in *Picador Porky*, when both Porky Pig and a furious bull run upside down across the screen as if they were doing a rollercoaster loop or a long flip, we hear the sound of an electric guitar slide. Another example of this isomorphic relationship can be found in *Porky in Wackyland* when the Dodo Bird is able to do an antigravity running loop following the surface of a curved tree branch, and the sound we hear is a glissando in a slide whistle.



Picador Porky (1937): Porky and the bull running upside down.

Falls: Going Down

The emphasis in the descent movement of the grotesque swing is displayed when the cartoon body falls. Usually the sound the body makes while falling is characterized by the variation of pitch from high to low in a conventional isomorphic relationship. For instance, in *A Tale of Two Kitties*, Catstello falls from the ceiling of a house while the sound of a glissando

on the piano is heard going from high to low notes in two seconds. In the same short, the descent movement of the body can make the sound of a bomb dropped from a high altitude. This is the sound one hears when Catstello falls after having tried to catch Tweety Bird in a tall tree. Although this sound imitates the trajectory of the body, going from a high to a low pitch, its rematerialization in the cartoon body turns out to be surprising because its original context is the war.

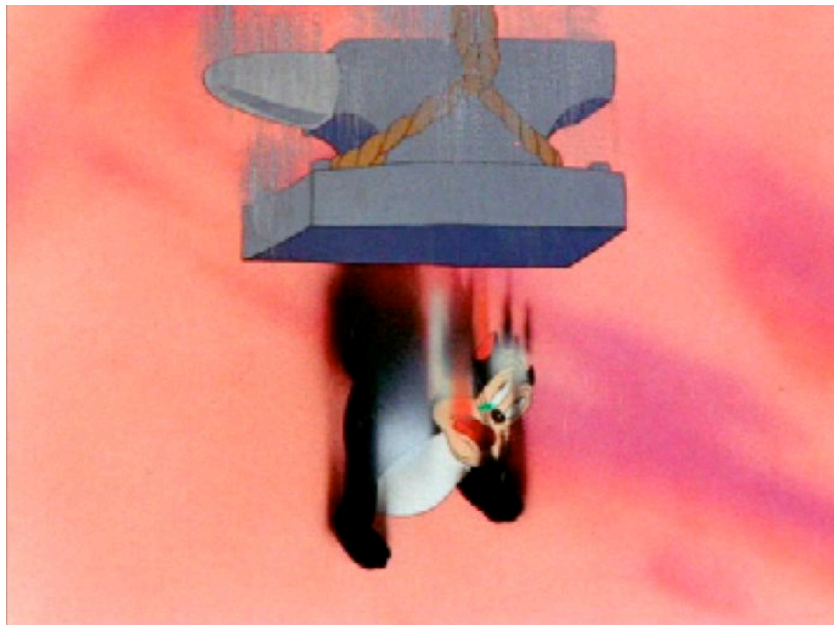
Sometimes, the isomorphic relationship is very stylized, as when the sound of an aircraft diving in the sky is heard while Catstello falls, making flips in the air, turning his body upside down several times. This sound is the one made by a bomber aircraft (a dive bomber) and has the characteristic of a Doppler effect, in which the sound changes its frequency and wavelength (varies its pitch) as it approaches the observer, or, more exactly, the microphone that captures the aural event.⁹⁴ The original context of this sound is that of the Second World War and it is quite possible that the sound has been split from a newsreel film of that period.⁹⁵

The most extreme of these falls or descent movements are great examples of how well sound can help rendering the transgression of physical laws. In one of the scenes of *A Tale of Two Kitties*, Catstello is falling (one more time) after hanging by a rope that Tweety throws him. Since the rope is attached to an anvil that is on the roof of a house, and Catstello has been pulling the rope in order to ascend, the anvil ends by falling from the roof; and while it goes

⁹⁴ As Murray Shaffer explains, the Doppler Effect “results when a sound is in motion at sufficient velocity to cause a bunching up of the sound waves as the sound approaches an observer (resulting in a rise in pitch) and an elongation of the sound waves as the sound recedes (resulting in a lowering of pitch)” (80).

⁹⁵ The United States Navy used the dive bombers during World War II. The main characteristic of such aircraft was the capacity to dive almost vertically into the targets in order to provide greater accuracy when dropping the bombs.

down we hear the sound of a siren-whistle in a conventional isomorphic relationship with the images.⁹⁶ When Catstello notices the anvil, he stands in the air for a moment and makes an exaggerated panicky face while an outburst of brass and percussion emerges from the soundtrack. Then he turns upside down in the air, and starts moving his legs as fast as possible in order to fall faster than the anvil. The sound of a slide whistle in a tremolo starts to be heard and is mixed with the sound of the siren-whistle. Catstello in fact reaches the ground before the anvil, but then is smashed by it. Such acceleration of the fall of a body could only be rendered in animation, and thanks to sound, it becomes more exaggerated and more magically real. In this case, the relationship between the images and sounds is anarchic because the fast tremolo of the slide whistle does not follow the fall of Catstello but instead goes from high to low pitch super-fast.



A Tale of Two Kitties (1942): Catstello falling faster than an anvil.

⁹⁶ The Acme Orchestral Siren Whistle was patented in 1895, and often called the “cyclists’ road clearer.” This loud siren is now used for all sorts of signaling, the Acme Orchestral Siren Whistle produces an unmistakable unique sound for boats, camping, calling the kids indoors or out. (as announced in catalogues and the internet)

3.3. Innovative and Conventional

The system for depicting the body of the cartoons is quite standard at the level of the general acoustic characteristics of the sounds (unharmonious, uneven, rough, loud, percussive, varied in pitch) and in the kinds of relationships that can be established between images and sounds. Since the gestures and actions of the slapstick comic routines are so systematic, they require sounds with certain acoustic characteristics for the punctuation of the physical violence and grotesque movements. However, the varied new sounds that become available for punctuating the slapstick comic routines and the imaginative reinterpretation of the gags in the Looney Tunes and Merrie Melodies make the system pretty flexible. For instance, the conventional fall can become an absurd race between a cat and an anvil, in which the sounds do not create an isomorphic relation with the images (going from high to low pitch) but instead they establish an anarchic or incongruous one (super-fast slide whistle tremolo).

Due to the possibility of transgressing physical laws in animation, the grotesque movements of the cartoon characters can be rendered in ways that could never have been achieved in live-action films or in theater. The fantastic quality of such grotesque swings evidently motivates explorations by the sound guys (especially Treg Brown) of the anarchic relationships between images and sounds. Other example of such absurd movements and their incongruous sounds are the backflips of Porky Pig in the air accompanied by the sound of a car screech.

Although the sonic punctuation of violent impacts is percussive, loud, rough, and concrete, the introduction of new sounds such as the snapping of a rubber band, the striking of pins by a bowling ball, the vibration of a metallic spring, or the clap of castanets, constitutes an innovation. Even though these sounds establish conventional iconic relationships with the images, they are surprising and unexpected. Furthermore, their use is also motivated by the specific narrative and musical contexts where the comic routines occur. For instance, when the maracas and castanets are used, the context is a panorama of a Mexican town in which the music played by the orchestra is the stereotypical folk song “La Cucaracha.” Since the maracas and castanets are associated with Latin music instrumentation, their use becomes appropriate for depicting the folk town atmosphere, for the orchestration of the music, and, at the same time, for punctuating the mockery and abuse of the body in an innovative way.

The sound-on-film recording technology motivates, therefore, the introduction of a new vocabulary of sounds for depicting the cartoon body and punctuating the slapstick comic routines. Because the *looney* sounds of the slap-of-the-stick are aural events frozen on film, they are easy to store and can be reused across different soundtracks. Especially in the case of the sound-effects, the practice of re-using them across different shorts became a standard. However, such standardization of a library or database of sound-effects was also flexible, and a single sound-effect could be used for punctuating different grotesque movements and different parts of the body in innovative ways.⁹⁷ For instance, the sound of an electric guitar slide can be heard when a furious bull stretches his mouth, when Porky Pig emerges from the waters of a lake, or when Porky and the bull run upside down.

⁹⁷ That the same sound could be used in different contexts emphasizes the *schizophonia* of the cartoon body.

The *schizophonia* of the cartoon body — that results from using sounds that have been split from their sources— is comical. The sounds lose their origin, become extra strange, and are recontextualized into the carnivalesque contexts of material lower bodily stratum and grotesque swing. Due to the phenomenon of *synchresis*, they are synthesized with the carnival-grotesque images and create new audiovisual events that are incongruous and improbable.⁹⁸ For instance, the cartoon body makes the sound of a dive bomber when is falling, or the sound of a bowling strike when collides against a wall. The audiovisual synthesis rematerializes the acoustic qualities of the sounds into the cartoon body. Since the majority of these sounds are percussive or glissandos, and all of them are very concrete and loud, the cartoon body becomes a very exaggerated audible entity that makes sounds that are as violent and physical as the visual violence of the abuses and grotesque movements.

Altogether, the *looney* sounds of the slap-of-the-stick are conventional and innovative at the same time. They are certainly new in their close-up perspective, the *schizophonic mimesis* they motivate, and their variety. They are conventional in their general acoustic characteristics of being concrete, loud, percussive and variable in pitch. Because they are in perfect synchronization with the visual impacts and grotesque movements, they are also conventional in establishing iconic, isomorphic, and anarchic relationships with the images. However, since the animation medium makes possible the rendering of comic routines in ways that transgress physical laws, those relationships are renovated with the introduction of fantastical mockeries of the body, absurd grotesque movements, and a new repertoire of sounds.

⁹⁸ This happens because the sounds are played at exact points of synchronization where the impacts and the grotesque movements are displayed on-screen.

CONCLUSIONS

What makes slapstick a tradition is the fact that its basic principles of physical violence and disruption, and its conventions of grotesque movement and of mockery and abuse of the body, have been developed across different media, cultures, and eras. As we have seen, from Italian *Commedia dell'Arte* to American vaudeville, from American live-action films to American animation, the slapstick principles and conventions have been systematically followed and innovated, keeping the tradition alive. The Looney Tunes and Merrie Melodies created at Termite Terrace from 1937 to 1943 are part of this rich tradition and represent an important place in its history.

We have been able to appreciate the development of the tradition by following the different reinterpretations of the *lazzi*, comic routines, or gags across media. The *lazzi* are structured actions—independent and modular micronarratives—that exploit all means of producing quick response in the audience and amuse for a moment. It is inside the *lazzi* that the principles and conventions of the slapstick tradition have been formalized. Thanks to their modularity, these comic routines have become, since the early days of *Commedia dell'Arte's* improvisational performances, the basic blocks for building slapstick comic texts.

Sound plays a major role in the comic routines. *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 a composite of visuals and sounds.

As we have seen, 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.” It is a composite word that carries in its meaning the simultaneity of sound and images. Such audiovisual simultaneity has turned into the conventional sound practice of the slapstick tradition for producing comic effects.

What I have called 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. 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. In *Commedia dell'Arte* the sound of the “batocchio” is a “TWACK!” In vaudeville, the drummer “catches the falls” either with a drum roll “TRRRRRRRR!” or with a cymbal crash “PLASHHSSSSSS!” In silent film accompaniment, either the organist or the drummer plays a “CRASH!” from a sound-effect trap (mechanical noisemaking device). In sound film and animation, the sound-effects man records, selects, and edits the sound of a “BOIIING!” Thanks to the phenomenon of *synchresis* that is prominent at the points of synchronization (impacts, falls...), many sounds can be synthesized with the visuals independent of any rational logic, creating a new audiovisual event. The protagonist of such new audiovisual events is a human or animal body that is very concrete and material.

Although conventional in their loudness and materiality and in their synchronization with the images, the sounds of the slap-of-the-stick have also been innovative. New sound technologies and practices have determined the emergence of “new” sounds of the slap-of-the-stick. For instance, “traps” or mechanical noisemaking devices that could make the sounds of a door bell, the falling of heavy articles, or the crash of dishes, were used for punctuating in real time (“catching the fall” technique) the comic routines performed by silent film clowns on the screen.

The sounds of the slap-of-the-stick introduced in the Looney Tunes and Merrie Melodies (1937-1943) illustrate very well the innovations determined by the technologies of the Sound Era. Since sounds were frozen on film, they could be cut, separated completely from their original sources, and then arranged in the totally new context of mockery and abuse of the cartoon body and its grotesque movements. This innovative practice is what I have called (inspired by Feld’s concept of *schizophonic mimesis*) *schizophonia* of the cartoon body. Different parts of the audible cartoon body can sound like an airplane, a rubber band or a screeching car. In addition, because the audiovisual synchronization was achieved in an editing room and not in real time, the sounds are perfectly synchronized with the images. Furthermore, the *looney* sounds of the slap-of-the-stick have the close-up perspective that the new technologies made possible; they are clear sounds without reverberation that are always heard in the foreground of the soundtrack.

However, the innovations of the slapstick tradition that took place at Termite Terrace go beyond the rich variety of *looney* sounds of the slap-of-the-stick that were introduced. The orchestration of those sounds with a continuous medley of musical genres played by a symphonic orchestra and with the comic dialogue performed by Mel Blanc, gives rise to a complex soundtrack in which all the elements are synchronized to the beat and to the frame. Such a complex soundtrack is indeed an innovation in which the sound practices of silent film accompaniment (Carl Stalling), radio actors and comedians (Mel Blanc), and sound-effects men and foley artists (Treg Brown) converge to create a unique kind of sound.

Interestingly, the scoring method of Carl Stalling based on selecting cues from music catalogues, and the practice of archiving sound-effects on film reels developed by Treg Brown, are similar to the one of the directors and animators who decided to select comic routines, lazzi, or gags, from the slapstick tradition database. This sort of database mode of composition, even though can appear very conventional at first glance, makes possible innovations due to different timings and remixes in which the basic blocks can be arranged.

Moreover, due to the collaborative and creative production practices of the boys of Termite Terrace, music, voices, and sound-effects are more than a simple accompaniment to the comic routines: they are integral to them. The slapstick comic routines acquire the time discipline of music, and the music acquires the fragmented structure of the anarchic compilation of gags. The result is seven minutes of an energetic audiovisual rhythm that is

syncopated and that never stops changing, going from slow to fast gags, from classical music to popular tunes.

The boys of Termite Terrace also innovate the slapstick tradition because, taking advantage of the possibilities of the animation medium to transgress the physical laws of time and space, they render conventional comic routines in ways that were impossible to achieve on the stage or in live-action film or. 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, backflips without gravity, or impossible acrobatics. 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 comic gags. In addition, that super speed of the impacts and grotesque movements was enhanced by the continuous flow of sound.

In conclusion, as we have seen, the theatrical animated cartoons made at Termite Terrace between 1937 and 1943 —especially those directed by Tex Avery and Bob Clampett— represent a high point in the history of the slapstick tradition. The unique comedic style that was being set up in the Looney Tunes and Merrie Melodies of this time, and which would become the Warner Bros. animation style during the next twenty years, follows the conventions of the slapstick tradition and at the same time innovates them.

It is precisely the tension between innovations and conventions that makes this unique “termite” comedy style distinctive and that has made it so popular up to the present. In the final analysis, that style, a sort of innovative cartoony slapstick style, remains as international in its appeal as the *Commedia dell’Arte* in the early beginnings of the tradition.

APPENDIX

The following Cue-Sheets written by Carl Stalling have been reformatted from the original ones in order to fit the format of this thesis. All of them came from the Warner Bros. Archive at University of Southern California.

Table 1. CUE-SHEET *Porky's Duck Hunt* (1937)

No	SELECTION	COMPOSER	PUBLISHER	TIME
1	Porky's Duck Hunt	M.K. Jerome	Witmark	0:20
2	Feelin' High and Happy	Unknown	Public Domain	0:23
3	Sing Me a Song of Nonsense	Stanley Adams-Hoagy Carmichael	Remick	0:30
4	Boulevardier from the Bronx	Al Dubin-Harry Warren Rossini	Witmark	0:15
5	William Tell Overture	Unknown	Public Domain	0:29
6	A Hunting We Will Go	Al Dubin-Harry Warren	Public Domain	0:11
7	I Only Have Eyes For You	Carl Stalling	Remick	0:10
8	Porky, the Huntsman	Unknown	Witmark	0:05
9	A Hunting We Will Go	Unknown	Public Domain	0:08
10	Listen to the Mocking Bird	Harold Arlen-E.Y. Harburg	Public Domain	0:07
11	Let's Put Our Heads Together	Carl Stalling	Harms	0:07
12	Poor Fish	Unknown	Witmark	0:22
13	How Dry I Am	Cliff Friend-Dave Frankling	Public Domain	0:16
14	When My Dream Boat Comes Home	Percy Wenrich-Edward Madden	Witmark	0:13
15	Moonlight Bay	Carl Stalling	Remick	0:70
16	Sailing Along	Unknown	Witmark	0:11
17	A Hunting We Will Go	Carl Stalling	Public Domain	0:24
18	Quack-Quack	Unknown	Witmark	0:17
19	A Hunting We Will Go	Lew Brown-Con Conrad- Benny Davis	Public Domain	0:15
20	Hi-Ho The Merrio (As Long As She Loves Me)	Fred Rose-T.Berwick	Remick	0:10

Table 1(continues). CUE-SHEET *Porky's Duck Hunt* (1937)

No	SELECTION	COMPOSER	PUBLISHER	TIME
21	Streamlined Greta Green	Unknown	Harms	0:27
22	A Hunting We Will Go	Carl Stalling	Public Domain	0:06
23	Crazy Duck	Al Dubin-Harry Warren Carl Stalling	Remick	0:05
24	Don't Give Up The Ship	Abel Baer-Charlie Tobias	Remick	0:20
25	Wanna Buy a Duck	Carl Stalling	Witmark	0:19
26	Gee But You're Swell	Unknown	Remick	0:10
27	Dejected Hunter	Carl Stalling	Witmark	0:16
28	Listen to the Mocking Bird	Al Dubin-Harry Warren Unknown	Public Domain	0:08
29	Empty-Handed	Belt Kalmar-Harry Ruby	Witmark	0:15
30	Don't Give Up The Ship	Carl Stalling	Remick	0:15
31	A Hunting We Will Go	Unknown	Public Domain	0:12
32	She Was an Acrobat's Daughter	Al Dubin-Harry Warren Unknown	Wirmark	0:03
33	Acrobatic Ducks	Carl Stalling	Witmark	0:07
34	A Hunting We Will Go		Public Domain	0:09
35	Boulevardier From the Bronx		Witmark	0:07
36	A Hunting We Will Go		Public Domain	0:02
37	Duck Hunting		Witmark	

NOTE: The original CUE SHEET has two other columns: Extent (partial or entire) and How Used (Background instrumental cues or Vis. Vocal.).

Table 2. CUE-SHEET for *Porky In Wackyland* (1938)

No	SELECTION	COMPOSER	PUBLISHER	TIME
1	The Merry Go Round Broke Down	Cliff Friend-Dave Franklin	Harms	0:21
2	Feelin' High and Happy	Rube Bloom-Ted Koehler	Witmark	0:50
3	The Dodo Hunt	Carl Stalling	Witmark	0:15
4	Wackyland	Carl Stalling	Witmark	0:35
5	Mulberry Bush	Unknown	Public Domain	0:06
6	William Tell Overture	Rossini	Witmark	0:20
7	Schlesinger Swing	Carl Stalling	Witmark	1:15
8	The Dodo Bird	Carl Stalling	Witmark	1:14
9	Ad Libbing	-----	-----	0:03
10	Octooroon	Harry Warren	Witmark	0:18
11	The Chase	Carl Stalling	Witmark	0:16
12	Octoroon	Harry Warren	Witmark	0:06
13	Captured	Carl Stalling	Witmark	0:21
14	Feelin' High and Happy	Rube Bloom-Ted Koehler	Witmark	0:07
15	The Last of the Dodo's	Carl Stalling	Witmark	0:27
16	The Merry Go Round Broke Down	Cliff Friend-Dave Franklin	Harms	0:07

NOTE: The original CUE SHEET has two other columns: Extent (partial or entire) and How Used (Background instrumental cues or Vis. Vocal.).

Table 3. CUE-SHEET for Merrie Melodie *A Tale of Two Kitties* (1942)

No	SELECTION	COMPOSER	PUBLISHER	TIME
1	Merrily We Roll Along	Charlie Tobias-Murray Mencher-Eddie Cantor	Harms	0:19
2	Three Little Kittens	Unknown. Arr. Carl Stalling	Witmark	0:11
3	Tale Of Two Kitties	Carl Stalling	Witmark	0:21
4	I'll Pray For You	Arthur Altman-Kim Gannon	Harms	0:16
5	Bird's Nest	Carl Stalling	Witmark	0:33
6	Keep Cool Fool	Josef Myrow-Doc Rhythm Carl Stalling	Advanced	0:41
7	Tricks		Witmark	0:24
8	Rock-A-Bye Baby	Unknown. Arr. Carl Stalling	Witmark	0:06
9	The Daring Cat	Carl Stalling	Witmark	0:04
10	Someone's Rocking My Dreamboat	Otis Rene-Leon Rene- Emerson Scott	Advanced	0:37
11	Keep Cool Fool	Josef Myrow-Doc Rhythm Al Johnson-Joseph Meyer-	Advanced	0:17
12	California Here I come	B.G. Desilva	Witmark	0:18
13	The Stooge	Carl Stalling	Witmark	0:07
14	ABC Nursery Rhyme	Unknown. Arr. Carl Stalling	Witmark	0:14
15	Hang on to Your Lids Kids	Harold Arlen-Johny Mercer	Remick	0:22
16	We Did it Before (And We Can Do it Again)	Charly Tobias-Cliff Friend	Witmark	0:02
17	Getting The Bird	Carl Stalling	Witmark	0:24
18	Keep Cool Fool	Josef Myrow-Doc Rhythm Harry Warren-Al Dubin	Advanced	0:11
19	Don't Give up the Ship		Remick	0:22

Table 3 (continues). CUE-SHEET for Merrie Melodie *A Tale of Two Kitties*

No.	SELECTION	COMPOSER	PUBLISHER	TIME
20	Try, Try Again	Carl Stalling	Witmark	0:03
21	Don't Give Up The Ship	Harry Warren-Al Dubin	Harms	0:20
22	No Luck	Carl Stalling	Witmark	0:07
23	Merrily We Roll Along	Charlie Tobias-Murray Mencher-Eddie Cantor	Harms	0:05

NOTE: The original CUE SHEET has two other columns: Extent (partial or entire) and How Used (Background instrumental cues or Vis. Vocal.). In this cue I also have changed the numbering of the cues (in the original they have letters of the alphabet) in order to be consistent with the other ones and facilitate their analysis.

WORKS CITED

- Abel, Richard and Altman, Rick, Eds. The Sounds of early cinema. Bloomington, IN: Indiana University Press, 2001.
- Agee, James. Film writing and selected journalism. New York : Penguin Putnam, 2005.
- Altman, Rick, Sound theory/sound practice. New York : Routledge, 1992.
- Silent film sound. New York : Columbia University Press, 2004.
- “Cinema and Popular Song: The Lost Tradition” Soundtrack Available: essays on film and popular music. Ed. Robertson, Pamela and Knight, Arthur. Durham, NC : Duke University Press, 2001. 19-30.
- Andrews, Richard. Scripts and scenarios : the performance of comedy in Renaissance Italy. Cambridge; New York: Cambridge University Press, 1993.
- Attali, Jacques. Noise : the political economy of music; translation by Brian Massumi. Minneapolis : University of Minnesota Press, 1985.
- Augoyard, Jean-François and Torgue, Henry. Eds. Sonic experience : a guide to everyday sounds. Montreal : McGill-Queen's University Press, 2006.
- Bakhtin, M. M; Rabelais and his world, Cambridge : M.I.T. Press, 1968.
- Barlow, Piscilla. “Surreal Symphonies: L’Age d’or and the Discrete Charms of Classical Music” Soundtrack Available: essays on film and popular music. Ed. Robertson, Pamela and Knight, Arthur. Durham, NC : Duke University Press, 2001. 31-52.
- Barrier, Michael. Hollywood Cartoons: American Animation in Its Golden Age. New York, New York: Oxford University Press, 1999.
- “An Interview with Bob Clampett.” Funnyworld No. 12. 1970. 7 July 2008. <http://www.michaelbarrier.com/Funnyworld/Clampett/interview_bob_clampett.htm>.
- “An Interview with Carl Stalling.” The Cartoon Music Book Ed. Goldmark, Daniel and Taylor, Yuval. Chicago: A Cappella Books, 2002. 37-58.
- Blanc, Mel. That's not all folks. New York: Warner Books, 1988.
- Becker, Howard. Art Worlds. Berkeley : University of California Press, c1982.
- Benjamin, Walter, “Mickey Mouse.” Selected Writings. Ed. Marcus Bullock and Michael W. Jennings. Cambridge, MA. : Belknap Press, 2003.
- Bergson, Henri. Laughter: An Essay on the Meaning of the Comic 1901. Authorised translation by Cloudesley Breerton L. Es L. (Paris), M.A. (Cantab) And Fred Rothwell B.A. (London). 5 May 2008. <<http://www.gutenberg.org/etext/4352>>
- Bordwell, David and Thompson, Kristin. Film art : an introduction. Boston : McGraw Hill, 2008
- Brunovska, Kristine and Jenkins, Henry. “Introduction: Comedy and the Social World.” Classical Hollywood Comedy. New York : Routledge, 1995.
- Callahan, David. “Cel Animation: Mass Production and Marginalization in the Animated Film Industry.” Film History, Vol. 2, No. 3. (Sep. -Oct., 1988). 223-228.
- Chion, Michel. Audio-Vision : Sound on Screen; edited and translated by Claudia Gorbman. New York : Columbia University Press, 1994.
- Cook, Nicholas. Analyzing musical multimedia. Oxford University Press, 1998.

- Corbett, John. "A Very Visual Kind of Music." The Cartoon Music Book. Ed. Goldmark, Daniel and Taylor, Yuval. Chicago: A Cappella Books, 2002. 17-20.
- Cowell, Henry, "The Liberation of Sound." Audio culture : readings in modern music. Ed. Cox, Christoph and Warner, Daniel. New York: Continuum, 2004. 17-21.
- Crafton, Donald. "Pie and Chase: Gag, Spectacle and Narrative in Slapstick Comedy." Classical Hollywood Comedy. Ed. Kristine Brunovska Karnick and Henry Jenkins. New York : Routledge, 1995.
- "The View from Termite Terrace." Reading The Rabbit : explorations in Warner Bros. animation. Ed. Kevin S. Sandler. New Brunswick, N.J. : Rutgers University Press, 1998. 101-120.
- Curtis, Scott. "The Sound of the Early Warner Bros. Cartoons." Ed. Altman, Rick. Sound theory/sound practice. New York : Routledge, 1992.
- Dali, Salvador. "Surrealism in Hollywood (1937)." Dali & Film. Gale, Matthew. London: Tate, 2007. 154-157.
- Dirks, Rudolph. "Mama Katzenjammer is so strong! Ach, Yes! (1901)." The comics before 1945. Walker, Brian. New York : H.N. Abrams, 2004.
- Duchartre, P. L. The Italian Comedy. Authorized translation from the French by Randolph T. Weaver. London: Harrap, 1965.
- Durgnat, Raymond. The crazy mirror: Hollywood comedy and the American image. New York, Horizon Press, 1970
- Evans, Brian. "Foundations of a Visual Music." Computer Music Journal Volume 29, Number 4, Winter 2005. 11-24.
- Feld, Steven, "Pygmy POP: A Genealogy of Schizophonic Mimesis." Yearbook for Traditional Music 28. 1996. 1-35
- Fitzpatrick, Tim. Flaminio Scala's Prototypical Scenarios: Segmenting the Text/Performance in The Science of buffoonery by Ed. Pietropaolo, Domenico. Ottawa : Dovehouse Editions, 1989. 177-198
- Goldmark, Daniel. Tunes for 'toons : music and the Hollywood cartoon. Berkeley : University of California Press, 2005.
- Goldmark, Daniel, Kramer, Lawrence and Leppert, Richard. Eds. Beyond the soundtrack: representing music in cinema. Berkeley : University of California Press, 2007.
- Gordon, Mel; Lazzi : the comic routines of the Commedia dell'arte. New York : Performing Arts Journal Publications, 1983.
- Grantham, Barry; Commedia plays : scenarios, scripts, lazzi. London : Nick Hern, 2006.
- Gunning, Tom. "The Cinema of Attractions: Early Film, Its Spectator, and the Avant-Garde." Wide Angle vol:8 iss:3-4, 1986. 63.
- "Crazy Machines in the Garden of Forking Paths: Mischief Gags and The Origins of American Film Comedy." Classical Hollywood Comedy. Ed. Kristine Brunovska Karnick and Henry Jenkins. New York : Routledge, 1995.
- Henke, Robert, Performance and literature in the commedia dell'arte: Cambridge University Press, 2002.
- Herriman, George. "Krazy Kat comic daily strip of January 17, 1918." The comics before 1945. Walker, Brian. New York : H.N. Abrams, 2004.

- Hoberman, J. Vulgar modernism : writing on movies and other media. Philadelphia : Temple University Press, 1991.
- James , Richard S. "Avant-Garde Sound-on-Film Techniques and Their Relationship to Electro-Acoustic Music." The Musical Quarterly, Vol. 72, No. 1. 1986. 74-89.
- Jenkins, Henry. What made pistachio nuts? : early sound comedy and the vaudeville aesthetic. New York : Columbia University Press, 1992.
- Jones, Chuck. "Music and the Animated Cartoon." Hollywood Quarterly, Vol. 1, No. 4. (Jul., 1946). 364-370.
 "The Roadrunner and Other Characters" in Cinema Journal, Vol. 8, No. 2. (Spring, 1969). 10-16.
- Katritzky, M. A; The art of commedia : the study in the Commedia dell'Arte 1560-1620 with special reference to the visual records. Rodopi, Amsterdam and New York, 2006.
- Kittler, Friedrich A. Grammophon, Film, Typewriter. Stanford, Calif. : Stanford University Press, 1999.
- Klein, Norman M. Seven minutes : the life and death of the American animated cartoon. London ; New York : Verso, 1993.
- Lacassin, Francis. "The Comic Strip and Film Language." Film Quarterly, Vol. 26, No. 1 (Autumn, 1972). 11-23
- Lang, Edith. Musical Accompaniment of Moving Pictures. Reprint of the 1920 ed. New York, Arno Press, 1970.
- Lang, Edith and West, George. "Animated Cartoons and slap-stick comedy." The Cartoon Music Book. Ed. Goldmark, Daniel and Taylor, Yuval. Chicago: A Cappella Books, 2002. 17-20.
- Lastra, James. Sound technology and the American cinema : perception, representation, modernity. New York : Columbia University Press, 2000.
- Leslie, Esther. Hollywood flatlands : animation, critical theory and the avant-garde. London ; New York : Verso, 2002.
- Lindwall, Terrance and Melton, Mathew. "Towards a post-modern animated discourse. Bakhtin, intertextuality and the cartoon carnival." A reader in animation studies. Ed. Pilling, Jayne. London: J. Libbey, 1997..203-217
- Madden, David. Harlequin's stick, Charlie's cane: a comparative study of commedia dell' arte and silent slapstick comedy. Bowling Green, Ohio : Popular Press, 1975.
- Maltin, Leonard. Of mice and magic : a history of American animated cartoons. New York : McGraw-Hill, 1980.
- Manvell, Roger. The technique of film music. New York : Hastings House, 1980.
- McCaffrey, Donald W. "The Evolution of the Chase in the Silent Screen Comedy" in The Journal of the Society of Cinematologists, Vol. 4. (1964 -1965). 1-8.
- MacCloud, Scott. Understanding Comics : the Invisible Art. Northampton, MA : Kitchen Sink Press, 1993.
- McLaren, Norman and Jordan, William. "Notes on Animated Sound" in The Quarterly of Film Radio and Television, Vol. 7, No. 3. (Spring, 1953). 223-229.
- Morton, David. Sound recording : the life story of a technology. Westport, CT : Greenwood Press, 2004.

- Mott, Robert L. Radio sound-effects : who did it, and how, in the era of live broadcasting. Jefferson, N.C. : McFarland, 2005.
- Neale, Stephen. Popular film and television comedy. London ; New York : Routledge, 1990.
- Palmer, Jerry. The logic of the absurd on film and television comedy. London : BFI Pub., 1987.
- Prendergast, Roy M. Film Music : a Neglected Art. New York : Norton, 1992.
- Peters, Julie Stone; Theatre of the Book, 1480-1880: Print, Text, and Performance in Europe. Oxford, 2000.
- Riblet, Douglas. "The Keystone Company and the Historiography of Slapstick." Classical Hollywood Comedy. Ed. Brunovska Karnick, Kristine and Jenkins, Henry. New York : Routledge, 1995.
- Sartin, Hank. "From Vaudeville to Hollywood, From Silence to Sound." Reading The Rabbit : explorations in Warner Bros. animation. Ed. Kevin S. Sandler. New Brunswick, N.J. : Rutgers University Press, 1998. 67-85.
- Sandler, Kevin S. Reading the rabbit : explorations in Warner Bros. animation. New Brunswick, N.J. : Rutgers University Press, 1998.
- Scala, Flaminio, fl. 1620. Scenarios of the commedia dell'arte : Flaminio Scala's Il teatro delle favole rappresentative. Translated by Henry F. Salerno. New York : Limelight Editions, 1989.
- Stallybrass, Peter and White, Allon. The politics and poetics of Transgression. Ithaca, N.Y. : Cornell University Press, 1986.
- Sterne, Jonathan. The audible past : cultural origins of sound reproduction. Durham : Duke University Press, 2003.
- Stokes, Charlotte. "Collage as Jokework: Freud's Theories of Wit as the Foundation for the Collages of Max Ernst" in Leonardo, Vol. 15, No. 3. (Summer, 1982). 199-204.
- Smoodin, Eric. Animating culture : Hollywood cartoons from the sound era . New Brunswick, NJ : Rutgers University Press, c1993.
- Thompson, Emily Ann. The soundscape of modernity : architectural acoustics and the culture of listening in America. Cambridge, Mass. : MIT Press, 2002
- Wells, Paul. Understanding animation. New York : Routledge, 1998.
- White, Timothy. "From Disney to Warner Bros: The Critical Shift." Reading The Rabbit: explorations in Warner Bros. animation. Ed. Kevin S. Sandler. New Brunswick, NJ: Rutgers University Press, 1998. 38-48.
- Whitehead, Kevin. "Carl Stalling, Improviser & Bill Lava, Acme Minimalist." The Cartoon Music Book. Ed. Goldmark, Daniel and Taylor, Yuval. Chicago: A Cappella Books, 2002. 141-150.
- Williams, Alan. "Historical and Theoretical Issues in the Coming of Recorded Sound to the Cinema." Sound theory/sound practice. Ed. Altman, Rick. New York : Routledge, 1992.