The Appeal of Stop Motion in the Digital Age

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Declaration of Originality

This dissertation is submitted by the undersigned to the Institute of Art Design & Technology, Dun Laoghaire in partial fulfilment of the examination for the BA (Honours) in Animation. It is entirely the author's own work except where noted and has not been submitted for an award from this or any other educational institution.

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Abstract

This thesis analyses the medium of stop motion animation with the intention of uncovering the unique charms and strengths that allow for its longevity, particularly at a time when digital technology dominates the animation industry.

Since the advent of the studio system in American animation, stop motion has been a far rarer medium in popular animation than hand-drawn animation and, subsequently, digital 2D and 3D productions. However, artists and audiences continue to return to this medium time and time again, singing its praises as an artisanal medium, as the "highest artform" of animation, as a medium that holds a special kind of power over its audience.

To understand the appeal of this medium for artists and audiences alike, particularly when contrasted against a digital revolution, this thesis explores the unique materiality of the medium within the animation and wider film industries. Stop motion is a highly tactile medium that is constructed of and within our material reality, but it does not fall into realism. The production process is hands-on and imperfect, and the human touch is embedded in its materiality.

Stop motion is also then considered within the context of the modern era, a time of rapid technological progress. As a medium with a familiar, timeless materiality, and an intensely involved, manual production process, stop motion can be analysed within the context of socio-cultural phenomena like nostalgia and artistic value.

Through these lenses, this thesis will help to form an understanding of stop motion animation's unique appeal in the digital age, and why it continues to be practised and enjoyed.

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Introduction

Since the 1990s the animation industry, and the world at large, has been rapidly digitalising, with computer hardware and software permeating every aspect of our lives from music streaming services to menus in restaurants. Within animation, these developments have been greatly beneficial in terms of reducing labour and expanding the creative possibilities at our fingertips.

3D CG animation has reigned supreme now for two decades in the world of animated feature films. 2D animation has also shifted from a traditional hand-drawn practice to a digital one. However, here and there, once in a while, a studio or independent director will release a stop motion animation feature film. Beginning with *Tim Burton's Nightmare Before Christmas* (Henry Selick, 1993), released by Disney in the early 1990s, there has continued to be a small but a steady output of stop motion feature films, from *Corpse Bride* (Tim Burton, Mike Johnson, 2005) and *Coraline* (Henry Selick, 2009) to *Isle of Dogs* (Wes Anderson, 2018) and *Pinocchio* (Guillermo del Toro 2022).

Once the dominant 3D animation practice, stop motion animation continues to hold a place at the table in the modern, largely digital world of animated features. It has never been the most efficient or commercially viable form of animation, yet it continues to find passionate creators and audiences. Why do artists, and in turn audiences, believe that stop motion animation is a practice worth keeping alive?

Personally, growing up in the 2000s, I enjoyed a surplus of Disney, Pixar and Dreamworks CG features being released for my age group, yet I remember exiting the cinema after a showing of Henry Selick's *Coraline* and feeling a new kind of thrill that stuck with me to this day, and which I feel every time I watch a work of stop motion

animation. In 2023 the medium of stop motion continues to flourish, with *Pinocchio* garnering an Oscar for Best Animated Feature at the 2023 Academy Awards. In this thesis I want to look at this old, much-beloved form of animation and consider why it is that we continue to return to it in the digital age. Guillermo del Toro recently described the medium as "rare, cherished, and always on the brink of extinction"[1]. Yet still not extinct. How does the medium stand out in the digital age, what are the unique charms and characteristics that ensure its longevity?

In the first chapter I will consider the experience of viewing a work of stop motion, focusing on the unique materiality of the medium and how we relate to it as an audience. I will use Henry Selick's *Coraline* as a case study for this topic, analysing how the familiar, real-world materiality of the medium is used to enhance the viewing experience for the audience.

In the second chapter I will consider the hands-on nature of the medium and the imperfection that arises from its production. My approach in this chapter will continue to consider the phenomenology of the medium, using the work of Aardman Animations to explore how our viewing experience as an audience is impacted by the presence of imperfection and traces of human intervention.

In the third and final chapter I will look at the cultural context of stop motion as a 'handmade' medium in the digital age and consider our relationship to the handmade at this moment in time. I will consider how we relate to such media through the lens of nostalgia and artistic value, and how this translates into the films that are being made today.

[1] Del Toro, Guillermo. "Guillermo del Toro on Pinocchio Shot That Took Over 2 Months to Set Up". *YouTube,* uploaded by Collider Interviews, 19 October 2022. https://youtu.be/AUU1Nk4uQrs?t=185

Chapter 1 – Materiality and Fabrication

The people, places and objects of our environment make up our material reality. We engage with this material world through our senses; seeing, feeling and interacting with its textures, shapes and colours. The experience of living in a material world is a sensuous and engaged one. As we feel and observe the matter that surrounds us, we understand our own material nature and our physical existence in space.

In cinema, we cannot step through the screen and physically enter the world of a film. We experience images on a flat, two-dimensional screen from our material chairs in our own material reality. Our eyes are engaged by imagery and our ears are engaged by a soundtrack. Cinema is not, however, a purely audio-visual experience. The phenomenology of cinema is often overlooked in favour of semiotic analysis. As Joanna Bouldin notes, "viewing is not simply an ocular phenomenon, but rather it is a fully embodied experience."[2]

> "Watching a film, we are certainly not in the film, but we are not entirely outside it, either: We exist and move and feel in that space of contact where our surfaces mingle and our musculatures entangle."[3]

In animation, artists design and fabricate new material worlds in which their stories can take place. In 3D animation, due to its existence in a three-dimensional space like

[2] Bouldin, Joanna. "Bodacious Bodies and the Voluptuous Gaze: A Phenomenology of Animation Spectatorship". *Animation Journal,* vol. 8, no.2, 2000, pp. 56-67.
[3] Barker, Jennifer. *The Tactile Eye: Touch and the Cinematic Experience*. Los Angeles: University of California Press, 2009, p. 12.

our own, artists are "directly concerned with materiality" and usually work to create a "meta-reality which has the same physical property as the real world."[4] In stop-motion animation, this meta-reality is constructed of real, physical materials like clay, wood and felt. Stop motion worlds exist within our material realm and are touched by its same light and dust. In this chapter I wish to examine stop motion's unique, familiar-yet-reconstructed materiality. I hope to understand the appeal it may have for audiences from a phenomenological and semiotic standpoint.

Coraline, directed by Henry Selick, is an example of a film in which materiality is purposefully used to enhance the film narratively as well as aesthetically. When interviewed in 1999, ten years prior to Coraline's release, Selick cited stop motion's materiality as one of its greatest appeals.

> "Coming from the 2D world, I think what drew me to stop motion was the fact that you actually see this miniature world in front of you… It's one of the greatest appeals of stop motion: this feeling of real objects coming to life. I love the tactile realness of the miniature world. It's something you can never get with hand-drawn or computer animation."[5]

The film, adapted from Neil Gaiman's novel of the same title, traces the titular character's experience following her family's move to a new home. Somewhat lonely and disenchanted by the world, she soon discovers a small, child-sized door, wall-papered over, in their bleak, musty apartment. This door proves to be a portal to an alternate version of her reality where everything she feels is missing from her own world is made material.

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[4] Wells, Paul. *Understanding Animation.* Routledge, 1998*,* p. 90.

[5] French, Lawrence. "Henry Selick: The Director of *The Nightmare Before Christmas* on Re-Animating Stop-Motion". *Cinefantastique,* vol.31, February 1999, pp. 56-60.

We initially explore the "real" world of the film. Early on, Coraline, at her father's suggestion, takes a tour of their new apartment. We are introduced to the materiality of her world through images of a stubborn, faded carpet, hard bathroom tiles, slimy cockroaches, and cold, leaky windows thick with condensation (see Figure 1 and 2).

Figure 1 Still from *Coraline* (Henry Selick, 2009).

Figure 2 Still from *Coraline.*

As we observe the variety of textures at play in this sequence, particularly through close-ups that capture them in greater detail, a phenomenon occurs that engages not only our sense of sight but also our sense of touch. This is defined as haptic visuality.

As opposed to optic visuality, in which we form images in our minds through information absorbed by our optic nerves, haptic visuality is "the way vision itself can be tactile, as though one were touching a film with one's eyes"[6]. By observing textures on screen, we engage with memories of touch and find that we can have a physical, embodied, tactile reaction to those textures. Jennifer Barker defines the close relationship between sight and touch as one opposite to the "distant experience of observation."[7]

The power of this sense of touch is that it structures closeness between the audience and the world of the film. As Lucy Donaldson notes in *Texture in Film, "*[i]f we accept that films create self-enclosed diegetic worlds that are separate from us, but are also marked by their closeness to us, texture can be considered as a structuring of this completeness and closeness"[8]. By using and emphasising real materials and textures, stop motion can evoke a more engrossing, embodied viewing experience, in which viewers sensuously perceive textures which they can relate to their own material reality. We can immediately *feel* these films in a truly embodied way.

In *Coraline*, as we observe and explore her material realm, we feel all that she feels. As we connect our sense of touch to our memories, the familiar, real-world textures refabricated into a miniature world for Coraline evoke memories of childhood, of the strange comfort yet loneliness of a new home. In this scene in which she explores the apartment, all is old, leaky and creaky, evoking a sense of history and nostalgia. Through the highly tactile medium of stop motion, we can embody Coraline's

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[6] Marks, Laura. *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses*. Duke University Press, 2000, p. xi.

[7] Barker op cit. p.2.

[8] Donaldson, Lucy Fife. *Texture in Film*. Palgrave Macmillan UK, 2014, p.56. ProQuest Ebook Central, https://ebookcentral.proquest.com/lib/iadt-ebooks/detail.action?docID=1780025.

experience and better relate to her physical and emotional relationship to the world around her.

Due to this deep connection between memory, touch and materiality, the intimacy created between the audience and the world of the film can be used to influence the emotional experience of the audience. One aspect of worldbuilding in stop-motion animation is the ability to refabricate and redefine materiality. The world of the film is built according to the imaginations of artists, and isn't overly restricted by realism or the laws of physics. "Fabrication in animation may ... be understood as the redefinition of materiality and the physical world by the pre-conscious imperatives of the artist/filmmaker"[9]. By redefining and manipulating familiar materials, artists can evoke powerful emotional and physical reactions in their audiences.

Jan Švankmajer, a Czech filmmaker who has been highly influential in the world of stop motion animation, is known for twisting materiality to create disturbing, uncanny childhood fantasies. He "enjoys using the very substantiveness and function of an object as its specific identity but fundamentally challenges the historically determined associations invested in it."[10] In his adaptation of Lewis Carroll's *Alice's Adventures in Wonderland*, entitled *Alice* (Jan Švankmajer, 1988), Švankmajer creates a disturbing alternate version of this childhood tale through the refabrication of familiar materials: using a glass-eyed, porcelain doll as a protagonist (see Figure 3), giving human teeth to sock puppets, and reanimating taxidermy mice. "Childhood toys and games are Mr. Švankmajer's favourite vehicles for his playful meditations on death."[11]

[9] Wells op. cit. 92
[10] Ibid
[11] Caryn James, "Aggressive Objects Take It Out on Helpless People," *The New York Times*, May 3, 1989.

Figure 3 Still from *Alice* (Jan Svankmajer, 1988).

Stop motion is well suited to the nightmarish retelling of childhood tales. The use of animation, of puppets that reflect the imaginary games played with dolls as children, imbues these stop-motion horrors with a unique child-like perspective. The potential to redefine these objects we are intimately familiar with allows artists to create strange, engrossing, uncanny nightmare realms. Selick likes to lean into this unsettling, nightmarish effect of refabrication, often working on films centred around the macabre. *Coraline* is a horror aimed at children, and stop motion lends itself well to this genre.

Figure 4 Still from *Coraline.*

Figure 5 Still from *Coraline.*

When we are first introduced to the world behind the little door, we are taken in, like Coraline, by the feast of lavish colours, food, and music this world has to offer (see Figure 6 and 7). Here, the world is warmer and more vivid, more interesting and fantastical. This reality is also less familiar to us, with exotic plants that glow and harmonise and magical mechanised gravy trains. It is visually striking, and we share in Coraline's childhood wonder at the spectacles she beholds. It does not, however, evoke the same nostalgia and memory as the "real" world of the film, and hints of something unsettling are found in the fact that the residents of this world have buttons for eyes. In our embodied cinematic experience, the contrasting materiality of these

two realms enhances our understanding of Coraline's experience existing in both. Selick and the artists involved understood the unique ability that stop motion has for creating absorbing, tactile worlds, and how to fabricate two similar yet opposing worlds that could evoke distinct reactions in the audience.

Figure 6 Still from *Coraline.*

Ultimately, as the film progresses, all these beautiful and awe-inspiring details grow increasingly nightmarish. This disturbing turn of events is foreshadowed in the opening sequence, in which disembodied, sewing-needle hands take apart and reconstruct a sawdust-filled ragdoll in Coraline's likeness (see Figure 8). Close-up shots of the materials emphasise texture and unnerve the viewer. The cold, sharp needles, and the dry, dull sawdust contrast with our associations of hands and ragdolls with safety and comfort. We are unnerved by familiar materials and objects being refabricated to become something that lies in the uncanny valley.

This is echoed throughout the film as the heightened reality of the other-mother's world begins to show its true colours, and both our and Coraline's initial relationship

to this warm, vibrant, awe-inspiring realm of fantasy is twisted and revealed to be a frightening nightmare stuffed with sawdust. Plants snap at Coraline's heels, sweet mice turn to sawdust-filled rats, her other mother morphs into a sharp, skeletal creature with needles for bones (see Figure 8). In her brief reprieve back in the real world, the bland beige cushions in Coraline's parents' sparsely decorated bedroom become one of the few soft, comforting objects remaining on screen (see Figure 9). As the film wraps up and Coraline escapes the other-mother's grasp, we, like Coraline, are deeply relieved to return to the real world where all is familiar.

Figure 7 Still from *Coraline.*

Figure 8 Still from *Coraline.*

> "We arrive at the notion of audiences understanding worlds in film as worlds not only through a cognitive ability to make the two-dimensional three-dimensional but also because of the film world's relationship to our own: the ways in which it relates to a reality that we already understand through experience."[12]

In conclusion, we observe and engage sensuously with the worlds of these films through haptic visuality and the memory of our real-world experiences. The tactile, embodied reaction we have to film is provoked through visual textures which structure a deeper intimacy between audience and film.

The material worlds of stop motion films have a unique place in animation due to the use of real-world materials which we immediately relate to. Thus, we tend to feel and experience the worlds of these films on a more intimate level than we do with

[12] Walters, James. *Alternative Worlds in Hollywood Cinema.* Intellect Books, 2008, p.21.

contemporary 2D or 3D computer-generated animation. While having the appeal of the tactility and "ontological thickness"[13] of live-action materiality, stop motion also has the freedom of refabrication that comes with world-building in animation. In *Coraline*, this is effective in evoking powerful emotional reactions, leading us through scenes of childhood nostalgia and wonder as well as into disturbing, uncanny realms that crawl under the skin and into the psyche. Our intimacy and familiarity with the materials in these films allow the impact of this refabrication to be all the more profound.

The choice to adapt *Coraline* through stop motion resulted in an engrossing, tactile, horrifying and rich cinematic experience for adults and children alike. The materiality of stop motion is, as Henry Selick observed in 1999, one of its greatest strengths and appeals. Stop motion holds a unique place in cinema in which our own material reality can be refabricated to create strange and absorbing realms of fantasy, providing a thrilling viewing experience that has yet to be replicated by CG technology.

In the next chapter I will focus on one distinctive characteristic of stop motion's materiality – the presence of imperfection.

[13] Bouldin, Joanna. "Cadaver of the Real: Animation, Rotoscoping, and the Politics of the Body." *Animation Journal,* vol.12, 2004, pp. 7-31.

Chapter 2 – Imperfection and the Human Touch

Figure 9 Still from *Jason and the Argonauts* (Don Chaffey, 1963).

In the past, when stop motion was used for early special effects, the aim was to fit the stop motion models and puppets into the live-action world of the film as seamlessly as possible. The likes of Ray Harryhausen worked to create and animate believable monstrous creatures to battle against real human actors (see Figure 10). However, in the modern film industry, with the advent of CGI, the natural imperfection that is inevitable when working with stop motion has rendered its use for special effects redundant. The perfection of CG has, on the other hand, highlighted the unique charm that imperfection can give to a work of animation.

Artists understand this charm and why we are drawn in by it, and are now beginning to emphasise it in their filmmaking process. Directors like Selick or Wes Anderson choose to lean into imperfection in their films, "intentionally instruct[ing] everyone to

be very wary of trying to reach for perfection"[14]. Discussing *Nightmare Before Christmas*, Henry Selick mentioned that they "looked at Starevich's (Władysław Starewicz) film not so much for style but because he would use real material, real cloth, hair, insects, things that shudder and shake and pixilate and catch your attention needlessly that most animators would avoid."[15]

> "What are the strengths of stop motion? What should we try to hold on to?... It's touched by the hand of the artist – you can feel that. You can sense that life force, but it's imperfect. It can be done perfectly – that's what CG can do. And I'm trying to get people to embrace that: if it pops, if cloth shifts a little, if the hair is buzzing. It's like this electricity of life."[16] (Henry Selick).

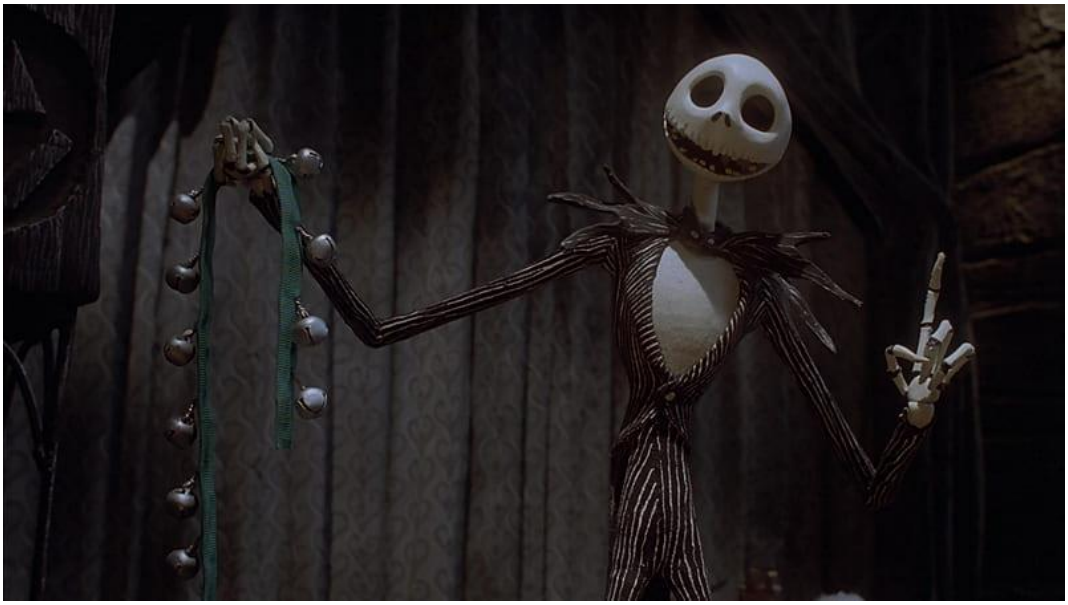

Figure 10 Still from *Tim Burton's Nightmare Before Christmas* (Henry Selick, 1993).

[14] Desowitz, Bill. "Selick Talks 'Coraline': The Electricity of Life." *Animation World Network*, 6 February 2009. https://www.awn.com/animationworld/selick-talks-coraline-electricity-life#:~:text=You%20can%20sense%20that%20life,like%20this%20electricity%20of%20life.

[15] Selick, Henry. "Animated Dreams" by Leslie Felperin. *Sight and Sound.* December 1994.

[16] Selick, Henry. Quoted in Desowitz op. cit.

Since it was first founded in 1972, the British animation studio Aardman Animations has been known for charming clay stop motion (commonly referred to as "claymation") shorts and feature films. The people at Aardman are keenly aware of the power of imperfection, of the "rugged, handmade charm"[17] that draws audiences to their work, from *Chicken Run* (Nick Park and Peter Lord, 2000), to the *Wallace and Gromit* series. David Sproxton, co-founder of Aardman, is aware that "Audiences love that sense of tangibility, the sense that it isn't perfect, the fact that you can see the fingerprints."[18]

Chicken Run marked Aardman's first venture into feature-length filmmaking. The film is best described as a parody of prisoner-of-war films akin to *The Great Escape* (John Sturges, 1963), made using Aardman's signature clay animation style. It tells the story of the revolt and escape of a community of chickens from Mr. Tweedy's Farm, led by the hen Ginger who dreams of something beyond the wire fence.

Figure 11 Still from *Chicken Run* (Nick Park and Peter Lord, 2000).

[17] Thill, Scott. "An Imperfect World: An Interview with the Directors of Flushed Away". *Pop Matters,* 9 November 2006. https://www.popmatters.com/an-imperfect-world-interview-with-sam-fell-and-david-bowers-directors-of-fl-2495740124.html

[18] Sproxton, David. "At 40, Aardman Animations Stays Stubbornly Eccentric." By Peter Debruge, *Variety*, 10 June 2016. https://variety.com/2016/film/spotlight/aardman-animation-peter-lord-david-sproxton-company-history-40-year-1201790417/

Figure 12 Still from *Chicken Run*.

The production design of the film is homely and charmingly odd, with anthropomorphic hens, rats and roosters sporting the classic Aardman eyeballs and wide toothy grimace. Mixed in amongst the clay and tweed and wet muck are teaspoons and badminton shuttlecocks, objects directly transplanted from the real world (see Figure 13). The rural farmland setting and the self-reflexive tongue-in-cheek humour of the production are suited to the rugged, cartoonish, imperfect animation and design. At one point, the grumpy patriarch Fowler confidently states: "I don't like the look of this one, his eyes are too close together." Additionally, embedded within this characteristic tactile materiality is imperfection.

Imperfection, mistakes, are not a mark of failure, but rather an inevitable occurrence within the natural world. Imperfection tells the story of an object or person that has engaged with other people, places and things. Jan Švankmajer observed that "Places, rooms and objects have their own passive lives which they have soaked up, as it were, from situations they have been in and from the people who have made, touched or

lived in them."[19] In art and crafts, these past lives can be read in something referred to as deixis, which John Sundholm defines as "categories which encode the person, place, time or social context of utterance"[20] including the traces an artist leaves in his or her artwork. The aesthetics of materiality "is a way of retaining deixis; a trace of the past as an intervention ..."[21]

The highly manual production process of the medium ensures that regardless of how skilled the artists and animators who work on these films are, small imperfections are inevitable. By retaining deixis, stop motion draws attention to its constructed nature, rather than hiding the seams and construction lines. We are given the thrill of knowing these are puppets come to life, a sense of magic akin to trick films of early cinema. The earliest animation purposefully drew attention to the presence of a human artist behind the imagery on screen, particularly through the "hand of the artist" convention, literally incorporating the body of the animator into the film as they drew characters to life (see Winsor McCay in Figure 14). At this time, trick films with little narrative were the main form of cinema, as described by Tom Gunning's term, "cinema of attractions". Early spectators found a thrill in seeing a kind of magic take place before their eyes, a hand-drawn image come to life. Donald Crafton writes that "part of the animation game consisted of developing mythologies that gave the animator some sort of special status… a demigod, a purveyor of life"[22] – they were magicians whose presence added to the magic of watching animation.

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[19] Švankmajer, Jan. quoted in Wells op. cit. p.90.

[20] Sundholm, John. "I am a Rhinoceros: Memory and The Ethics and Aesthetics of Materiality in Film." *Studies in European Cinema*, vol. 2, no.1, 2005, p. 55.

[21] Ibid p.56.

[22] Crafton, Donald. Quoted in Gadassik, Alla. "Ghosts in the Machine: The Body in Digital Animation." *Popular Ghosts: The Haunted Spaces of Everyday Culture*, edited by María del Pilar Blanco and Esther Peeren, Continuum International Publishing, 2010, p.229.

Figure 13 *Gertie the Dinosaur* (Winsor McCay, 1914)

Gadassik in her article "The Ghost in the Machine" argues that "dominant accounts of animation neglect the significance of the animator's presence in the frame of cinema history" and, particularly with the development of digital media, there is "a tendency to privilege technology, language and information over corporeal presence and embodied creative imagination"[23]. She also suggests that many theorists have the underlying assumption that animation's chief struggle through the 20th century was an inability to faithfully imitate reality. Gadassik argues for the importance of an embodied human presence in animation.

One argument in favour of human presence is that it testifies to a "corporeal presence beyond the frame", connecting the world of the film to a "material realm behind the cinematic apparatus"[24]. Once again this brings us to the idea of creating a sensuous, embodied viewing experience for the audience. According to Gadassik, the body of

[23] Gaddassik op. cit. p.226.
[24] Ibid. pp. 230-231.

the animator in animation creates "more corporeally grounded relationships with the moving image" [25], and gives the image a greater "ontological thickness". In other words, when a human presence is tangible the world of the film feels more "real" and engaging to us. "In order to be touched by it, we need to believe that a film's world continues out of frame, that there is more depth beyond the surfaces of our mingling and entangling"[26].

In addition to the brazen, circus-like awe that seeing puppets come to life has on an audience, there is a subtler psychological effect taking place, in which we find comfort, intimacy, and sensuous immersion in the images on screen due to a tangible human presence. By retaining deixis, traces of the artist in the final product, we retain the rich material history of the objects on screen – the shuddering of fur and the creasing of fabric draw our attention to the constructed nature of the puppet, that human hands created this object, that human hands manipulated every movement and expression this character makes. The history of the creation of a piece of stop motion can be read in the final product through the imperfect intervention of human hands. A tangible material history creates a more grounded materiality for us to engage with.

[25] Ibid. p. 234.
[26] Donaldson op. cit. p. 53.

Figure 14 Still from *Chicken Run*.

Figure 15 Still from *Chicken Run*.

In *Chicken Run*, the material history and work of human hands is stitched and moulded into every character and set piece. We recognise the human hands that roughly moulded and sewed props such as the decoy hen (see Figure 15), or Bab's knitted noose (see Figure 16). We see imperfection in the stitching and recognise that these props were crafted by human hands.

The retention of fingerprints and traces of human touch in stop motion also has the effect of eliciting haptic visuality, which was discussed in Chapter One. The handmade

nature of the medium "allows a more tactile approach of the physical act of animating and a more sensuous perception of the tangible by the viewer, that is the elicitation of the sense of touch through the experience of watching an animated film."[27] Tactility is enhanced by the retention of imperfections which we connect with the touch of the animator. The use of plasticine is particularly tactile, as its surface is entirely grooved with fingerprints. In *Chicken Run*, this tactility shines in a sequence in which the boastful yet cowardly cockerel Rocky attempts to save the protagonist, Ginger, from her demise within Mrs. Tweedy's chicken pie machine (though ultimately needs saving himself). Sharp whirring blades, soft sticky dough, and slimy gloopy gravy provide a feast for the senses. The surfaces of these materials are tracked with human touch, the way a real ball of dough handled by humans would be, though ironically the entire process of pie-making is mechanical in the world of the film. We feel able to reach out and touch the objects on screen, which gives a greater ontological thickness to the world of the film and a more embodied viewing experience for the audience.

Figure 16 Still from *Chicken Run.*

[27] Rocha, Ellen. "Beyond Materiality in Animation: Sensuous Perception and Touch in the Tactile Existence of "Would a Heart Die?"" *Animation Studies*, vol. 11. 2016. https://www.journal.animationstudies.org/

Figure 17 Still from *Flushed Away* (Sam Fell, David Bowers, 2006).

In 2006, a Dreamworks-Aardman collaboration was released, entitled *Flushed Away* (Sam Fell, David Bowers, 2006). The film attempted to translate the classic Aardman style into computer-generated animation. Director Sam Fell discussed in an interview how imperfection was central to this translation – modellers were told to "knock the edges out a bit", painters did extensive research of the outside world, studying flaking paint and other such materials, and animators animated secondary action by hand rather than by computer.[28] The final product manages to retain some of Aardman's signature handmade charm through this purposeful incorporation of imperfection – something which is naturally inherent to stop motion animation. The film is charming, and captures the Aardman spirit, though it lacks the same level of tactility and charm as its stop motion counterparts. The corporeal presence of the artists is lacking, and the obvious constructed nature of the film is absent. Strangely, the materiality of stop motion animation is full of imperfections which, rather than interrupting our immersion, have the ability to draw us closer to the world of the film. The company

[28] Fell, Sam. "An Imperfect World: An Interview with the Directors of Flushed Away". By Scott Thill. *Pop Matters.* 9 November 2006. https://www.popmatters.com/an-imperfect-world-interview-with-sam-fell-and-david-bowers-directors-of-fl-2495740124.html

continue to "ever-so-tentatively [embrace] digital technology" while "recognizing that audiences prefer the stop-motion work to such all-CG attempts as *Flushed Away* and *Arthur Christmas*."[29]

Figure 18 Fingerprints in Wallace's hand-moulded face, still from *Wallace and Gromit: A Grand Day Out* (Nick Park, 1989)

> "The imperfect reveals the process of the object's production and its history and invites (or maybe demands) an engaged interaction. But what does not happen is that our minds do not slip over the surface, untouched and uninterested, on to the next thing that comes along. Imperfection engenders response and solicits questions."[30]

Stop motion's highly manual production process naturally results in imperfection, which is more engaging to us than flawless renderings and suited to telling charming

[29] Debruge, Peter. "At 40, Aardman Animations Stays Stubbornly Eccentric." *Variety*, 10 June 2016. https://variety.com/2016/film/spotlight/aardman-animation-peter-lord-david-sproxton-company-history-40-year-1201790417/

[30] McFarlane, Karen. "Aesthetics, Value, and the Joy of Imperfections". *English Studies in Canada,* vol. 39, no. 2–3, 2013, p. 12.

human stories. The value of imperfection lies in its ability to tell the material history of an object.

In *Chicken Run*, imperfection is charming and homely, as well as wondrous and magical. It is wondrous as it draws our attention to the constructed, trick-film nature, and therefore the magic, of the medium. It is charming because it suggests the imperfect intervention of human hands. Imperfection connects the audience with the history of human touch in the production process. By retaining its material history, stop motion is imbued with an "ontological thickness", a deeper sense of existence. In turn, we believe and are touched by the world of these films on a deeper level. Imperfection enriches the world of the film with something deeply human. It creates a materiality that we can connect with because our own materiality is deeply human and imperfect.

In the final chapter I will consider the materiality and corporeality of stop motion within the context of the modern age, and why it might hold a particular appeal against the backdrop of our fast-paced, technologically advancing society.

Chapter 3 – Nostalgia and Soul

As discussed in the previous chapter, the ability of technology to flawlessly simulate indexical realities has highlighted the charms of imperfection within manual, handmade artforms. In this chapter I hope to delve deeper into this idea of the "handmade" in the digital age, and in turn why this aspect of stop motion animation may account for its continued existence alongside its digital 3D counterparts. I will primarily draw on two socio-cultural phenomena that relate to the medium of stop motion – nostalgia and artistic value.

In 2022 the streaming giant Netflix released several stop motion feature films, including the 2023 Academy Award Winner for Best Animated Feature, *Guillermo del Toro's Pinocchio* (Guillermo del Toro, 2022). The story of Pinocchio is an old tale, retold countless times across a broad spectrum of media. It is familiar, a part of one's childhood, a tale entangled with a history of human expression. The story originated in the children's novel *The Adventures of Pinocchio* by Carlo Collodi, published in 1883. This was only fifteen years prior to the creation of the first known piece of stop motion animation, *The Humpty Dumpty Circus* (J. Stuart Blackton, 1898). In Guillermo del Toro's adaptation, the timelessness of the tale is echoed in the timelessness of the medium. Both have changed and been retold through modern perspectives and technologies, but they remain the same at their core. Puppets, brought to life through human labour and love.

What can this 21st Century adaptation of Pinocchio tell us about our relationship to the medium of stop motion in the digital age? The decision to tell this tale through stop motion allows for a reflective, metafictional exploration of themes of craftmanship, love, and soul, of what it is to be alive and to be human.

This version of the story follows Geppetto, a poor woodcarver who loses his son in a bombing of his town during the First World War. One night, after years of wallowing in grief, Geppetto drunkenly, hastily and haphazardly builds a puppet version of his lost son. As he sleeps, a wood sprite brings the puppet, Pinocchio, to life.

Figure 19 Still from *Guillermo del Toro's Pinocchio* (Guillermo del Toro, 2022).

The use of tactile materials, of imperfect puppets and animation, all create a deep sense of history in this film. It feels old, despite employing the most up to date technology in its creation in terms of rigging and motion control, 3D printing, and so forth. The puppets are largely hand-modelled and painted, as shown in the accompanying behind-the-scenes documentary. It is an adaptation that attempts to capture the original spirit of the story, one that has been with us for over a century. We see this in the grubby, lined fingers of Geppetto and in the worn circus trousers of Spazzatura (see Figure 21).

Imperfection and, as such, a material history has been manually painted into the objects that create the world of *Pinocchio,* connecting to the audience's memories and sense of nostalgia, especially when contrasted with the naturally bright, smooth, clean digital interfaces of the modern age. Stop motion holds a timelessness and a human-connectedness in its materiality, old objects holding traces of their construction.

Figure 20 Spazzatura*,* still from *Pinocchio.*

> "In counterpoint to our fascination with cyberspace and the virtual global village, there is a global epidemic of nostalgia, an affective yearning for a community with a collective memory, a longing for continuity in a fragmented world."[31] (Svetlana Boym).

Nostalgia is a cultural phenomenon, a human emotion that can be defined as a yearning for a home that one cannot return to. Svetlana Boym notes that nostalgia is not opposed to modernity but coeval with it – nostalgia and progress come hand in hand. "Nostalgia inevitably reappears as a defence mechanism in a time of accelerated rhythms of life

[31] Boym, Svetlana. "Nostalgia and its Discontents". *The Hedgehog Review.* Summer 2007. p.10.

and historical upheavals."[32] We are living in a time of rapid technological progress, a time when virtual platforms are finding their way into every aspect of our lives. Nostalgia kicks in as a reaction to these changes. When it comes to the physical versus the virtual, for example, one can observe the rise in popularity of vinyl records as digital music streaming becomes the mainstream. We appreciate and adopt the ease of streaming, while simultaneously finding new value in physical music. Rather than eradicating the analogue, the prevalence of mechanical production and digital technology has helped to create a newfound appreciation and nostalgic romance around the material and the handmade. Nostalgia always comes with distance, and as we find ourselves distanced from the tactile, material world and its inherent imperfection, it takes on a new, sentimental value.

Modern psychological studies have also found that "in an increasingly technologically advanced age, the demand for handmade goods has never been higher."[33] These studies find that there are a few reasons behind this attraction to the handmade. One reason is the effort heuristic: "people consciously or subconsciously judge the value of something based on the perceived effort put into it".[34] It is also noted that the higher the number of people perceived to have been involved in the production of a product, the lower artisanal value it holds for consumers. We value human effort, but that effort is more tangible when it can be read as a deep connection between individuals and their craft. We value individual craftmanship over factory-like or mechanical production processes, according to these studies, due to the perceived "artisanal love" within individually crafted products. Echoing the coeval relationship of nostalgia and

[32] ibid pp. 8-10.
[33] Waytz, Adam. "The Appeal of Handmade in an Era of Automation" Excerpted from *The Power of Human: How Our Shared Humanity Can Help Us Create a Better World*. W. W. Norton & Company, 2019. Accessed through Kellogg Insight from the Kellogg School of Management.
[34] ibid

progress, the sentimental idea of artisanship, this measure of artistic value, exists in contrast with, and because of, the dominance of mechanical production in modern society.

In early cinema, stop motion was the dominant form of animation, used for special effects as well as entirely animated narratives. Production in early cinema and particularly animation was "relatively spontaneous, involving a very limited crew… there was no lack of creativity". With the advent of the studio system in the 1920s, however, American animation shifted "from an artisanal process to an industry"[35]. The industry remained this way throughout the 20th Century. According to Maureen Furniss, "for the artists involved, the dilemma often has been one of keeping creative expression alive within the parameters of a profit-making enterprise."

With this shift towards the factory-like production processes of the American studio system, 2D drawn animation was favoured. Stop motion's production process, consisting of highly involved individual artists, was less compatible with the studio-system, and as such it was never as commercially viable as drawn animation. Stop motion continued to be produced but nowhere near the scale of drawn animation, and often with individual artists "[toiling] over the animation of a single stop motion figure."[36] However, in contrast to the studio system, the production process of stop motion ties in better with the "intensely individualistic theory of art and how it is made"[37] proposed by Andrew Sarris in 1962. Sarris wrote about "several premises that can be considered measures of value in any filmmaker's work: technical competence, the distinguishable personality of the director, and the interior meaning or 'soul' of the

[35] Furniss, Maureen. *Animation: A Global History.* Thames & Hudson Ltd., 2017, p.43.
[36] ibid. p.64.
[37] Furniss, Maureen. *Art in Motion: Animation Aesthetics*. John Libbey & Company Limited, 2007, p.21.

production"[38]. According to Sarris, being able to read the trace of distinctive, individual human expression in a film is a mark of artistic value. He also touches on the concept of soul, which I will return to later in this chapter.

Figure 21 Still from *Pinocchio.*

Pinocchio is a passion project of Guillermo del Toro's, a film he spent fifteen years bringing to fruition. The promotional methods used for the film emphasise the "painstaking craftmanship" involved in production of the film, with Netflix releasing a 30-minute documentary alongside *Pinocchio* showcasing animation timelapses and crew interviews that highlight the passion and labour involved in the film's making. The theme of craftmanship is introduced narratively in *Pinocchio* through Geppetto's woodcarving. His workshop is that of an artisan, littered with creations, and he is commissioned to hand-carve a statue of Christ for the church. Of course, Pinocchio, the young protagonist of the tale, is also a product of Geppetto's craftmanship. The wooden puppet Pinocchio is allowed to have a life, a soul, because he was handcrafted with deep grief and love and longing by Geppetto's hands. We want to believe humans

[38] Ibid.

hold something unique - a soul, a breath of life - something we can imbue the world with that cannot be replaced by computers and machines. “Humans can communicate something beyond mere function, and this expression coupled with intentionality can give an object enhanced meaning”[39]. Del Toro chose the medium of stop motion as, in his words, “of all the artforms of animation, to me the most sacred and magical is stop motion… you give life to it, and that is the highest artform”.[40]

Figure 22 Still from *Pinocchio.*

The themes of love and soul are contrasted starkly in this film with the ongoing rise of Mussolini and his fascist government. In *Pinocchio*, the titular character becomes a literal and figurative puppet, first for an abusive circus ringmaster, and then for the fascist Italian government, and is involuntarily enlisted in the “Elite Military Project for Special Patriotic Youth”. There are clear black-and-white themes contrasting love and humanity with war and abuse. In discussing the value of human presence in animation, Gadassik notes that in modern science, medicine and warfare, human life

[39] Waytz op. cit.

[40] Del Toro, Guillermo. *Guillermo del Toro’s Pinocchio: Handcarved Cinema.* Netflix, 2022.

and its material reality are increasingly treated as "standing reserve", "raw and undifferentiated energy, made available for exploitation"[41].

We have an aversion to this disregard for human life, particularly when it is employed in art, which be believe exists only through human intention and meaning. Our reaction to mechanical production and an absence of the human body within it is one of anxiety, of fear of something bigger than us, separate from us; it is a fear of human beings becoming the nameless fuel for machines, or of humans not being needed at all. It is a fear of a loss of what makes us human.

Within the context of stop motion versus CG animation, digital technology is of course not evil or inhuman, though "many CGI opponents exaggerate the contrast between the 'pure' days of traditional film and the 'dark' days of digital technology."[42] As mentioned previously, developments in animation tools and software in recent decades have relieved artists of certain amounts of labour as well as expanding the creative possibilities of the medium. Though there is an easing of certain labours, and perhaps a broader distribution of tasks across a studio of people, digitally produced films don't necessarily have less human effort or "love" put into them. Artists, writers and directors spend years working tirelessly to produce digital art and films. And while certain jobs are taken over by computers and artificial intelligence, the creation of these films is far from being devoid of human presence.

Additionally, the stop motion feature films of the last few decades have been far from devoid of mechanical and digital technology. Motion control camera rigs, 3D modelling and 3D printers, post-production software, editing, and stop-motion/CG

[41] Gaddassik op. cit. p.232.
[42] Ibid.

hybrids have all been utilised to expand the possibilities of the medium and ensure it can hold up in a world of high-definition cinema screens.

Still, through the retention of imperfection in the texture of the final images, stop motion manages to express its handmade nature in a way that digitally produced films cannot at this moment in time. In handmade animation, human presence is tangible in the final film, while CG is, by nature of its production process, more disconnected from the artists. When digital technology erases or prevents deixis, traces of construction, there is a disconnect between the human artist and the product delivered to consumers and audiences. In digital animation the artist is more of an absent "posthuman animator – a controlling force without a traceable source"[43]. In a world lacking in tangible, physical human presence, therefore, a tactile medium full of imperfection evokes a sense of human connection, a nostalgia for a more present and connected world. Human-made tends to mean imperfect; machine-made is more uniform and without flaw. The power of stop motion lies in its human presence; as Guillermo del Toro notes, stop motion is "the bond between an animator and a puppet".

[43] Gaddassik op.cit. p.230

Figure 23 Still from *Pinocchio.*

The passing of time and mortality is central to the story of Pinocchio. The character of Pinocchio dies, spends an allocated time with Death, and comes back to life repeatedly across the course of the film. To save Geppetto, he chooses to become mortal, to become a "real boy". To be human is to be temporarily here, leaving only traces of ourselves behind. To quote the narrator character, Sebastian J. Cricket, "What happens, happens, and then, we are gone".

In the end Pinocchio's restored immortality means that those around him pass away one by one, while he remains the same eternally. This film is constructed of images and objects that will outlast us, yet the surfaces of these images and objects are marked eternally by human touch, a fleeting memory of mortal beings intermingling with puppets and giving them life.

Guillermo del Toro's Pinocchio is a retelling of a beloved childhood fairy-tale. It is about love, mortality and what it means to be a human with a soul. Through its laborious production process it is imbued with artisanal love, which the audience sees and loves and praises. We sense a soul in this film. In a rapidly digitalising world, we

are finding a new appreciation for old, handmade, tangible objects, touched by human hands. Stop motion evokes nostalgia for an old, material, connected, human world.

Conclusion

Stop motion animation has existed for as long as cinema itself, and despite its comparable rarity to more mainstream forms of animation, it has continued to be practised and cherished across the globe. It is a timeless, playful, and tactile artform akin to playing with dolls, reminiscent of childhood. Built from familiar materials, corporeally grounded through imperfections that betray human intervention, the experience of watching stop motion is a sensuous, engaged, fully embodied one.

As a labour of love, an intricate process that takes years of dedication to complete on a feature-length scale, it can represent artisanship to its viewers, a nostalgic return to a slower, more connected world that we feel was somewhat lost in the digital revolution.

Stop motion has only stayed alive by growing with technology, and developments in technology point to a movement across the digital landscape of cinema towards a gradual blurring of the lines between the handmade and the digital, a push and pull that will continue to expand the possibilities of the medium. However, for now, stop motion animation's unique materiality possesses a charm and power over viewers that suggests we will continue to return to this medium for years to come. In the modern age of rapid technological advancement, we find comfort, wonder and connection in such a tactile, timeless medium.

Works Cited

Barker, Jennifer. *The Tactile Eye: Touch and the Cinematic Experience*. Los Angeles: University of California Press. 2009. eBook.

Bouldin, Joanna. “Bodacious Bodies and the Voluptuous Gaze: A Phenomenology of Animation Spectatorship”. *Animation Journal* 8, no.2, 2000. eBook.

Bouldin, Joanna. “Cadaver of the Real: Animation, Rotoscoping, and the Politics of the Body.” Animation Journal, vol.12, 2004. eBook.

Boym, Svetlana. “Nostalgia and its Discontents”. *The Hedgehog Review.* Summer 2007. Print.

Caryn James, "Aggressive Objects Take It Out on Helpless People," The New York Times, May 3, 1989. https://www.nytimes.com/1989/05/03/movies/review-film-aggressive-objects-take-it-out-on-helpless-people.html

Del Toro, Guillermo. Guillermo del Toro’s Pinocchio: Handcarved Cinema. Netflix, 2022. Film.

Del Toro, Guillermo. “Guillermo del Toro on Pinocchio Shot That Took Over 2 Months to Set Up”. YouTube, uploaded by Collider Interviews, 19 October 2022. https://youtu.be/AUU1Nk4uQrs?t=185

Desowitz, Bill. *Selick Talks 'Coraline': The Electricity of Life*. 6 February 2009. https://www.awn.com/animationworld/selick-talks-coraline-electricity-life#:~:text=You%20can%20sense%20that%20life,like%20this%20electricity%20of%20life.

Donaldson, Lucy Fife. *Texture in Film*, Palgrave Macmillan UK, 2014. ProQuest Ebook Central, https://ebookcentral.proquest.com/lib/iadt-ebooks/detail.action?docID=1780025.

Fell, Sam. “An Imperfect World: An Interview with the Directors of Flushed Away”. By Scott Thill. *Pop Matters.* 9 November 2006. https://www.popmatters.com/an-imperfect-world-interview-with-sam-fell-and-david-bowers-directors-of-fl-2495740124.html

Felperin, Leslie. “Animated Dreams”. *Sight and Sound.* December 1994.

French, Lawrence. “Henry Selick: The Director of The Nightmare Before Christmas on Re-Animating Stop-Motion”. *Cinefantastique* vol.31. February 1999.

Furniss, Maureen. *Animation: A Global History.* Thames & Hudson Ltd. 2017. Print.

Furniss, Maureen. *Art in Motion: Animation Aesthetics.* John Libbey & Company Limited. 2007. eBook.

Gadassik, Alla. "Ghosts in the Machine: The Body in Digital Animation." *Popular Ghosts: The Haunted Spaces of Everyday Culture*, edited by Editor's Name(s), London, GBR: Continuum International Publishing. 2010. Print.

Marks, Laura. *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses.* Duke University Press. 2000. eBook.

McFarlane, Karen. "Aesthetics, Value, and the Joy of Imperfections". *English Studies in Canada.* 39.2–3. June/September 2013.

Rocha,Ellen. "Beyond Materiality in Animation: Sensuous Perception and Touch in the Tactile Existence of "Would a Heart Die?"" *Animation Studies*, vol. 11. 2016. https://journal.animationstudies.org/ellen-rocha-beyond-materiality-in-animation-sensuous-perception-and-touch-in-the-tactile-existence-of-would-a-heart-die/

Sproxton, David. "At 40, Aardman Animations Stays Stubbornly Eccentric." By Peter Debruge, *Variety*. 10 June 2016. https://variety.com/2016/film/spotlight/aardman-animation-peter-lord-david-sproxton-company-history-40-year-1201790417/

Sundholm, John. "I am a Rhinoceros: Memory and The Ethics and Aesthetics of Materiality in Film." *Studies in European Cinema*, vol. 2 no.1, 2005. eBook.

Walters, James. *Alternative Worlds in Hollywood Cinema.* Intellect Books. 2008. eBook.

Waytz, Adam. "The Appeal of Handmade in an Era of Automation" Excerpted from *The Power of Human: How Our Shared Humanity Can Help Us Create a Better World*. 2019. W. W. Norton & Company, accessed through Kellogg Insight from the Kellogg School of Management

Wells, Paul. *Understanding Animation*. Routledge. 1998. eBook.

Filmography

Anderson, Wes. *Isle of Dogs.* Searchlight Pictures, 2018.

Bowers, David and Fell, Sam. *Flushed Away.* Paramount Pictures, 2006.

Burton, Tim and Johnson, Mike. *Corpse Bride.* Tim Burton Productions, 2005.

Chaffey, Don. *Jason and the Argonauts.* Colombia Pictures, 1963.

Del Toro, Guillermo. *Guillermo del Toro's Pinocchio.* Netflix, 2022.

Lord, Peter and Park, Nick. *Chicken Run.* Dreamworks Distribution, 2000.

Park, Nick. *Wallace & Gromit: A Grand Day Out.* National Film and Television School, 1989.

Selick, Henry. *Coraline.* Laika, 2009.

Selick, Henry. *The Nightmare Before Christmas.* Buena Vista International, 1993.

Sturges, John. *The Great Escape.* United Artists, 1963.

Svankmajer, Jan. *Alice.* Condor Films, 1988.