



Thomas Parks.

## Chapter 4

# Animating With Sand and Other Powders

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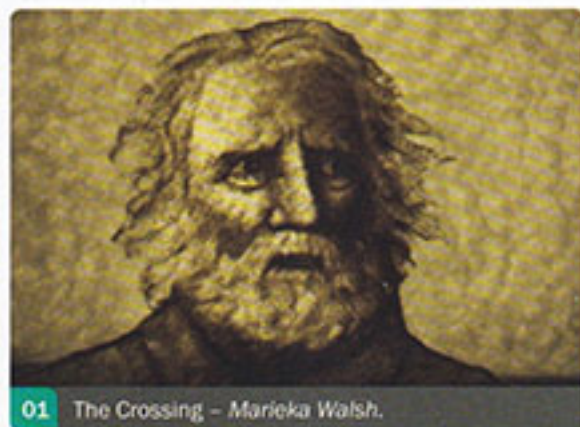
### Combining Sand with Other Animation Techniques

Case Studies from Commercial Projects

Any child at the beach will quickly realize the vast expanses of sand are an open canvas for creative exploration. But who would think that those tiny grains could be a medium for harnessing pure light into nuanced chiaroscuro under the camera? **01**

Sand animation encompasses delicate textures alongside bold, contrasting shapes and each artist that encounters the material interprets its uses in a new way. Powder animation, as it is sometimes called, is not limited to sand either. Salt is used in a similar way, as well as other granular substances.

If you have encountered sand animation before, it was probably in a film by Caroline Leaf or through a school assignment. **02** The fact that you are reading this book tells me that your interest was piqued, not spent, by this strange form of animation. Sand animation is my particular specialty, so as we begin to tap the potential of this little-known medium, I would like to personally welcome you into the world of sandy animation!



**01** The Crossing – Marieka Walsh.



**02** The Owl Who Married a Goose ©1974 National Film Board of Canada. All rights reserved.

## Notable Pioneers in Powder Animation

Sand animation came into its own in a time when animators were eagerly trying new materials and techniques. Swiss animator and historian Rolf Bachler observes,

Like with many other inventions in the history of film, there were several people in different places experimenting independently with similar materials at roughly around the same time. In the pre-digital world images could not be spread as easily and instantly as they are now, and a new animation technique had to travel physically as a film print if it was to be discovered elsewhere.<sup>1</sup>

Thus, the first influential films made exclusively with sand and other powdered substances came to light in several different areas of the globe.

### Nag and Gisèle Ansorge

In Switzerland in the 1960s, Ernest "Nag" and Gisèle Ansorge were making live action commercial films to support their more experimental endeavors. **03**

In one of these commercial films, they used sand to depict circulating blood.

As a pharmacist, Gisèle was familiar with loose material of all kinds, and tested every substance within reach, ending with quartz sand of a certain grain size . . . They would sift the sand for the right calibration, soak it in black china ink and then grind the dyed grains in a mortar.<sup>2</sup>



After three years of experimenting and refining the technique, the Ansorges presented their first short, *Les Corbeaux* (*The Ravens*) in 1967 at the prestigious Annecy International Animation Festival. **04**

The enthusiastic response, and their fascination with the material, led to a lifetime of work in sand resulting in ten short films and many commissions.

The Ansorges's films are sometimes narrative and sometimes surreal journeys. Gisèle primarily manipulated the sand while Nag operated the camera and took care of the editing. One thing that marks their work is the use of imaginative transformations from scene to scene. Gisèle's masterful command of the material combined with an unabashed approach to unconventional narrative led to films that explored the inner psyche of their relationship and philosophy. **05** The Ansorges also made a sustainable career out of sand animation by making films for children and advertisements. **06**

### Kazimierz Urbanowski

In Poland in the 1960s, Kazimierz Urbanowski was also experimenting with new techniques. He chose to use salt on a black board, becoming the yin to the Ansorges's yang. His students followed in his footsteps with many works, including Piotr Muszalski's *Toccata and Fugue in D Minor* (1994).



**04** *The Ravens* - 1967. Courtesy of ASIFA Switzerland.



**05** *Smile 3* - 1975. Courtesy of ASIFA Switzerland.



**03** Nag and Gisèle Ansorge ©Aline Kundig / [www.alinekundig.com](http://www.alinekundig.com).



**06** *The Little Boy Who Stole the Moon* - 1988. Courtesy of ASIFA Switzerland.



and *The Awakening* (2000) by Waldemar Mordarski. The most well known and prolific of Urbański's students is Aleksandra Korejwo. More on her in a bit. **07**

### Caroline Leaf

Also in the 1960s, a young Harvard architectural student was invited to take the university's first animation class. Feeling that drawing wasn't her strong suit, she went to the beach and came back with a bucket of sand to move under the camera. The resulting film, *Sand or Peter and the Wolf* (1969), was Caroline Leaf's first film and the beginning of a groundbreaking animation career. **08**

Her mentor and professor, Derek Lamb, was executive producer at the National Film Board of Canada's English Animation Studio, and he soon invited Leaf to Montreal to continue her work. While at the NFB, Leaf made several short films in sand, paint-on-glass, and scratching on celluloid.

Leaf's early sand films emphasize the shape and form of the sand, and her characters have minimal details. In *The Owl Who Married a Goose* (1974), positive and negative space intermingle as passing characters melt into each other and reform on the other side, preserving a clean and elegant design throughout the animation. Leaf

manages to convey a sense of depth and space in the white void of the background by growing and shrinking the characters as though they were walking toward or away from the camera. In the distance, the characters are black silhouettes but as they approach the camera we see more details in their feathers and refined shapes in the eye, approximating atmospheric distance. **09**

Remarkably, the landscape surrounding the characters is in our imaginations without any actual imagery on Leaf's part. Leaf also transforms the positive space in the film so by the end, what was white has become black and what was black is now white, reflecting both a seasonal



**07** Toccata and Fugue in D Minor – 1994 – Piotr Muszalski. Courtesy of TV Studio of Animation Films Ltd, Poznan.



**08** Caroline Leaf's first film – Sand or Peter and the Wolf (1969) – made at Harvard.



**09** Positive and negative shapes define the composition and movement in Leaf's landmark film *The Owl Who Married a Goose*. ©1974 National Film Board of Canada. All rights reserved.



change and a reversal in the Owl's fate as a lover.

Leaf's next and final sand film, *The Metamorphosis of Mr. Samsa* (1977), employs more tonal variance and texture, as well as far more sophisticated perspective shifts and camera angles. Based loosely on Kafka's tale of a man who turns into an insect, Leaf's seamless transitions take us back and forth between the dark world of Gregor's personal misery and the expectations of the friends and family outside his little room. **10**

Looking at Leaf's entire body of work, the progression of her personal style is clearly evident in the increasing visual complexity displayed in each film.

## Ferenc Cakó

Ferenc Cakó from Hungary began working with sand in the 1980s. After many years of working with puppets and clay, Cakó was searching for a way to tap into his roots as a graphic artist and create drawing-based films. "I experimented with paints and powders and eventually with sand, which allowed me to move fast."<sup>13</sup> Cakó is less concerned with studied motion and more interested in how the transformative quality of the sand can enhance his overarching themes. His first film, *Ab Ova* (1987), won the Palme d'Or at Cannes in 1987. In this film and many others, Cakó uses both sand and clay, mixing the three-dimensional world of stopmotion with the two-dimensional world of sand. "The biggest advantage for me with this type of animation, as opposed to the hand drawn animation, was the constant room for improvisation."<sup>14</sup> **11**

*Ab Ova* opens with images of birth and growth. As the music takes a violent turn, the slow gentle morphs of the opening are replaced by abrupt cutting and sand being thrown across the delicate drawings, which disintegrate into abstraction. The maternal instinct of the beginning is replaced by the instinct of Cain and Abel. Cakó presents symbolic interpretations of human conflict, which make symbolic use of a cycle of destruction and formation, bringing us to a final, climactic revelation of three-dimensional humanity, emerging from the pattern of conflict.

The physical qualities of the sand are just as important as the thematic imagery. **12**



**10** Leaf expands into tonal variations and pattern with sand in *The Metamorphosis of Mr. Samsa*. ©1977 National Film Board of Canada. All rights reserved.



**11** *Ab Ova* – Ferenc Cakó – 1987.



**12** *Fészek (Nest)* – Ferenc Cakó – 1992.





**13** Ferenc Cakó and the live sand animation performance. Photo credit: Szabolcs Bánlaki.



**14** The Swan - Aleksandra Korejwo - 1990. Courtesy of TV Studio of Animation Films Ltd. Poznan.



**15** Carmen Habenero - 1995 - Aleksandra Korejwo. Courtesy of TV Studio of Animation Films Ltd. Poznan.

We frequently see the artist's hand at work and it is clear Cakó is just as fascinated by the process of creating as he is by the ideas he is communicating. It makes sense, then, that he was the first to make live sand animation performances. In such a performance, the artist tells a story, usually with musical accompaniment, by drawing in the sand while the audience watches a projection of the artist's hands at work. Though not created frame-by-frame, this performance art is often referred to as sand animation. The magic in these performances lies in watching the artist transform one drawing into another with a few strokes of the fingers. Live performance and stopmotion sand animation are complementary art forms. **13**

Cakó prepares for both the live sand performance and the stopmotion films in a similar manner, creating concept drawings and a script ahead of time to guide the imagery.

Since I have to work tightly together with the music, I don't practice drawing, because I can do that, but I do learn the order of the pictures, so that they correspond to the rhythm... As the musician practices the piece, here the drawing should be rehearsed to be "in tune with" the music.<sup>5</sup>

### Aleksandra Korejwo

Another artist that belongs in this group of pioneers is Polish animator Aleksandra Korejwo. Her delicate, lyrical films are made by carefully moving colored salt on a velvet background. Korejwo's animation was inspired by her childhood fascination with Walt Disney films and a lifelong love of music and dance.<sup>6</sup> **14**

In fact, her first inclination was to make films that were colored music for the eyes. Watching her films, the viewer will get the impression that Korejwo is somehow aware of every single grain of salt on the screen, moving them with delicate attention and precision. Her style is immediately recognizable for its shimmering color palette and lyrical movement patterns based on dance and opera. Developing this unique style has contributed to Korejwo's success at film festivals and in the commercial market. She has made numerous

advertisements in salt, working for companies that valued the specific artistic quality of her personal style. **15**

Looking back, we may call these animators pioneers of powder animation, but at the time they were simply working with an interesting material that best suited their temperament and the stories they wanted to tell. What attracted these artists to sand was not the novelty of working with a strange material, but the actual properties of that material. You can draw with the sand, but in that drawing process you push, mold, spread, and confine it. The combination of dimensional and linear properties can be frustrating for some artists and liberating for others. The only way to test your affinity is to dig into the sandbox and give it a try!

## Exploring the Technique

There are many things I could tell you about sand animation. We could talk about texture and light, color and layering, pre- and post-production. Eventually we will get to a lot of these things, but at the beginning, the best way to learn is to dig your hands in and start animating. Let's not worry about perfection or plan a major opus. Let me simply introduce you to the sand.

To start, we will need just the most basic setup: a light table, a camera, and a frame capture program, all of which we learned about in Chapter 3. You will also need a glass box that you can put on the light table to contain the sand. Otherwise it will spread out and get all over your studio. You can make a box quite easily with a sheet of glass, some foam core, and masking tape. **16** Make sure the walls of the box are fairly high and all the seams are taped securely so no sand can escape.

And, of course, you will need some sand. Any sand will do – something you picked up on your last trip to the beach perhaps, or maybe from the hardware store or your nearest craft store. I find a quart is usually enough to start with. If you like working on a large surface, you may need more. I run my beach sand through a kitchen sieve to filter out any larger grains or odd bits of seaweed and shell. **17**

### #ProTip

*Sand likes to get in every nook and cranny in the studio. I wrap my keyboard camera buttons and anything I might get dirty while animating in plastic wrap before I start.*



**16** A young animator plays in a home-made sandbox. Photo credit: Kevin Fosse.

### #ProTip

*Even though I can see the edge of my frame in the frame capture program, I use a dry-erase marker to put little marks in the corner. That way, when I'm looking at the glass, I know what will be on screen and what will be off. **17***



**17**