Third Edition

Frame-By-Frame Stop Motion

The Guide to Non-Puppet Photographic Animation Techniques

Pixilation - Timelapse - Downshooting

Tom Gasek

CRC Press
Taylor & Francis Group

SUPPORT MATERIAL

"This book is a wonderfully inspiring, accessible and thorough guide to a number of techniques that have been seldom written about or charted before. It is an essential manual for any student, professional or creative person who has ideas – and wants to be encouraged with a sense of 'I could do that' – and wants to get their ideas out there. I just wish this book had been written when I was a student of animation (I still am, so I will buy it anyway)."

—Nick Park, Academy Award winner and creator of *Wallace and Gromit*

"A must-have book for any animator's library. *Frame-by-Frame* is a reminder of all the magical possibilities animation has to offer and all you need is a camera and an idea."

—Jim Capabianco, Filmmaker / Director of *The Inventor*

"Tom's extensive experience as a stop motion animator, combined with his knowledge of the field and his natural teaching ability, make this book a clear, well-organized, and empowering introduction to stop motion animation. This book will be an invaluable resource for student and teacher alike."

—Steven Subotnick, animator, educator and author of *Animation in the Home Digital Studio*

"In the digital age it pays to remember that innovative ideas can still be inspired using even the most basic techniques. This book is a timely reminder that a rewarding process depends as much on ingenuity as it does on facility."

—Dave Borthwick, animation director, *Bolex Brothers*

Frame-By-Frame Stop Motion

This third edition of *Frame-by-Frame Stop Motion* is an up-to-date review of non-puppet stop motion techniques. The reader will not only learn how to execute these techniques through descriptive chapters but also experience them with the carefully designed exercises included at the end of this book. There are many other aspects of filmmaking including design, sound, cinematography, lighting, and animation principles that make this a thorough study in non-puppet stop motion. The animation of people, objects (not designed to be animated), light painting, time-lapse, and downshooting are popular approaches to animation practice around the globe. This edition includes insights from the author, an experienced stop motion puppet and non-puppet animator, as well as filmmakers from Japan to Eastern Europe to Argentina and North America. There are many aspects to this edition that should appeal not only to animators but also to photographers, live-action filmmakers and those interested in expanding their repertoire in the filmmaking arena. Included are examples of filmmaking critiques and a wide variety of applications of photographic animation. *Frame-by-Frame Stop Motion* is the only resource of its kind.

Tom Gasek is a Professor Emeritus at Rochester Institute of Technology (RIT) where he taught in the School of Film and Animation for 19 years. He worked as a professional director and animator for 26 years prior to teaching with animation credits that include Aardman Animations' *The Wrong Trousers* and *Chicken Run* as well as Laika's *Coraline*. He operated several small studios of his own including the award-winning, Sculptoons in San Francisco. Gasek is a Fulbright Specialist and wrote the only book on "non-puppet stop motion." He just completed his third independent film called *4 @ 60*, which includes "non-puppet" stop motion techniques.

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As is evident from the many stop motion films that have been produced in the last seven or eight years, photographic frame-by-frame animation lives and thrives. There is a strong continuum in this area thanks mostly to the many puppet stop motion projects that keep being produced around the globe. Many of these puppet stop motion artists have played with non-puppet techniques since the principles of movement and technology are the same, excluding the fabrication process of puppets. I am one of those puppet animators who jumped into this non-puppet stop motion world and have thoroughly enjoyed the results. As I complete this third edition of Frame-by-Frame Stop Motion*, I have also completed my own non-puppet stop motion film called "4 @ 60." This is a self-portrait film divided into segments, which allowed me to play in the genre with some of its infinite variabilities. "4 @ 60" is based on four (of the many) things that interest me in my sixties. This thematic film approach allowed me to pixilate myself, use time-lapse, composite techniques, and animate everyday objects (rocks). Although I have retired from university teaching, I do continue to teach non-puppet stop motion techniques online at Maine Media. The demographic for these classes tends to lean toward mixed media students as well as live-action filmmakers and photographers. About two years ago I gave exclusive online workshops to Pixar Animation Studios. This just shows me that there continues to be a strong interest in hand-made, photographic techniques, even from some of the most sophisticated computer animation artists.*

As one of my former students once said, "Stop motion is one of the most easy and accessible animation techniques, but one of the most difficult to master." That's quite a range to cover. So anyone can give it a try, which is easily attained through the ubiquitous smartphone, a mini tripod, and a free app called "Stop Motion Studio." Anyone can jump in and have fun without

having to worry about the results. Usually, they are fun. I would recommend getting a few tips (and certainly this book will help in that pursuit). So, I would like to dedicate this edition of Frame-by-Frame Stop Motion *to all of those adventurous novice animators and to the many masters of this form, who keep it alive in the puppet and non-puppet stop motion traditions.*

Contents

Acknowledgments

The critical elements of this book are the diverse contemporary artists/filmmakers who contributed insights and images to this study of alternative stop motion photographic techniques. Those artists and filmmakers are Terry Gilliam, Jan Svankmajer, PES, Blu, William Kentridge, Dave Borthwick, Nick Upton, Dave Sproxton, Heather Wright and Aardman Animations, Jan Kounen, Carolyn Leaf, Evan Spiradellis, Jim Blashfield, Joan Gratz, Joanna Priestly, Ken Murphy, Miki Cash, Eric Hanson, Tom Lowe, Yuval and Merav Nathan, Chris Church, Geoff Tompkinson, Keith Loutit, Victoria Mather, Julian Tryba, Corrie Parks, Juan Pablo Zaramella, Andrew Sonntag, Bryan Papciak, Daniel Sousa, Eugene Mamut, Joe Lewis, Adam Fisher, J.P. Crangle, Mary Ludwig, Mark Watters, The National Film Board of Canada, dina Amin, OMOZOC, Kevin Parry, Winston Hacking, Scott DaRos, Alexis DePrey, Benoit Leva, Lindsay Berkebile, Jordan Greenhalgh, Jason McLagan, Shannon Chanler, Rachel Fisher, Marlee Coulter, Stevie Ward, Knhik Haefner, Tyler Gasek, Linda Grossman, and the School of Film and Animation at The Rochester Institute of Technology. There are many more artists and filmmakers who are practicing these techniques than I was able to site or interview. These frame-by-frame techniques are as varied as the artists who practice them and I was only able to touch on a few approaches. I did try to incorporate principles and practices that are common to most of these techniques, but I am sure that I have left out a few. My aim is to open up the door a bit wider to handmade photographic animation approaches. These approaches have been evolving since technology has continued to expand, and this makes these techniques as viable as ever. All one has to do is scan the web and see what is out there, and suddenly you will realize that this is a vast and potentially exciting area of filmmaking. The old saying "what is old is new" applies to this book, but again, technology has made these approaches to single-frame photographic filmmaking much more accessible, and I hope many new filmmakers from all backgrounds

including photography and live-action filmmaking are able to explore this area of animation. This book can serve as a guide. So, I acknowledge all the new filmmakers and established filmmakers who expand their means of expression through frame-by-frame photographic animation. In addition, I am grateful to Andrew Sonntag for writing Chapter 10, Brian Larson for drawn illustrations, Tom Gasek and the artists cited in each chapter for photographic illustrations.

Introduction

It's been about 15 years since I first wrote the original version of this book. It appears Focal/CRC Press wants to keep current in this area of animation since there is a varied yet niche market for these techniques. The artists who utilize these forms do vary from animators to designers, photographers, and live-action filmmakers. This includes inexperienced novices to experienced professionals. I taught in the School of Film and Animation at RIT for 19 years after 26 years as a full-time professional animator and director. My work in stop motion puppet animation was quite extensive, yet I never completed a film in these "non-puppet" stop motion techniques. I just completed the final touches on my attempt at a "non-puppet" stop motion short film and I will say it has been a joy to make.

I set out to try different approaches to this form from pixilation to down-shooting to time-lapse. The one thing that kept coming up in my own film, "4 @ 60," was the use of post-effects using programs like Adobe After Effects. As I reached out to other artists and animators currently working in this arena, I discovered that this post-work is the norm. It allows all animators, including stop motion animators, to combine layers, clean up images, and expand and visualize their creative ideas. I have always thought shooting all effects directly under the camera was something to strive for, but there are limits to this approach and

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compositing can achieve these approaches with ease. In order to experience these effects, I made sure that I could create a short film that allowed me to try different experiences with these techniques, which all had some post-effects work in them. I often would use Photoshop since I felt more control and comfort in this program, but After Effects (AE) was also used. I would hire experts in this area who were fluid in AE. They included Andrew Sonntag, who succeeded me at teaching stop motion at RIT. His ability to understand stop motion and After Effects made him ideal for updating Chapter 10 in this third edition to address After Effects with a little more technical learning. He used some examples from my new film and other sources and for those interested in composite work with AE this is a must-read chapter.

The other point of interest I am pursuing in this edition is the practice of "critique." Having taught at a university for almost two decades in a college of art and design, I have learned a lot about this engagement. Critique is certainly not limited to non-puppet stop motion but to all forms of creative pursuit. It can be a conversation between the creator and the audience that can benefit the creator. Oftentimes artists think of critique as a criticism or negative perspective that requires defending, but this is not the only element of critique. We are often too close to our own creations to have a more objective perspective, so hearing from more objective audiences can help us relate to them in a more meaningful way. This might mean that we must re-draft our ideas to accommodate more effective ideas. Keep in mind that in filmmaking we are most often trying to reach an audience, so adjusting a film production can lead to a better and more resonating effect. In animation, there is so much effort and work put into production, so we want to make sure we don't go too far in that area without getting feedback or critique early on. This is why most animators create an animatic, also called a Leica reel. This is the moving, timed storyboard played back on a timeline. The animatic can be rough, but it must be clear in getting across a story idea and a sense of the characters. Getting feedback at this point will save the filmmaker lots of wasted time and effort down the road. When you finally get to production, you will feel much more confident in the hard work that you must produce to make an animated film. Sometimes these animatics can be accompanied by a short-animated example of the final look, which is not always easy or possible.

How do we receive feedback or critique? This is the million-dollar question, and it is really up to the filmmaker. Many feel that the larger the audience, the better the feedback. Others may limit early exposure of ideas to a limited audience that is trusted or relevant to the film's purpose or focus. There is no particular best practice with this exposure, but what is important is how you, the filmmaker, receive and incorporate (or not) this information. When you screen an animatic or early footage, it is helpful for your audience to know what you want to accomplish or what your objective might be. I often don't reveal this in the early stages of critique so as not to bias my audience. Once I get initial feedback, then I might share my objective and then receive any new responses. If I hear the same response to any particular issue in the film, then I might give it

some serious consideration. How can I address this concern? In a larger response group, there may be many different suggestions that are a one-of-a-kind idea. Many of these comments are throwaways, but every once in a while, someone sees something that others don't, but it might ring true to you, so it's important to keep an open mind. Many of these comments don't feed into your objective, and often these perspectives can help you feel stronger about what you have already done. Remember, you know what you want to accomplish in your idea, and some suggestions might just be distractions from your objective. I often think of a one-line sentence that sums up what I want to say in a scene or the film. If the suggestion does not feed into that objective, then I might not give it any credence.

There are different levels of critique. Films can fall into the experimental or narrative categories, and these can determine the response a filmmaker can receive in critique. There are technical, conceptual, and filmic categories to consider in critique. Sometimes all three are important, but there might be situations where there is no narrative. What is the filmmaker trying to achieve in an experimental film? Did they accomplish their objective? That objective might be to elicit a strong reaction – surprise – disgust – anger – joy or just to take you to another world. A narrative has another element to accomplish – the story arc, which can include "acts" in the sequence of events. There is often a conclusion or a kind of resolution in a narrative, but this can be complex. Linear and non-linear narratives mostly want to take the audience somewhere, and this should be weighed in a critique.

I have chosen three contemporary artists to critique and their work lies in the non-puppet stop motion trick-film tradition. OMOZOC is a trick-film artist from Japan. The piece I will center on is an animated short on card tricks. dina Amin is an Egyptian animator whose background is in product design. She uses this knowledge and interest in her trick-film approach on a downshooter. Kevin Parry is a US citizen with a background in puppet animation but whose YouTube channel is filled with all sorts of trick films. I chose to look at a larger downshooting film he created about skateboarding. Finally, I am going to write a self-critique on one of the shorts I created for my first non-puppet film, "4 @ 60." Self-critique is important to practice because it helps us as filmmakers really stay true to our idea and objective. Sometimes we can be most critical of our own work, but this kind of critique needs to be balanced with positive feedback as much as any negative comments, and I set out to do this. Of the four films, mine is the only narrative, although I would consider it an experimental narrative. The other three films have a kind of narrative but lie in the more experimental realm. I hope you get some value from these critiques that might help you in your creative process.

1

What Are the Possibilities?

Neighbours/Voisins
Directed by Norman McLaren
Produced by Norman McLaren
Pictured: Norman McLaren

Figure 1.0

Norman McLaren from the NFBC. (Courtesy of Evelyn Lambart, National Film Board of Canada, 1952).

Creating Magic

The history of these stop motion photographic animated art forms remains the same, but there continues to be progress in present applications. The technology involved has become more refined and accessible, but in the end, as always, ideas

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and stories dominate all film productions, animated or not. In this third edition, I will reflect on some of these newer additions to the ongoing development and evolution of non-puppet photographic stop motion history. Many of these more contemporary versions tend to lean toward drama and effect more than revealing a complex idea or even a story. This does not diminish the effectiveness of these efforts. They expand a range of possibilities and often lean into post-production enhancements to achieve amazing effects.

Humans are social creatures that have an innate need to share experiences and stories. Ever since humankind started communicating, stories, real and unreal, were shared around the communal circle. The tribe was gathered together, and a tale was told that revealed information, lessons, provocative thought, and emotional empathy. Often the more fantastic the story, the more entranced the audience became and the stronger the message. This might be the job of the shaman or chief, but soon everyone had stories and experiences to relate. Eventually stories became enhanced from the oral tradition through props and other means of visual storytelling. In just over the last 100 years, filmmaking has become a powerful vehicle to relate stories and to capture an audience's imagination. Sight and sound are our most primal senses, and filmmaking tapped into these receptors. Soon filmmaking started to expand its repertoire and the "fantastic" became a possibility in storytelling.

Single-frame filmmaking has been around as long as film itself. The idea of fooling or tricking the eye has always been fascinating to people, and the manipulation of live-action filming was the origin of this technique. Imagine the early days of filmmaking when audiences were seeing projected images on a screen, images that appeared to be alive and real for the first time. That was magic in itself. When filmmakers became a bit more sophisticated by stopping the camera in mid-shoot and removing an object from in front of the camera and then continued to film, the results were genuinely magic. As film started to mature, artists and practitioners began to see the endless possibilities that this new medium offered. This stopping the motion of filming and adjusting images, cameras, and events is the predecessor to special effects and stop motion animation.

We are talking about stop motion photography, which has evolved into many variations. The most common form of stop motion that is recognized today is model or puppet stop motion. This is when figurative models are fabricated and animated frame-by-frame to create a narrative or experimental approach. Examples of this form are seen in films and on television. Feature films like Jiri Trnka's "A Midsummer Night's Dream," Nick Park and Peter Lord's "Chicken Run," "Coraline" directed by Henry Selick, and, most recently, the Academy Award winning 2023 animated feature "Pinocchio" directed by Guillermo del Toro and Mark Gustafson all exemplify this popular approach to figurative puppet stop motion. Television has also laid claim to this form of animation with popular programs like "Pingu," "Gumby," "The Rankin Bass Christmas Special," "Rudolph the Red Nosed Reindeer," "Robot Chicken," and the Japanese series, "Rilakkuma and Kaoru." These, among other titles in this genre, are well loved

and are considered more in the realm of traditional stop motion puppet animation. "Robot Chicken," created by Seth Green and Matthew Senreich, occasionally uses existing objects or models but the fabricators adapt these object/models to work for animation so they are a cross-breed of puppet and non-puppet/object animation. The work of PES is also a great example of an artist that crosses the gap between puppet and non-puppet stop motion work.

The non-traditional or alternative use of stop motion utilizes people; objects; various materials like sand, clay, paper, and often a mixture of these; and other elements as the objects to be animated. The most common of the non-traditional alternative stop motion techniques is known as "pixilation." This term is attributed to the Canadian animator, Grant Munro, who worked at the National Film Board of Canada with Norman McLaren in the 1940s, 1950s, and 1960s. Both McLaren and Munro were major contributors to this art form. In pixilation, usually a person is animated like a puppet or model. Puppets and figurative models have "armatures" inside of them for effective manipulation of the puppet and to refrain it from falling over with the force of gravity. This is similar to human skeletons that basically serve the same function. There is a limited amount of registration in pixilation so the result is a rather kinetic, bewitched, fragmentary movement that appears pixilated or broken up. It has nothing to do with the modern-day term related to low-resolution digital images. Time-lapse photography and "downshooting" (animation on a custom animation stand), which includes "multi-plane downshooting animation," are two other forms of non-traditional alternative stop motion photographic animation. We will explore each of these approaches and more in the following chapters.

Silent Films and Beyond

This interest in the manipulation of filming and single frame adjustment started as soon as film arrived on the scene in the late 19th and early 20th century. The Lumiere Brothers are considered the first to successfully shoot and project films for audiences.

Their work was amazing to the French and, ultimately, international audiences of the late 1890s. Everyday scenes of that era are well recorded and documented in the factories and streets of Lyon, France. Once audiences became accustomed to the novelty of moving images, then the experimentation began. There were several artists who took the filmmaking technique much farther than Auguste and Louis Lumiere, but the most significant artist was Georges Melies.

The Parisian-born Melies was often referred to as the "Cinemagician." His work with film was influenced by his experience as a stage magician. Melies learned how to use multiple exposures, dissolves, time-lapse photography, editing techniques, and substitution photography where the camera was stopped, and the subject was changed to create a magical effect. It was referred to as "stop trick." These silent films created in the late 19th and early 20th century were

Figure 1.1

"The Auguste and Louis Lumiere" circa 1895. (Public domain).

Figure 1.2

"Georges Melies" circa 1890. (Public domain).

Figure 1.3

"The Conjuror" (1899).

like magic shows that featured special effects. This kind of filmmaking was the precursor to several different branches in the tree of stop motion including modern-day special effects, puppet or model stop motion and pixilation, and their various forms. Melies' "The Conjuror," filmed in 1899, is a clear example of the relationship that he made between magic and his filmmaking.

He covers a woman with a cloth and pulls it off revealing that the woman has disappeared and reappears on an adjacent table. He then, through what appears to be magic, continuously switches positions between him and the woman using smoke and confetti to enhance the effect. This is most likely attained through editing the film and re-enacting the action with different elements. This replacement of people (or objects) would usually occur in large and dramatic actions of the animated subject. The camera must be "locked" down in one position in order for this to work. Today, computer-controlled "motion control" would allow a camera-move to be accurately repeated to give movement to the camera position. The continuous movement of the actors helps create a smooth transition from one person or object to the next. The editing process was the first technique used in the manipulation of imagery, but before too long frame-by-frame manipulations shot in the camera became a very effective way to have ultimate control on the film's outcome.

Another French contributor to stop motion and pixilation was Emil Cohl. His 1911 film "Jobard ne peut pas voir les femmes travailler" (Sucker Cannot See the Women Working) utilized real people and is one of the earliest pixilated films known. Unfortunately, many of Cohl's films have been lost due to fire and neglect.

The Edison Company founded by Thomas Edison created some of the first motion pictures in the United States in his infamous "Black Maria" studio in West Orange, New Jersey in 1893. Edison was a dominating force in early filmmaking.

Similar to the Lumiere Brothers, Edison's first films reflected everyday life and activities. Edison also attracted audiences and talent like, the first established American stop motion animators**,** James Blackton and Willis O'Brien. Both artists favored model or puppet animation. O'Brien produced special effects films like the 1915 "The Dinosaur and The Missing Link: A Prehistoric Tragedy" and the eventual 1933 "King Kong." Artists were moving away from the obvious tricks of dissolves, position replacements, and editing techniques to techniques that were the beginnings of special effects and model animation. Pixilation took a back seat. Even artists like Charley Bower favored models as was illustrated in

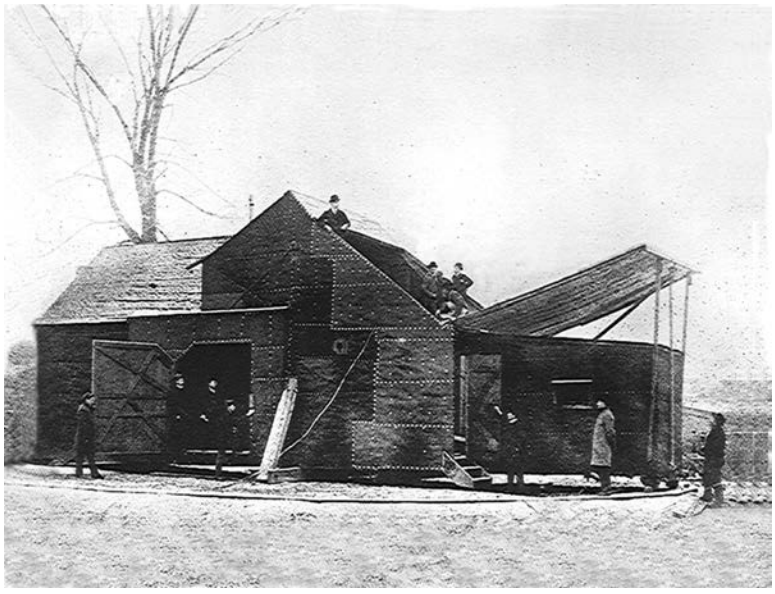

Figure 1.4

"Black Maria" studio circa 1893.

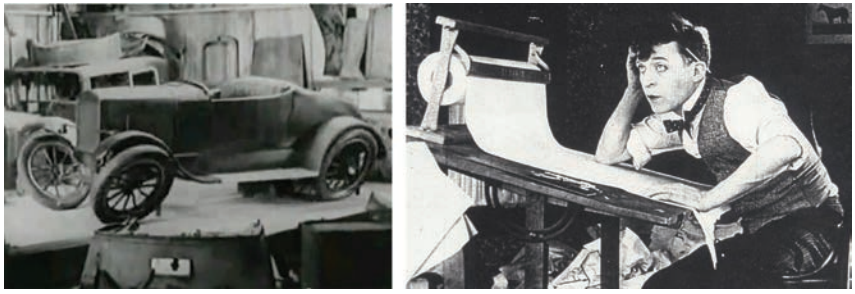

Figure 1.5

Car assemblage from "It's a Bird" and Charley Bowers circa 1935.

his 1930s "It's a Bird" where Bowers has a bird eating metal materials and a car appears to be destroyed frame-by-frame as the film is run in reverse. This gives the appearance of the car assembling itself totally unassisted when projected forward.

It is worth noting the Russian-born Polish animator, Ladislas Starevich, who in 1910 was creating documentary films for the Museum of Natural History in Kovno, Lithuania. The final film in a series was focused on the fighting of two stag beetles. Since these beetles would become dormant when the movie lights

were on, Starevich decided to use dead beetles and attach wire to their thorax in place of their legs with sealing wax thereby allowing him to manipulate and pose the beetles in one frame or at a time. This innovative thinking started a whole new approach to stop motion, which ultimately led to much more developed model animation.

In 1929 Russian director Dziga Vertov created a silent documentary film called "Man with a Movie Camera." In this film, Vertov documents the lives of urban citizens in Odessa. The film, which was edited by his wife and partner, Elizaveta Svilova, features many of the techniques that we will discover in the following chapters. Not only does Vertov use freeze frames, double exposures, reverse playback, fast and slow motion, dynamic camera angles, and editing techniques, but he also uses stop motion approaches to reveal a rather frenetic and modern existence. It is worth viewing this wonderful documentary film for its historical and aesthetic approach.

Stop Motion and Its Various Faces

It wasn't until 1952 that the technique of pixilation became utilized in a film that struck an international chord. It was Norman McLaren's Academy Award winning "Neighbours" that featured Grant Monroe, mentioned earlier as the person who coined the term "pixilation," that put this technique back in the public eye.

McLaren's use of animated people and objects, dramatic action, and art direction made the technique perfect for this film. The battle between neighbors, in an extremely territorial fashion, has great humor but also a dark tone that delivers a message in an effective manner. Pixilation continued to grow after McLaren's continued use of this technique. One of the most notable and inspirational masters of this technique is the Czech surrealist, Jan Svankmajer. Although Svankmajer used puppets on occasion, he also used everything else from humans to meat to household furniture as animated objects. His concentration on textural imagery and suggestive conceptual filmmaking made him stand out from all other filmmakers. His 1971 film "Jabberwocky," based on a poem by Lewis Carroll, features a cabinet running through a forest, dancing clothes, maggot-ridden apples, distraught dolls, and flipping puzzle parts.

Although Svankmajer uses puppets, he mixes his animated subject matter so wildly that the photographic, textural, fast-paced editing leaves an audience feeling rather assaulted. Animators like the American, Mike Jittlov, with his pixilated 1979 film "Wizard of Speed and Time" and French-born Jan Kounen continued using the pixilation technique with obvious influence from their predecessor, Norman McLaren. In Kounen's 1989 "Gisele Kerozene" the use of dramatic facial makeup and costuming remind us of the faces of McLaren's two neighbors as they start to get deeply into their fight.

Kounen even uses classic Warner Brothers cartoon animated motion when his animated people smash into walls. Wide-angle lenses are used for

Neighbours/Voisins
Directed by Norman McLaren
Produced by Norman McLaren
Pictured: Jean-Paul Ladouceur; Grant Munro

Figure 1.6

"Neighbours," Norman McLaren (1952).

exaggerated effect. Pixilation is starting to mature. The technique is no longer just a humorous or gimmicky style but a technique that can be chosen as a cinematic device. Dave Borthwick's 1995 feature film "The Secret Adventures of Tom Thumb" is a fascinating and dark film that expands the pixilation technique with a very distinctive story. Nick Upton plays Tom Thumb's father and he plays this role with a McLaren sense of exaggeration. This English actor holds his jaw out to maintain a particular look and refines the element of acting associated with this physically challenging technique. Controlling facial and body involuntary actions requires extreme control and awareness often for hours and hours of shooting time and Upton does this quite well.

Finally, it is worth noting the Peter Gabriel music video called "Sledgehammer." This 1986 groundbreaking animated short produced by Limelight London and directed by Stephen R. Johnson featuring the work of Aardman Animations and The Brothers Quay mixed mediums and featured Peter Gabriel lip-syncing or mimicking the words to this wonderful piece of music frame-by-frame and

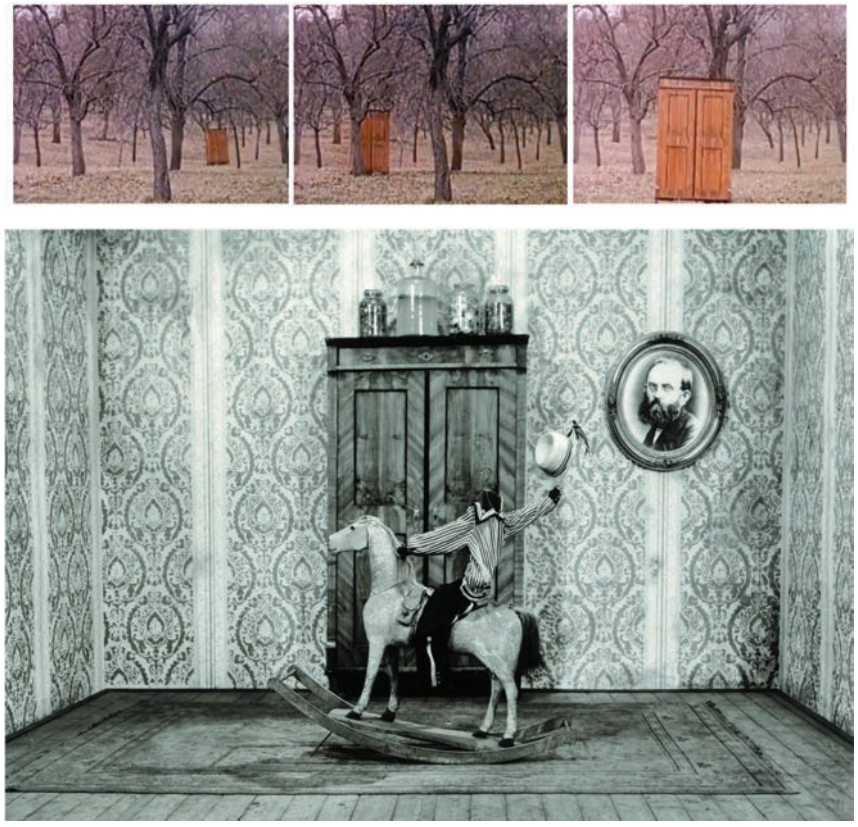

Figure 1.7

"Jabberwocky" cabinet in woods, Jan Svankmajer (1971).

Figure 1.8

Still from "Gisele Kerozene," Jan Kounen (1989).

interacting with everything from fish to fruit to people to clothes and the woodwork itself. Most of these examples, including Sledgehammer, were produced and shot directly in the camera. There were very few post-production effects added, which points out the clever and innovative approach these filmmakers used.

Figure 1.9

Still from "The Secret Adventure of Tom Thumb," Bolex Brothers (1993) (Nick Upton with exaggerated face).

This direct application of effects shows resourcefulness that offers a unique look and cost-saving production.

Pixilation has become quite popular in film and animation programs across the country and the world. The technique is relatively inexpensive to produce and very direct in terms of the outcome. It does require proper planning like any effective use of animation, but you can get fast results and learn a lot of animation

Figure 1.10

Peter Gabriel acting in the "Sledgehammer" video, Limelight (1986).

techniques by just grabbing a camera, stop motion animation software, and objects or friends. On a professional level, there is more pixilation and mixed media out in the mainstream of our society than ever before. Three examples are "Her Morning Elegance" directed and produced by Yuval and Merav Nathan, an Israeli couple who work in various animated techniques and genres. This music video is shot with a static camera mounted directly above a bed. This can be considered a kind of "downshooting" technique. A woman, man, and objects are shot frame-by-frame in a controlled environment in a very stylized manner depicting walking, movement in a subway, and swimming underwater all on top

Figure 1.11

Still from "Her Morning Elegance," Yuval & Merav Nathan (2009).

of the bed. The static background sets off the animated motion of the people, cloth, and various objects in a very satisfying manner.

Two other extensions of pixilation are seen in the work of "Juan Pablo Zaramella" and "PES." Each artist uses pixilation but in very different ways. Zaramella works in a studio and outdoors. Although he is often considered a "puppet" animator, his work in pixilation is masterful. His 2011 film "Luminaris" takes advantage of the single-frame approach by using time-lapse photography to evenly pace exterior shadows across an exterior set to lead human subjects. He also allows clothes to pop on his lead actor avoiding the awkward action of slipping on clothes in a natural fashion, which can be very difficult in pixilation. The photography and compositions are well designed and his use of freeze frames allows audiences to read emotional expressions with ease. He does use some post-production techniques to enhance his story and visuals, which is more of a commonly used approach to pixilation and other forms of stop motion in contemporary animation.

PES works with objects in a very controlled manner creating events and environments out of everyday objects as in his 2008 film "Western Spaghetti." In this animated short the simple use of candy corn vibrating frame-by-frame on a stove top mimicking gas-fueled flames sets the style that unfolds in this cooking experience. He incorporates a very well-animated real-hand frame-by-frame in these stop motion events, which adds a credible awareness of the animated event.