Film and Media Studies (MA) Theses   Dissertations and Theses

Spring 5-2021

Re-animating Post-Digital Cinema: [Animated] Fluidity and Hybrid Aesthetics in Tomm Moore's Celtic Trilogy

Thomas James Schwaiger
Chapman University, schwaiger@chapman.edu

Follow this and additional works at: https://digitalcommons.chapman.edu/film_studies_theses

 Part of the Film and Media Studies Commons

Recommended Citation

Re-animating Post-Digital Cinema:

[Animated] Fluidity and Hybrid Aesthetics in Tomm Moore's *Celtic Trilogy*

A Thesis by

Thomas James Schwaiger

Chapman University

Orange, CA

Dodge College of Film and Media Arts

Submitted in partial fulfillment of the requirements for the degree of

Master of Arts in Film Studies

May 2021

Committee in charge:

Nam Lee, Ph.D., Chair

Emily Carman, Ph.D.

Dawn Fratini, C.Phil.

CHAPMAN UNIVERSITY | Dodge College of Film and Media Arts

The thesis of Thomas James Schwaiger is approved.

_____

Nam Lee, Ph.D., Chair

_____

Emily Carman, Ph.D.

_____

Dawn Fratini, C.Phil.

April 2021

Re-animating Post-Digital Cinema:

[Animated] Fluidity and Hybrid Aesthetics in Tomm Moore's *Celtic Trilogy*

Copyright © 2021

by Thomas James Schwaiger

ACKNOWLEDGMENTS

ABSTRACT

Re-animating Post-Digital Cinema:

[Animated] Fluidity and Hybrid Aesthetics in Tomm Moore's *Celtic Trilogy*

by Thomas James Schwaiger

Tomm Moore's Celtic Trilogy, consisting of *The Secret of Kells* (2009), *Song of the Sea* (2014), and *WolfWalkers* (2020), displays an inter-medial hybridity and synergy of commercial and experimental elements that encourage a redefinition of animation with a focus on the innate qualities of fluidity in animated aesthetics. This fluidity in visual aesthetics and narratology honors the legacy of studio animation over the past century, while reintroducing technological and creative experimentation. This freedom further allows for authentic cultural (self-)representation of Celtic traditions in film.

Paralleling a history of cinematic theories by Arnheim, Cholodenko and Manovich projects a shared space for (live action) cinema and the animated film, which even predates the digital era. This discussion is complicated by the total conflation of live action and animated elements with the advent of digital cinema technology. This thesis introduces *photo-realistic* and *iconic animation* as new terminology to discuss animation with an emphasis on the visual qualities driving the medium as cinematic art form.

A thorough analysis of Moore's *Celtic Trilogy* reveals an evolution of animated aesthetics throughout the films, which includes the use of Art as tool and meta-language capable of reshaping the reality of the films, and a focus on fluidity in character and world design. The

digital processing space is presented as hybrid medium between physical and digital reality by reintroducing simulated physical stimuli and textures.

The culmination of the *Celtic Trilogy* presents animation as existential toolset to link the physical and metaphysical layers of the cinematic experience and projects the creative possibilities for animated texts of the future in a *post-digital* world that unites both analogue and digital art forms in a fluid interplay.

TABLE OF CONTENTS

Introduction

In a stylized animated spectacle, a young monk fights a mythological monster by reshaping reality with a stick of chalk. A pair of siblings races to the Irish seaside, traversing a series of ever-transforming watercolor illustrations. A young huntress' transformation into a wolf spirit dissolves her world of medieval art into a wilderness of animated rough sketches. What begins in the fashion of familiar animated works following in the footsteps of classical American animation rooted in heightened yet immersive realism, quickly transforms into a fluid, abstract world of artistic exploration. This captivating interplay of digital technology and visual experimentation encapsulates the novel approach to animation taken in Tomm Moore's *Celtic Trilogy*, comprising the feature films *The Secret of Kells* (2009), *Song of the Sea* (2014), and *WolfWalkers* (2020). The display of inter-medial hybridity and the synergy of tradition and re-invention found in the style and technology of Moore's works encourages a redefinition of animation and its underlying fluid qualities as existential tools to link the physical and metaphysical layers of the cinematic experience. Going against dominant realist tendencies in contemporary cinema, Moore's focus is on the visual qualities and formalistic experimentation with the source material.

Built on new creative opportunities facilitated by digital cinema technology, the films evolve established conventions of studio animation into new aesthetics and new forms of animated storytelling. The three films use digital technology in service of a hybrid aesthetic that reproduces the tactile layers present in traditional animation practices. This hints at a radical shift in the relationship of the spectators with the digital realm, which influences the interaction with animated texts on screen and has potential to reshape and transform the understanding of physical artwork.

1

A survey of critical theory shows an academic landscape increasingly interested in animation as the intersection between live action and digital cinema techniques. Tracing a legacy of theories focused on the shared space inhabited by cinema and the animated film negotiates a redefinition of cinema as form of applied animation. This revision continues into the digital era, which further redefines the spectators' relationship with animated texts through technological innovation. With the goal of deepening the spectator's understanding of animation as the technique and focus of study, I introduce two novel categories into the discussion of animated texts, emphasizing the aesthetic elements: the *photo-realistic* and *iconic*. Tomm Moore's works combine both aesthetic qualities, thus creating a unique hybridity in style and narratives.

Introduced in *The Secret of Kells*, the development of a meta-language focused on the arts expresses a malleability in animation art, allowing visual and narrative elements to conflate and fuse in the digital realm in an exploration of regional art styles and cultural story traditions of the Celtic realm. *Song of the Sea* builds on this inherent fluidity in narrative and visual aesthetics through the replication of physical textures and by capturing hand-painted artwork in a digital state of perpetual wetness. Furthermore, the film crafts a hybrid space in which myth and cultural history conflate in the form of a unique, nostalgic *chronotope*.[1] Finally, *WolfWalkers* combines and emulates the meta-layers of animated fluidity in a digital hybrid production leveraging advanced technology in service of traditional animation practices. The film balances artistic authenticity and innovation in the application of *post-digital* techniques that reconnect digital cinema back to the origins of animation in physical visual arts practices.

I expand on animated theories in the post-digital era by refocusing the analysis of animation on the fluid elements that are unique to the medium and the key to the innovation of animated texts to come.[2] This versatile approach sheds new light on our understanding of

animation and its relation to cinema, and encourages the development of new theories in order to prepare future artists, animators and critics for a new approach to the animated medium and the fluidity it inherits from the visual arts.

Theories of Animation: The Interplay of Iconic and Photo-Realistic Qualities from the Age of Traditional Animation to Digital Cinema and Beyond

We are intimately familiar with the wide reach of animation in the form of animated films, cartoon shorts, or animated characters that have become ingrained in popular culture beyond their origins on screen as sequential drawings. Despite our extensive exposure to animation in the form of cinematic, commercial and artistic storytelling, the term 'animation' and the life-imitating techniques and technologies it encompasses remain shrouded by the product, the animated texts themselves. The inability to clearly define *animation* as a concrete art form or single technique has made the term synonymous with the animated film as a peripheral category of cinema.[3] This complicates the study of animation in the digital era, which saw the perceivable borders between live action cinema and animated films completely blurred. Whereas the photo-chemical capture of live action material was interpreted differently from the creation of a scene through drawings due to its mechanical nature, this issue becomes more acute with the advent of digital cinema. Digital technologies make it impossible to distinguish between *filmed* and *animated* material in a shared digital processing space allowing fluid manipulation of all elements. Furthermore, a majority of cinematic productions, live action or animated film alike, seems to favor a focus on photorealism over formalistic experimentation. As a result, fewer animated works embrace a level of fluidity and formalist visuality innate to the medium. Despite an increase in critical attention on animation since the 1990s, the discussion of animation

remains largely limited to the study of studio history, commercial cinema, children's

entertainment, and influence on popular culture.

The goal of this thesis is to provide a new angle on the discussion of animated works as a

cinematic art in order to expand awareness of the animated aesthetics at work. Furthermore, I

wish to shed light on the underlying fluidity and hybridity, which already inseparably link

animated texts to the body of cinema and also hint at new, innovative forms of cinematic

storytelling as is present in Tomm Moore's *Celtic Trilogy*.

The difficulty in defining animation stems from the complicated history of the

intersection of human perception and replication of live motion in the arts. Animation spans a

variety of techniques and philosophies from the earliest artistic depictions of motion to the most

sophisticated digital technologies replicating photorealistic motion in digital cinema.[4] Even

though cinematic animation inherited its techniques and even physical production methods

directly from the visual arts, an enduring association of the fine arts and relevant painting

techniques is with *stillness*, framed in a singular image. What separates animation from the

representation of still life is the innate implication and indication of *movement* which, like the

film frame, defies any notion of a fixed state. The second point of confusion in the definition of

animation stems from the mechanical reproduction of life through photography, animation's

other parental technology. Unlike abstract painting or highly stylized cartoon imagery,

photography does not immediately appear pre-mediated via the work of an artist and masks its

degrees of visual manipulation in the final product. Despite this illusion of direct, mechanical

reproduction of an authentic, real-looking world, photography is no less manipulated by the

vision of an artist than a portrait painting. Whereas the distinction between hand-drawn

animation and live action cinema was more apparent in the pre-digital era, the advent of digital

4

cinema and the development of photorealistic computer animation has erased this preconceived distinction between *animation* and *cinema*; a discussion of one inevitably involves the other.

The total conflation of cinema and animation is not only the result of the proliferation of digital technologies. Instead, the transition to digital cinema is the culmination of the shared, immersive, world-building principles underlying and predating both the animated film and other forms of cinematic storytelling. Evidence of these shared roots can be found in the theory that the entirety of cinema is a highly contracted art form, as is the animated film. Furthermore, the subsequent (re-)definition of cinema as a form of animation builds on the medium's universal use of sequential images, as well as the composition of editing elements.

The beginnings of modern animated theory coincide with Rudolf Arnheim's approach to cinema as highly constructed, formalistic medium of art and, consequently, entirely reject theories arguing for a natively realist quality in the medium, such as Bazin's. Even though Arnheim does not address animation explicitly, Arnheim's approach to the then-nascent motion picture industry frames cinema as extension of the visual arts, thus uniting both live action and animated films in their shared ancestry in painting and photography through the solidification of a cinematic aesthetic language. Even when these artificial techniques are masked from the spectator to various degrees, in order to recognize and accept a reality on screen as believable, the index requires manipulation and framing, such as in the precise framing of a cube in relation to the camera to make it recognizable as dimensional object instead of a single plane (Arnheim 10). Arnheim's example of the cinematic depiction of a cube in consideration of angles and position to the camera is of as much concern to the cinematographer of a live action production as it is to the animator wishing to convey the necessary visual information to allow correct recognition of the object on screen. The result, no matter how untouched and authentic a visual

might appear on screen, is a highly constructed and manipulated object of artistic intent, no different from a drawn portrait or scenic painting. The strong focus on photorealistic qualities in live action productions and contemporary animation tends to overlook the deliberate, formalistic elements at the core of cinematic storytelling. This neglects the innate degree of fluidity in visual and narrative aesthetics integral to animated productions especially as digital technologies facilitate the approximation of photorealistic depiction, leading to less visual diversity between projects. Recruiting the digital in service of these fundamental formal elements, however, speaks to the potential in the hybrid use of multiple aesthetic styles, an innovation pioneered by the films of the *Celtic Trilogy* as a roadmap to the rediscovery of experimental formalist techniques first teased by Arnheim.

Predating the potential (re-)introduced in the digital era, the apparent neglect of animated productions in the critical discussion of cinema as (live action) art has prompted a series of new scholarship in animated theory since the 1990s.[5] Before the study of digital cinema focused on a universal processing space, a new holistic angle outlined animation no longer as a sub-genre of live action cinema, but as an inseverable connection bridging human consciousness and the use of art as an existentialist proto-tool to interpret physical reality in an abstract way. In reverse, this academic blind spot applied to the discussion of animation, which has continually neglected the application of film theory to animated works. This was in spite of a significant library of theorists inviting the intersectional nature of such cinematic animation theory, including *Eisenstein On Disney*, or Deleuze's *Cinema 1,* both of which do not exclude animation from the discussion of cinema and even position the discipline at the center of the reality-shaping processes in cinematic aesthetics.

As spectators, our understanding of animation as a cinematic medium is rooted deeply in the association of fluid movement with life, and in the transposition onto the screen of our lived experience with worlds and objects that are alive and in constant motion. The simplified definition of animation by influential animator Norman McLaren as "movements-that-are-drawn," crystallizes the notion that movement is part of animation on every incremental level rather than a result of only the cinematic mechanization of animated drawings in the screening process (Cholodenko 1991, 18). It is, therefore, possible to trace a connection not only between animation and movement, but also to detect implied motion in individual animated drawings. Motion is as much part of cinematic artistic processes as it is at the core of drawing and painting in which both line and value, the underlying components of construction in two-dimensional art forms, depend on the mastery of an intuitive understanding of how forms and bodies behave in space and in motion.[6] These principles carry over seamlessly to the construction of scenes and frames in the cinematic fine arts, which are deeply indebted to the visual fine arts and experimentation with which in the development of a shared cinematic language built on the inherent fluidity of motion. Moore's films are among the first to center-stage this intersection of art and fluid motion in design and narratives, honoring established techniques and finding new potential in the artistic depiction of motion action.[7]

The necessity for the centering of movement in the discussion of animated texts is illustrated in the form of the "*animatic,*" which comprises both medium and technique denoted as "in-betweener of inanimate and animate," connecting the life-giving, or *animating*, principles of perceived motion in nature or art, and life itself (Cholodenko 2011, 70). The process of *animating* endows a subject with motion, be it organic or lifeless, thus infusing the implication of life into the artistic text.[8] Nevertheless, the theorized process of the animatic itself remains

invisible as it becomes the intangible spirit behind the art on display or "the groundless 'ground' of all arts" (Cholodenko 2011, 71). Therefore, the inherent animated fluidity in the form of the animatic is equally a process and a presence encompassing the transcendental space inhabited by the arts, fusing both motion and life depicted. This allows characters, places and worlds to exist believably in artistic depiction, move in the absence of motion, and create the '*Illusion of Life*' beyond the physical existence of exact counterparts in space and time.[9] *Animation*, therefore, is understood as the process that infuses the arts with motion and perceived life—including cinema —while the *animated film* refers, more specifically, to a certain category of films relying on more stylized and art-centric aesthetics to create their narratives and establish their worlds. This analysis further mirrors the discourse on the animated text and animating techniques in the *Celtic Trilogy*. All three films draw attention to animated (i.e. moving) art in the creation of a self-reflexive meta-narrative centered around artwork as depiction, interpretation, and preservation of life and cultural heritage.

The understanding of animation as encompassing cinematic technique and as fluid artistic text becomes especially important in the shift from analogue filmmaking to digital cinema, which successfully blurs and eradicates the boundaries between live action productions and fully (computer-)animated texts. While this conflation is hinted at in theoretical form in previous scholarship, Lev Manovich addresses in detail the technical and artistic culmination of cinema as entirely animated art form in the digital space. The technological and ideological fusion of live action is not solely centered around the seamless integration of (computer) animation into the aesthetic realm of live action productions. In return, the re-introduction of simulated physical elements into the space of digital animation opens new possibilities for visual experimentation, as is the case in Tomm Moore's approach to digital animation adhering to a 2D style.

Whereas studios, scholars, and critics commonly rely on the underlying medium of production to distinguish between different iterations of applied animation as *hand-drawn*, *stop motion*, or *computer-generated* (i.e. *3D CGI)* animated films, the presence of hybrid media and the total conflation of digital live action and computer-animated technologies makes a focused discussion of animation and its individual elements much more difficult. Inevitable questions arise over where to draw the line between "live action" features and computer animated creations. Should a digital 2D-style film applying hybrid technologies be considered "hand-drawn" and considered in the same camp as hand-painted cel animation? Does the use of digital technology in recording and post-production stages shift stop-motion and live action films into the category of computer animation? The total transition of cinema into the digital space is seamless, the implication of this translation, however is monumental: "while retaining the visual realism unique to the photographic process, film obtains a plasticity that was previously only possible in painting or animation" (Manovich 301). Digitally photographed content does no longer exist in the form of a definite negative but inhabits a digital space that can be manipulated and transformed natively. Visual effects and computer animation techniques inhabit the same realm as photographed images converted to digital data. As culmination of preceding theories on the intersection of animation techniques and (live action) film, in the digital era, cinema as a whole is redefined as active application of animated elements, only one of which consists of live action footage (Manovich 302). The digital, thus, realizes the complexity innate to animation in its fluid composition of diverse elements in an aesthetic and technological hybrid approach.

In order to analyze in more detail the complex aesthetic nature of animated texts, I propose two visual angles on animation in the form of *photo-realistic animation* and *iconic animation*. The distinction of these two categories is a modification of the use of *dynamic* and

9

iconic styles in the visual fine arts to refer to different modes of selection, interpretation and

construction in drawing and painting techniques.[10] One technique stresses life-likeness, the other

the artist's rendition and the medium itself as forms of artistic perception, mediation, and

organization. Whereas one mode masks its techniques to present a *dynamic* image, the other

draws attention to its highlighted *iconic* choices. Finally, dynamic and iconic modes in the arts

and animation are never mutually exclusive and commonly appear together in hybrid approaches

to serve a desired effect in the resulting artistic product. Due to the hybrid nature and the

underlying application in both visual art and cinema, an application of the same principles

focused on aesthetic goals to the discussion of animated films, in total or just a single shot, is

inherently fluid.

    Photo-realistic animation is rooted in techniques prioritizing cinematic photorealism,

here defined as a cinematic aesthetic mode with the goal to immerse the spectator through the

establishment of a reality that is perceived as organic while masking the techniques and

underlying elements constructing these worlds.[11] The hyphenated term stresses a focus on

mimetic photorealism as well as on the association with a realist approach to cinema. Technology

is at the service of this reality with the goal to replicate a physical world as closely as possible, or

create the sense of a world rooted in organic, realistic, or logical natural laws. Dominant in a

majority of live action productions and animated films emulating an organic, virtual live action

aesthetic, the explicit focus on realism also extends into the heightened reality depictions in

many traditional, hand-drawn features. Therefore, cartoon worlds, in their inherent fluidity, can

prioritize stylization and formalistic elements while also serving a photo-realistic aesthetic goal

in their world building. Further techniques that support a photo-realistic animated approach

include the use of photorealistic visual effects that blend with the image in-world while

strengthening the effect of the camera as a clear window and the spectator as an onlooker rather than participant in an active exchange with the form of the medium itself. As a consequence, photorealistic 3D animation, which intends to be mistaken for photographed, indexical imagery falls into this category. Digital technologies addressing the "limitations" of two-dimensional imagery in cinema, as first addressed by Arnheim, re-introduce depth, and three-dimensionality to the cinematic experience in hopes to advance the levels of total immersion. Virtual reality [VR], and stereoscopic 3D technologies simulate the three-dimensional space familiar to the spectator in order to immerse the onlooker more deeply in the reality presented on screen. Finally, the principles behind Rotoscoping, the tracing of cartoon imagery over live action reference footage which found use in early animated aesthetics, and its descendent in the form of motion capture [mocap] technologies similarly rely on the connection to the index in the real world and the simulation of action, motion and aesthetics inspired directly through replication of photo-indexical material.[12]

The goal of outlining these categories is to draw attention to the potential in a hybrid application of both styles, especially in the digital era, which allows the foregrounding of iconic formalist techniques to reach new aesthetic goals in animated features, as is the case in Tomm Moore's utilization of digital animation technology. While the alluring potential of photo-realistic techniques lies in the replication of the familiar, the fascination of the iconic angle lies in the re-animation of realities to reinvigorate texts and conventions in novel ways. The animated film can be rediscovered as space for technological and aesthetic innovation that does not exclusively use digital cinema in favor of realist texts. Instead, the *iconic* aligns with the formalist experimentation that has been key to the solidification of both live action and animated films since the advent of early cinema.

Iconic animation is rooted in the active re-interpretation of the index. The focus is on artistic mediation and selection, which prioritize the transformation of source material while drawing attention to the medium of construction itself. Less concerned with the total and complete replication of a photorealistic illusion, it frames the artistic mediation process itself and the selection process in the artist's (i.e. animator's or filmmaker's) observation and choice of individual features highlighted in a form of formalism that frequently pushes the visuals into abstract and modernist territories of experimentation and expressionism.[13] Hand-drawn processes and cel animation are frequently associated with this aesthetic through the use of stylized imagery and fewer active efforts to mask the medium's contribution to the creation of the world. In the transition to digital production, a variety of productions preserve a degree of "hand-drawn" aesthetics even if computer technology transforms the creation processes of a 2D-style animated work drastically. The rise of hybrid productions successfully blends computer-style animation with textures and visual practices from the hand-drawn era in order to re-create the looks and aesthetics associated with traditional, manual modes of production even in the complete absence of a frame-by-frame animated approach completed start-to-finish in physical drawing media commonplace in days past.

While texts following a hand-drawn style have exaggerated their iconic and stylized elements for comedic and experimental purposes and rarely denied association with formalistic tendencies, computer-animated 3D (i.e. CGI) productions are much more difficult to address. Whereas the rise of computer animation is rooted in visual effects and has undoubtedly striven towards the goal of blending with filmed material seamlessly in the highest degrees of photo-realistic mimicry, I argue that the majority of computer-animated features builds on an underlying iconic aesthetic. Considering early stages of art direction, character design,

12

storyboarding, or even rough animation tests executed in hand-drawn animation techniques, the immediate artistic mediation of an index is at the core of the medium. The result is a stylized (2D-based) image that is converted and re-animated into a constructive 3D space rather than copied and reconstructed as photo-realistic mirror image to be mistaken for the referential index itself.[14] The application of high-fidelity graphics, dynamic lighting, and attention to organic textures only adds a simulation of depth and detail to computer-generated imagery in the final stages of production. While all the steps of conception are deeply engrained in iconic aesthetics, the most photo-realistic quality in computer-animation is the ability to mask the steps leading up to the final image, alluding once again to a deep-rooted hybridity in animation style and technology. I will illustrate the interplay of iconic and photo-realistic elements in my discussion of Tomm Moore's *Celtic Trilogy*, which foregrounds the innate fluidity of animated aesthetic elements in a digital hybrid approach building on deep understanding of animated theories and principles, as well as experimentation with form and medium in order to develop a new meta-language of animated art. The connection between animation art and physical artwork is at the core of *The Secret of Kells* in the form of a meta-narrative addressing the fluidity in character and world design. *Song of the Sea* expands on the discussion of art in context of post-colonial cultural heritage and preservation through the masked use of digital art technologies. The digital and narrative hybrid elements culminate in *WolfWalkers*, which innovates through the use of VR technology to reverse-engineer digital cinema while strictly adhering to a 2D aesthetic.

The Secret of Kells: Evolving Animated Traditions into a Meta-Language of the Arts

The success and appeal of the three animated films comprising the *Celtic Trilogy* (also referred to as *Irish Folklore Trilogy*) stems from the application of animated aesthetics in novel ways, fusing physical and digital traditions. By stepping outside the conventions and practices associated with animated films of the past century, Tomm Moore and his creative team are able to tap into the universal appeal of studio animation mixed with a fresh sense of experimentation while exploring digital frontiers that enable new aesthetic and technological hybrid approaches to animated storytelling. This exploration is mirrored in the narratives of Moore's films, which aim for a similar fusion of tradition and innovation by introducing elements of Celtic folklore and presenting them in an authentic, yet easily accessible framework of appealing characters, art styles, and music. The wide-reaching appeal of the trilogy relies equally on the familiarity with a cathartic, Aristotelian story structure and a freshness resulting from storylines taken from underrepresented cultural source materials in consideration of a post-colonial lens. Finally, the films enlist digital technology to create an entirely new aesthetic distinguishing the films from both, traditional hand-drawn works and studio-standard CGI animation. Displaying a strictly hand-drawn look, yet digitally composed, the technology masks itself while re-introducing layers of physicality and texture into the digital animation process.

The Secret of Kells is keenly aware of animated principles of Western studio animation. With a strong focus on cinematic construction, appealing characters, fluid animation, and emulation of a cel-animated look, Moore's film immediately appeals to the public consciousness familiar with any animated work of the past century. The film, however, does not intend to simply recreate studio traditions but actively breaks these established principles to go against them in favor of a more illustrated and experimental approach rooted in cultural patterns and

elaborate symbols. With a strong focus on the local creation myth surrounding the eponymous Book of Kells, the film follows Brendan, a young monk whose life's work will be the illustration of the mythological artifact. Weaving a fictional tale around the local legend of the Biblical book's survival in the midst of a hostile foreign invasion, the Book of Kells ultimately becomes the protagonist, relegating Brendan to the role of a literary patient in service of the book, or rather of the arts. Fiction and folklore elements enter a discourse on art as narrative and societal cornerstone that is manifested in both plot and art direction.

The design of the monastery of Kells plays with perspective, uniting multiple-angle visuals drawn from medieval artwork. This supports the multiplicity of the strict religious rules guarding the settlement. Engaging in a conversation with the underlying constructedness of cinema, the film prioritizes an iconic reinterpretation of animation art and background design. The constant contrast of geometric depth and flatness in design manifests the film's world as historical illustration while re-animating the elicited resemblance to art history through fluid movement and character design that aligns with modern animation. Moore describes the style as "geometric and perspective-less" in attempts to represent "the characters' personality as well as showing the influence of medieval art" (Moore 2014, 44). In a parallel to the monks' quandary having to prioritize war preparation or cultural preservation in the arts, the backgrounds unite multiple spatial perspectives while framing a discussion on Christianity in ancient Celtic symbols, stressing similarities among cultures over dissonance in beliefs. What *The Secret of Kells* presents as cultural undertone becomes central to the plot in the final film in the trilogy, *WolfWalkers*, which centers around the paradox of the colonial nature of Christianity in regards to ancient Celtic religious practices. This rich meta-narrative is also presented in the multi-ethnic

cast of clergy, extending the discourse's universal significance equally to the contemporary spectator.

The stylistic exploration also extends to character design. Uniting universal Hollywood appeal with European arthouse experimentation, the characters mimic a shape-based stylization drawn from mid-century aesthetics. Whereas modernist experimentalism generally occupied a separate space outside the heightened reality approach proliferated by US studios, *The Secret of Kells* creates a harmonious hybridity of both styles cohabitating the world on screen, which reflects this multiplicity in every aspect. Forsaking distinct silhouette shapes in their designs, the monks are largely geometric shapes—some brothers elicit round amicable shapes while the Abbot towers over Brendan like a monolithic Gothic statue.[15] A further example is the appearance of the forest fairy Aisling and the mythical cat Pangur Bán, who simultaneously embody complementing designs to Brendan's (in color design and shape) and introduce an incorporeal fluidity that transcends their physical shapes.

Aisling's introduction in the mists of the forest captures the transcendental nature of the character. Reflecting a sensibility for the supernatural in Celtic mythology, which endures in contemporary Irish culture, the forest fairy Aisling draws attention to the fleeting moments of materiality in the film. Shapeshifting from gossamers of mist into a wolf, then into a forest spirit, the physically unstable nature of the character does not question the integrity of the character, but calls attention to the narrative, focalized through Brendan's growth as an artist, which presents Aisling in whichever shape needed to visualize the inner psychology of the moment. In a similar fashion, Brendan is unable to stay away from the forest, which gradually becomes the visual *Other* to the monastery. The lush space teeming with fluid lines woven from Celtic symbols stands in stark contrast to the visually limited religious settlement conceived in rigid perspective.

When Brendan is locked away as a result of his disobedience by his uncle, the Abbot, Aisling

brings the fluidity and freedom of the forest to the tower of Brendan's incarceration. The fairy

unlocks cat Pangur Bán's power to transform into a mist spirit.

Though introduced unmistakably in the form of an "animal sidekick" familiar to fans of

Western studio traditions, Pangur Bán transforms and subsequently navigates the medieval,

multi-perspective world in order to steal a key located above the headboard of the Abbot. The

narrative neither investigates nor complicates this transformation, which allows Brendan to break

out of his physical and mental prison, leading into the film's climactic confrontation. The

significance of this break with traditions of spatial consistency in animation is not only the

awareness and emulation of masterful animation traditions—such as consistency and appeal in

character design—but also the bodily fluidity exhibited by the characters which matches the

medium. Rather than mask the characters' origins in artistic media, Moore's approach actively

encourages comparison of the characters with the drawn (and painted) medium. As a result,

characters are able to fuse with backgrounds, shift shapes and transform with the ease of a pencil

stroke. At its core, *The Secret of Kells*, is a tale of cultural traditions found in the arts, and the

fluidity in the physical media at work stresses this importance beyond the existence on screen.

The motif of fluidity in art and medium is also at the core of the film's central conflict.

This is manifested in a heroic battle Brendan has to fight against the mythical monster Crom

Cruach. The fight is not only a frightening battle against a larger-than-life monster in a cave, it

stands in for Brendan's task to master illustration in order to preserve his story in art, and the

story of his home, which is threatened by a looming Nordic invasion. After his escape from the

abbey, Brendan crosses the forest and steps into the den of the villainous monster, ready for the

confrontation. When the intricate animated world dissolves and the young monk drops into a

dark abyss below, the film's aesthetic shifts drastically into an abstract, supernatural space governed by glowing symbols and patterns. The dissolving world of the monastery and the forest —which, for the first part of the film, elicited a highly iconic and stylized aesthetic in their use of perspective and stylization—suddenly feel more dynamic in comparison to the abstract void of Crom Cruach's lair. This shift extends the incorporeal fluidity of the mythical characters into the physical world of the film. What ensues is not the traditional hero's battle against the monster fought with swords until a satisfying conclusion is apparent in the monster's climactic defeat. Instead, the battle is a plunge into the psychological core of the story. As Brendan fights Crom Cruach, the monster slithers across the darkness, unable to be captured fully in a single frame as it gradually embodies the very visual pattern with which Brendan has struggled during his apprenticeship. The glowing monster provides the sole source of light, its very presence illuminating the hero as much as it poses a threat in its vicious attacks from all angles. The monster's textural complexity equally alluring as it is disorienting in its animation. The battle culminates not in the hero's dominance over the monster through brutal defeat but through the use of art itself as a tool. Brendan narrowly escapes the monster's relentless assault by caging in Crom Cruach with the help of a simple stick of chalk, which Brendan wields as reality-transforming mechanic. Mastery of art, not of the sword, becomes the meta-language to gain the upper hand. By the end of the struggle, shades of cinematic realism have entirely dissolved and the filmic world commits to the iconic language of the medium itself. Nevertheless, the narrative throughline was only strengthened by the unconventional choices, which were possible due to a balance of traditional skills and technological innovations of the digital era.

The narrative expresses its multiplicity in the practical use of art as a weapon to subdue the beast synonymous to artistic complexity. This is accomplished by drawing attention to the

iconic animation techniques that highlight the medium of creation and the physical art materials involved. The iconic elements furthermore operate on narrative, visual, and plot-related levels, cross-pollinating narrative and visual aesthetic developments. The resulting meta-language of art unites both photo-realistic and iconic degrees in animation art in a fluid interplay without endangering the immersive qualities of the story. The film resolves the meta-narrative in tandem with the plot through a denouement that features a grown-up Brendan traversing across a triptych of paintings created in multiple artistic media. Brendan transforms according to the media of the backgrounds until until the character himself becomes an illustrated figure in the Book of Kells. The development of a visual and narrative meta-language draws attention to the artistic medium, which is equally protagonist and creational (i.e. *animating*) element of the world. More importantly, it does not present (animation) art as a static, masked or delineated entity, but as an organic and fluid interaction between the world and the characters fusing and bleeding into each other.

This interplay of plot and meta-narrative is made possible by the technological and aesthetic hybridity at play. By actively engaging with the artistic media involved on both narrative and technological levels, the film pioneers a new form of animation in the digital era. The novel hybridity in question emerges from the combination of photo-realistic animation elements, found in the imitation and recreation of real-world, and physical art media in the digital space. This includes the reintroduction and simulation of physical textures. In return, the content and depiction in these artistic creations incorporates highly iconic aesthetic elements in their reinterpretation and re-animation of reality. The process, which the successive films in the trilogy build on and emulate, is not a mere transition of 2D art into the digital realm, nor is it the use of CGI to simulate the look of 2D aesthetics. Instead, Moore's approach uses digital

technology in service of composition and transformation of animation art while firmly reclaiming a sensibility for the fluidity found especially in the iconic qualities of animation. This approach makes it possible to adhere to a 2D style in a digital processing space without sacrificing the physicality and textures involved in manual animation production.

While the digital remains masked as invisible production space rather than medium of creation itself, the sole explicit use of CGI occurs in the Nordic invasion of the monastery settlement. The invading warriors are presented as static, computer-generated shapes in stark contrast to the organic, drawn characters and backgrounds. An army of computer-generated clones overruns the hand-painted world. Furthermore, the computer-animated shapes are unable to blend with the backgrounds, deliberately separating the machine creation from the organic. Unlike the main characters, the invaders are static in shape, unable to fuse and blend with backgrounds of the same physical medium. The deliberate simplicity in CGI and hand-drawn elements works towards vastly different goals. The literal clash of styles stretches the visual cohesion of the film and presents the invaders as threat to the characters and aesthetic balance of the film. As resolution, the film utilizes stylized special effects of smoke and fire to reunify the aesthetics and blend the contrasting visuals on screen. Despite the reclaimed visual harmony, Kells falls. The final resolution occurs in Brendan's return to Kells with his finished artwork, as the character and his artistic creation become part of the Book of Kells. In the digital recreation of illustrations from the real-world index, the film achieves the explicit hybridity of photo-realistic qualities while re-animating the world referenced in a highly iconic fluidity. This complex interplay infuses photo-realistic qualities into the spectacle, then pushes the transformation into the experimental realm, actively reshaping the reference art in the scope of the (meta-)narrative. The role of real-world art as connection between the fictional world of *The*

Secret of Kells, and the spectators' experience with the physicality in the creation and observation of artwork becomes a central motif in Moore's works and continues to evolve in the succeeding films in the *Celtic Trilogy*.

Song of the Sea: Digital Fluidity through Regional Chronotopes

Part of the success of *The Secret of Kells* stems from the cultural and geographical roots of the producing animation studio Cartoon Saloon in Ireland. Driven by an enduring need for self-identification against a more dominant cultural environment it is inevitably connected to, Irish stories are deeply rooted in local mythology, whose underlying influence continues to contribute heavily to the flair and aesthetic of local stories and art across Europe. Irish productions have continuously enjoyed critical acclaim worldwide due to an innate resistance to commercial trends, thus aligning itself more with European, especially French, arthouse aesthetics (Barton Loc. 965 ff.). This postcolonial relationship between Ireland and a mainstream British culture with which the country is often associated globally is exposed in Cartoon Saloon's works focusing on regional Celtic cultures.[16] The tradition of Irish animation is driven by a quest for narrative conservation and tradition as it grew most substantially out of ex-Disney animator Don Bluth's efforts to relocate traditional animation production to Ireland after suffering some commercial disappointments in the Hollywood animation studio system (Barton Loc. 1036 ff.). The adoption of a system relying on European co-productions and, later, funding through European Union cultural initiatives helped European animation to evolve independently from US studio animation, which allowed relative freedom in narrative and visual foci. In addition, there is an underlying colonial nature in the dominant styles proliferated and exported by US studios well into Bluth's independent era, a visual tradition Tomm Moore and his team try to break by

deviating from a monolith style adhered to in both, US hand-drawn and CGI productions (Walsh in Barton Loc. 1076). Speaking to this underlying colonial power structure, a narrative and visual focus on local arts revives a public interest in a cultural heritage that has endured but does not necessarily reflect a post-modern self-image and cultural export of local traditions.[17]

At the core of Irish animation, therefore, stands a cultural (self-)exploration that deals with the fundamentals of what it means to be Irish or Celtic. Animated projects engage with the need to balance a novel image of regional self-discovery and cultural export to create a product that reflects local characteristics without alienating potential global (or local) audiences unfamiliar with the topic. Furthermore, the necessity to co-produce features in tandem with other European studios reflects the urge to represent contemporary circumstances and demographics, as well as the importance of animation to act as ambassador of regional culture and the arts. Whereas *The Secret of Kells* contains its narrative and visuals largely in the realm of myth, *Song of the Sea* actively engages with a nostalgic angle on the cultural and sociological space of Ireland in the past, which is reflected in the film's strict adherence to a 2D style (Moore 2015, 15). This combination of physical and digital production methods pioneered Cartoon Saloon's style, and continues to mask the digital in service of a hand-drawn aesthetic.

Song of the Sea carries over the aesthetic and technological experimentation from *The Secret of Kells*, but focuses more on new narrative possibilities in animation supported by its exploration of local art traditions. Unlike the symbolic and national mythology presented in *The Secret of Kells*, *Song of the Sea* centers around a single family in pre-modern Ireland. Mythological elements are woven into the fabric of Ireland of the past, drawing continuous parallels between the legend of the dormant giant Mac Lir and the protagonists' father's grieving the loss of his wife. Centered around the family's life on a small island tending to a lighthouse,

the film not only surrounds imagery with the sea as central motif but also calls back to Irish film history.[18] The sea and the element of water are central to the film's narrative and visual aesthetics on every level. The film mimics a storybook style in its illustrations and centers water as element of creation in both plot and art design. The film adheres to an iconic watercolor scheme and "a muted palette [which] lends certain sequences a dream-like look, which then transforms into full vibrant colour for moments of action" (Barton Loc. 1285). Through digital means, the film re-introduces a tactile, photo-realistic layer into digital filmmaking by simulating physical textures of the manual media used.

Song of the Sea capitalizes on this intersection by bringing its world to life through digital technology, evoking the innate familiarity with the physical media of watercolor, gouache, or ink, and animating them in the digital space. Emulating the level of hybridity established in *The Secret of Kells*, the use of water effects in *Song of the Sea* add a medial fluidity to the watercolor illustrations that captures backgrounds, characters and effects in a perpetual state of fluid wetness. Background paintings mimic the creation of watercolor and gouache artwork but unlike their physical counterparts, the digital paintings continue to transmute, preserved in their eternally wet states, continuously malleable and able to reshape with the narrative as needed. Despite the heavy reliance on digital technology, the film successfully masks its production methods due to the spectators' familiarity with the physical media simulated, drawing on a strong photo-realistic quality in the re-introduction of physical textures and stimuli while adhering to an iconic reinterpretation of reality in the film's visual aesthetics.

The film's expository scenes open with a paint brush illustrating the central song's story on paper. The traditional storybook opening is framed in a vignette of fading paint that spans the transition from illustrations of mythology to the introduction of the central characters. The

transition is fluid, achieved by perpetually-wet watercolor transforming into different locales. Even though the brush strokes become a literal frame, the borders are never solid as they mimic the waves surrounding the family's home on the small island off shore. The design is inherently circular, which frames the family unit, the setting, and even the main titles in interconnected patterns. It is important to acknowledge that even circular compositions as these are never static and continue to transmute in their wet medium. The film crafts its story and composition around the eponymous "Song of the Sea," allowing for a circular structure in story elements past and present that conflate in the film's climax. Protagonist Ben loses his mother to the sea in the prologue, a plot element that risks being repeated in the case of Ben's sister Saoirse in the film's final scenes. Water becomes the central element to give and take life, similar to the (digital) colors making up the world. Visual and narrative aesthetics intersect in the illustration of the song, which parallels the story of the grieving giant Mac Lir and Ben's father, allowing both realms to come to life in the shared medium of the storybook. Nostalgia is the central element to connect past and present. Using a visual style familiar to audiences from childhood illustrations makes the story universally relatable and allows immersion into the world of a specific cultural heritage an audience might not be deeply familiar with. This also allows for the (re-)introduction of mythological figures and linguistic elements, such as the use—and preservation—of the Irish language in song. This (re)presents a version of Celticness fresh to global audiences and perhaps even to some local spectators.

In a similar fashion, the narrative of *Song of the Sea* is hesitant to present the past as static entity and allows mythology to bleed into the modern world, not only to satisfy the nostalgic theme, but to present the need for cultural heritage, family and sense of belonging in the navigation of an ever-changing environment. The Ireland presented in the film is not a

snapshot of one single cultural image as the accents and geography on display paint a diverse picture rather than anchoring the story in an exact geographic location. *Song of the Sea* paints a fluid version of Ireland, presenting a coexistence of tradition and innovation, physical media and digital, inspiration and re-invention. Moore's vision similarly bleeds manual and digital animation techniques, emulating and reanimating a style that honors Hollywood's accomplishments and pushes beyond the established commercial aesthetic conventions.

In addition, a universal appeal arises from the strong local character in narrative, music, and visuals. This presents a personal connection of the filmmakers to the world on display, an artistic mediation of the subject rather than realist recreation, which mirrors strongly the local flair and style of auteurs of the animated film such as Studio Ghibli's Hayao Miyasaki, whose works influenced the production's approach to cultural remediation (Moore 2015, 18). *Song of the Sea*, therefore, presents the country to itself, and to a global audience by framing "Ireland as a chronotope, where time and space intersect" (Barton Loc 1307). The notion of a fluid *chronotope* mirrors the timelessness present in art direction and plot elements drawing from multiple periods without anchoring the style in one state by never letting the (digital) ink dry, allowing for continued reshaping throughout the plot development.[19] Like *The Secret of Kells*, *Song of the Sea*, therefore uses multi-media "signifiers of Irishness" to produce a local character that unites cultural and narrative elements in a "hybrid space" that feels authentic to locals and does not alienate audiences unfamiliar with the cultural background of the setting (O'Brien 38). The hybridity of representation and re-imagination central to the *Celtic Trilogy*, therefore, engulfs the narrative realm as much as it does the visual aesthetics.

The cultural, linguistic and mythological traditions in *Song of the Sea* are crucial to the film's tone and aesthetics. The appearance of mythological characters, such as the omniscient

druid Seanchaí with thousands of strands of glowing hair woven around an underground cavern, not only fulfills a role of cultural representation but also enables the creation and composition of intricate scenes with multiple layers and elaborate patterns in motion. This use of the digital opens up new possibilities to films that might not have been possible in this scope considering time and budget constraints especially in comparison to Hollywood studio productions.

The culmination of Moore's aesthetic approach to *Song of the Sea* occurs in the climax. After a race against time to reunite Saoirse with her magical coat by the sea, she is revealed to be a Selkie, a mythical seal spirit. The pair of siblings is reunited in the arms of their father, an image parallel to the circular visuals in the opening and forming a fractal pattern repeated by the cliff overlooking them in the form of the petrified giant. The scene and its environment are drained of the glow and movement present in the rest of the film until Saoirse regains her power to sing her magical song. Finally, the song visualizes in the form of glowing aurora lights washing over the country out into the sea, which re-animates the watercolor artwork both on the water and on land. The dancing Northern lights infuse the lifework in the painted backgrounds, reveal mythical creatures hidden in the artwork, and reawaken them as characters. This is a reversal of the fluidity found in the characters of *The Secret of Kells*, which fuse with the backgrounds, and instead *Song of the Sea* reawakens characters found in the painted environments.

The film's final scene unites mythology and the present in a glowing sun over the water: A vision of Ben and Saoirse's mother heads off into the distance along with the mythical giant. The fusion of light and water effects creates a twilight space, sunset or sunrise, and the designs slow to mimic the illustrated style in the prologue. The digital effects reflect patterns onto the virtual body of water while also retaining the stylized shapes of Celtic patterns in the individual

26

waves, cliffs and rays of light. This enhances the photo-realistic qualities of the watercolor paintings while the fluid paint elements retain the iconic re-imagination present in the artwork itself. The resulting hybrid image fuses both aesthetics with the help of the digital as invisible compositional element and vessel for immersive storytelling.

The aesthetic contributions of *Song of the Sea* outline not only a new visual path for animated works and new possibilities in animated storytelling, but touches on a liminal space between the physical and digital. The aesthetics in *Song of the Sea* are neither exclusively physical representations of concrete artwork, nor exclusively digital creations. Instead, the re-introduction of physical textures simulated in the digital realm and, inversely, the enhancement of physical painting methods hints at a shift in our understanding of the digital space.[20] This frame of discussion is no longer limited to the realm of cinema but ushers in a hybrid model of physical and metaphysical layers in our interaction with the world—the visible and invisible as pioneered by animation and VR technologies. Such inter-medial fluidity in technology and artistic perception does no longer attach itself to the boundaries of the post-modern or even the digital era; instead, it comprises a new collection of texts framing the *Post-Digital*. This outlook stands at the core of the third and final film in the *Celtic Trilogy*, *WolfWalkers*.

WolfWalkers: Technological and Aesthetic Hybridity in Post-Digital Animation

As the final entry in the *Irish Folklore Trilogy*, *WolfWalkers* continues to evolve the hybridity of technology and reanimation from the previous films and gives center stage to the fluidity in narrative and visual aesthetics as a result of inter-medial production methods. The film furthermore highlights a much stronger focus on the digital in the primary global distribution through tech giant Apple's streaming service and limited theatrical engagements, rather than a

traditional theatrical run followed by home media releases.[21] The digital is no longer contained solely in its functions as means of film production and computing but has transformed the public's engagement with cinema and all media, thus further signaling a shift in the physical-digital relationship in support of the Post-Digital. At the time of its streaming release in December 2020, *WolfWalkers* speaks to a world in constant change; its final stages of (post) production were impacted by the outbreak of the global coronavirus pandemic. The commonplace use of digital production and computer technology allowed the team to complete the feature remotely, as the producers discussed in several interviews while stressing the importance of digital technology not only to the film's production but as crucial means to stay connected across borders managing co-production logistics (Desowitz). The film's story about shapeshifting and the fluid transformation of characters and their worlds not only continues the narrative tradition set by *The Secret of Kells* and *Song of the Sea*, it also addresses directly a world facing uncertainty when confronted with such fluidity and unpredictability in our daily lives as audiences.

Whereas the narratives in the first two entries were predominantly driven by and focalized through young male characters, *WolfWalkers* features two female lead characters. Set in medieval Ireland in a time torn between native cultural elements and English settlement and colonization, the film hones in on the topical conflict 'man versus nature,' positioning the film in between the influences of traditional Hollywood animation with its Eurocentric, past-oriented narratives and a strong focus on the environment and human interaction with nature central to Japanese animation. Robyn, a hunter's daughter, is thrown into the midst of this conflict when she meets Mebh, a wild child of the forest who passes on the ability to transform into a wolf to Robyn. As the titular wolfwalkers, the girls transform into spectral wolf spirits while their

physical bodies are asleep—an Irish take on the legend of the werewolf—which signifies equally

freedom from the constraints of the human settlement and the embodiment of fear lurking in the

forests in the form of the wild beast.

The significance of a female heroine highlights the struggle of Robyn not only in

navigating the physical reality of history as a young woman but also in her standing up against a

world trying to assign her a fixed space in society. While the character was conceived as a boy,

during development Robyn was reborn as a female character to increase stakes in her position as

huntress and young woman standing up against a male-dominated society (Moore 2020, 51). The

focus on the medieval English settlement in Ireland touches on colonial context but does not

limit its discussion to historical specificities. While the film introduces a local relevance by

setting *WolfWalkers* in Kilkenny—home of Cartoon Saloon—the film expands its discussion into

the modern world through a strong focus on environmentalism and a central message of nature

conservation. The film critiques historical prejudice but avoids rewriting the factual context in

the form of historical revisionism. Instead, the film presents the constraints of the societal,

patriarchal and colonial power structures in their destructive impact on the forests surrounding

the town. At the same time, *WolfWalkers* avoids historical specificity (for example, Cromwell as

the central villain is never referred to by name of his historical counterpart) by centering the

conflict exclusively around the protagonists, which makes the story accessible and relevant to

audiences experiencing parallel conflicts in the modern world, thus linking the film to the present

even more actively than the previous films in the trilogy.

WolfWalkers draws similar inspiration from traditional art techniques and media as its

ideological prequels. The art design is inspired by medieval tapestry, woodblock prints, and

watercolor renditions of the local landscapes and forests. The forest stands at the core as a

wildlife refuge. This supports the focus on the destructive impact on the environment by human settlements in the fashion of Japanese animation narratives but furthermore harkens back at the Arcadian archetype that has presented untouched natural landscapes as both pure origin states of the world and transcendental spaces shared by humans and supernatural, mythical characters. *WolfWalkers* touches on such universal imagery to deliver the significance and stakes for the characters inhabiting this multi-medial world but also hints at traditions of hybrid spaces and aesthetic fluidity of storytelling traditions in the visual arts. Moore reclaims and reshapes these traditions in his films by exploiting the innate narrative and aesthetic fluidity in animation art aided by digital technology.

The most significant distinction appears in the opposing depiction of the human settlement and the forests. While the closed settlement appears rigid with thick contours in the fashion of solid block prints—in itself a symbol of identical reproducibility—the open forests commit to free-flowing line in watercolor, ink, and graphites similar to the magical natural spaces in *The Secret of Kells* and *Song of the Sea*. This distinction extends to the characters themselves as city folk appear in distinct inking and outlines, whereas the wolfwalkers in the forests linger in the space between rough pencil animation and clean-up inking. When in the settlement, Robyn appears much more geometric and static but adopts a different visual style when she ventures into the forests in a shift in line quality. This freedom taken in line quality and visual aesthetics once more regards animated principles as guidelines and opportunities rather than restrictions: "Animation is an art from with principles but no rules. No textbook or class dictates how a girl will walk through a forest, with a fixed number of drawings for each step" (Solomon in Moore 2020, 197). Facilitated by digital layering, characters take on the fluidity and transcendental nature crucial to Moore's works. Furthermore, they ultimately embody the

creative freedom that experimentation with media and digital technology can add to both narrative and visual layers.

At the core of this animated fluidity between solid line and rough sketch visuals stands a new technology termed "Wolfvision" by the film's development team. When characters transform into their spiritual wolf counterparts, the film's aesthetics shift entirely to adapt to the focalization through the wolves rather than human perception of the environment. In order to visualize the sense-based approach through which the film's wolfwalkers experience their environments, the team used virtual reality and CGI technology to create a three-dimensional production space of the film's world. In an elaborate process, complex layers of virtual camera angles, visual stimuli and character movements were combined to create an organic movement of the wolf spirits through the forests. The spirits themselves are guided by smell and sensation taking the form of northern lights spanning the forest paths.

The scenes in wolfvision dissolve the photo-realistic qualities of the film into a processing space of abstraction. Drawn characters are reduced to construction lines, movements blend with visual effects. In service of iconic exploration, the scenes achieve the reverse of digital visual effects in live action productions, which aim to blend masked effects into the reality of the film. Instead, wolfvision transforms the scene into a playground of the iconic, subordinating both backgrounds and characters to the line and medium of construction. Further play with animated framerates manipulates the perceived transition of motion and speed on screen. In this state of exploration, the virtual camera becomes more active and more subjective in point-of-view shots. Aided by the reverse-engineered VR approach, this allows for dynamic production of impressive action scenes without the potential visual clash resulting from the direct

31

insertion of CGI imagery into a 2D environment, which would require additional technology to mask the digital sculpt as hand-drawn creations.[22]

Even though digital technology is absolutely crucial to these elaborate shots, the team did not want to rely on CGI for the visuals alone and instead traced each simulated shot in hand-drawn media to recapture and match the painterly flair of the rest of the film. "'Wolfvision has a 3-D starting point, but everything that appears on-screen has been rendered over on paper,' emphasizes assistant director Mark Mullery about the process which took three years to complete. 'I wanted to make the film look as much like a drawing on top of a painting as possible. I didn't ever want the audience to think, 'Here comes the CG'" (Mullery, Solomon in Moore 2020, 204). When CGI physically invades the realm of *The Secret of Kells*, digital technology was chosen to remain unmasked. In *WolfWalkers*, the computer-generated imagery remains a pre-visualization tool to assist with the final 2D animation process. The biggest contribution of *WolfWalkers* is the post-digital awareness of CGI as construction tool rather than sole use for sculpting and effects in digital productions. While computer technology imitates and undeniably facilitates manual processes involved in the making of animated content in a digital interface, the traditional principles of animation have carried over into the new means of digital production allowing for even greater visual diversity.

The transition to the wolfvision sequences is a visual break from the deliberately flat perspective invoking wood prints, paintings, or tapestry patterns. This shift to a dynamic three-dimensionality familiar to the spectator from a photo-realistic approach, yet re-created and mediated in 2D, supports the co-dependency of narrative and visual aesthetics as it signifies that the characters left the human world (Steward in Moore 2020, 205). This shift is possible due to the shared levels of fluidity stemming from the use of iconic representation in both characters

and environments, drawing active attention to the art media at work and the resulting play and experimentation. The fluid nature of the characters is so important to the mythos and conflict set up through the narrative as, once again, the characters' origin in physical art media facilitates this transformation from character into artwork, and also from human to spirit. The intricate and precise linework in the township paintings is equally impressive in their constrictive nature as is the emergence of fluid construction lines that deny Mebh a solid form in the forest scenes. In addition, Robyn transitions from a solid state to the rough animation style in her transformation into a wolf but also maintains the characteristics of her physical transformation when she returns to her human character model which also gradually features more loose graphite lines to make her stand out against the cleanly-inked townsfolk. This aligns the characters inseparably with the physicality of the artwork itself, inhabiting the hybrid space between solid and ever-changing, searching lines.

In the final confrontation, Robyn faces not only the visually distinct villain but also her father who, in return, faces his fears in the form of his transformed daughter and has to make a choice between dutiful orders and family, economic success and ecological conservation. The film's resolution culminates in the assembling of the wolf pack (now including a reformed and transformed father) around Mebh's wounded mother. The cathartic circular image of the protagonists reunited in the mother figure's protective embrace parallels similar compositions in *The Secret of Kells* and *Song of the Sea*. Visual aesthetics honor both ancient Celtic influences in the use of swirling patterns while also drawing from art nouveau pieces, most notably Klimt's gold-plated works. Like the visual elements, which fuse to create new aesthetics in their continued re-animation and transmutation, Robyn and Mebh appear simultaneously human and as wolf spirits, their physical shapes flowing from one into the other fluidly.

As a result, the *Celtic Trilogy* re-envisions what animation and the animated film can be. As theorists argued, animation is not confined to film alone but rather extends beyond it, into the arts as existential tools to engage with the world and its complexities. Moore's films transcend their classification as animated films not only through their novel and experimental fusion of tradition and innovation in animated techniques and digital technology, but in their understanding of the fluidity of the animated medium and the potential for its narrative and visual aesthetics. This presents animation as a crucial tool for cinema—even preceding its conception in the legacy of the visual arts—and as a hybrid medium to address and visualize problematics and solutions for a post-digital world.

Conclusion

The films in the *Celtic Trilogy* show mastery of animation skills and keen awareness of animation principles and techniques while honoring and evolving dominant conventions in the legacy of studio animation. Rooted in the tradition of European animation, the triad of films hands the creative control back to the animators and artists. In a system based on international and interdisciplinary collaboration, it reintroduces a sense of innovation and experimentation with the medium and technological possibilities to create new aesthetics in support of fresh narratives. This adds a distinctly local flavor to the projects, which present authenticity to the creators' experiences and artistic visions, and accessibility for a universal audience due to the immersive, fluid qualities innate to the animated medium.

Moore's works combine traditional, physical media and art practices, such as watercolor, graphite, or wood print, only to name a few, with a digital production environment that allows emulation and innovation of traditional animation practices without sacrificing a traditional 2D

look. As an inherently hybrid medium, animation transcends the practice of animating single frames in the scope of film. Spanning all of cinema, a novel approach that pushes the visual and narrative boundaries of animated works raises awareness of the connection between artistic mediation of the surrounding world through physical artistic media, and an existential process of understanding the world through re-presentation and re-creation, i.e. re-animation. Theories on the universal nature of animation and its status as cinematic art find new application in the digital era and highlight the importance of animation as form of conservation of the legacy of artistic animation practices.

In return, hybrid works such as Tomm Moore's *Celtic Trilogy*, urge the spectator to recalibrate their position to cinema as a social and commercial structure. Digital cinema technology has effectively dissolved the boundaries between photography-based, indexical relations and content animated (i.e. created) without the indexical relation by unifying both photographed and manipulated content in a malleable universal processing space. The social distinction between live action film and animated content, however, outlasts the emergence of digital technology. By actively reintroducing the tactile and physical layers of the visual arts through simulated textures, the combination of physical and digital animation techniques, and active play with the fluid nature of animated worlds and characters, *The Secret of Kells*, *Song of the Sea*, and *WolfWalkers* present a hybrid model that cannot be contained within one single category of study. On the one hand, this introduces novel narrative and visual aesthetics that push beyond established industry conventions without sacrificing the expected immersive qualities or appeal. On the other hand, the films' origins in Irish animation present a collaborative model as critical and commercial success to rival commercial Hollywood productions. This approach facilitates alternative narrative approaches by addressing and visualizing enduring contemporary

problematics in new, constructive ways. As a result, the films inherit a universal appeal that speaks to a large audience regardless of cultural background or age demographic. This also addresses the social correlation of animated works with the category of children's entertainment, which fails to address the inherent complexity of animated formal aesthetics. The universal appeal engages audiences independent of age group and offers artistic fidelity and complexity that encourages revisits of the films among spectators of all ages.

This hybrid model speaks to a world that is inherently complex yet deeply connected to practices and traditions of the past, presenting animation as an artistic tool and narrative vessel for a post-digital era. By adding to an inclusive cinematic canon works such as the *Celtic Trilogy*, new paths open up for animators, artists and spectators that encourage a deeper understanding of animation beyond film. Through multidisciplinary approaches celebrating the fluidity innate to the medium, new creative opportunities arise in visual and narrative aesthetics encouraging renewed experimentation and innovation. The core focus on fluidity also applies to critical approaches by reframing animation not as uniform entertainment category, but as universal tool to fuse artistic and technological versatility. This allows critics and audiences to rediscover works of the past in a new light and stimulate creativity in future productions by acknowledging the hidden potential a hybrid approach can awake by experimenting and combining in novel ways techniques and traditions old and new.

ENDNOTES

[1] The *Chronotope* has first been used by Bakhtin as means to discuss the realities of time and space in a fictional or literary context and has been applied widely to the arts, including film. See *Bakhtin's Theory of the Literary Chronotope: Reflections, Applications*, *Perspectives* (Bemong, 2010).

[2] The bulk of academic and critical texts centered around a discussion of animation draws evidence from contextual research on the films' popular or commercial success. Critical discussion can involve coverage by tabloids or reviews, as well as intersectional study of the phenomenon of animated films. One thorough survey of the global impact of animation can be found in *Hollywood Flatlands: Animation, Critical Theory and the Avant-Garde* (Leslie, 2002). Though undeniably relevant in the discussion of modern cinema, a dominant Marxist lens or reception study can overshadow and distract from the aesthetic qualities of the animated text itself and forces commercial comparison with the performance of dominant export productions.

[3] The term "animation" continues to be used synonymously with children's or family entertainment in marketing campaigns for theatrical or home media / streaming releases of animated texts. The creation of awards categories set aside for "Animated Features" further continues to this fuzzy definition, especially as digital cinema technology makes it difficult to define animation separate from live action productions and visual effects.

[4] The earliest examples of visual representations of movement are attributed to prehistoric paintings dating back as far as 15,000 BCE in the case of the French Lascaux Caves (Furniss 12). The paintings depict motion in the form of overlaid images of animals in various positions of an observed running cycle. It is uncanny how closely this prehistoric observation parallels the development of the industry of studio animation (and cinema at large) around the turn of the twentieth century through the contributions of serialized photography, various optical toys aligning serialized drawings, and incremental stop-motion manipulations.

---

[5] The proliferation of animated scholarship in the 1990s coincides with the increase in animated productions on a global scale. This was, in part, precipitated by the critical and commercial success of Walt Disney Animation's *The Little Mermaid* in 1989, and the emergence of 3D CGI animated films first pioneered by Pixar.

[6] The study of art history and the fine arts teases out lines of sight, implied motion, or focal points that draw the eye of the viewer to certain parts of drawings, paintings, or architecture, eliciting actual motion in the onlooker, even if subconscious. Aforementioned still life paintings, or photographs, equally express mood in the absence of motion as moments entirely untouched by temporal progression, creating a paradox in having subjects exist in space and in (in-)action without the apparent passing of time.

[7] Examples of fluidity in animation design and aesthetics can be found across a variety of global texts predating the *Celtic Trilogy* and going back to early experimentation with the medium. Though not the first to display fluidity in animation aesthetics, Moore's balancing of commercial and experimental elements and the unique technological space created by the digital environment, which itself spans beyond cinema, make the works stand out.

[8] Common examples of this principle in action are animation tests and exercises endowing lifeless objects—a sack of flour among the most famous—with motions implying personality and human-like emotions through movement and mimicry of body language (Thomas and Johnston, 47 ff.).

Further study of the intersection of *motion* and *life* reveals a connection between cinema and the (re-)animation of the inanimate, lifeless, or dead body. For a survey on the '*automaton*' in relation to cinema and the animated film, see *Speculations on the Animatic Automaton* (Cholodenko, 2011).

9 One of the most prominent collections of conventional animation principles can be found in the form of reference materials, technical animation lessons and studio history of Disney's Feature Animation department in *Illusion of Life*, curated by Frank Thomas and Ollie Johnston, two of the Walt Disney's 'Nine Old Men,' arguably the studios' most influential group of animators and artists. The term has been referenced frequently in connection with the technical and critical study of animation, including Alan Cholodenko's comprehensive multi-volume collection of scholarship *THE ILLUSION OF LIFE: Essays on Animation* which, in turn, debuted at the world's first conference on animation studies drawing inspiration from the same phrase in 1991.

10 I was introduced to these terms in my personal art studies under my teacher Carolin Hosac, who distinguishes between the "dynamic" construction of subjects, based on mastery of life-like representation, and "iconic" reinterpretation, which prioritizes a stylized, experimental approach to an outcome more in touch with the physical medium of creation itself. Further credit is due to the contributions by Brian Curtis, in the tactile learning approach to art in *Drawing from Observation*, and Betty Edward's study and teachings rooted in a cognitive, intersectional approach to dynamic perception and artistic mediation in drawing published in *Drawing on the Right Side of the Brain.*

11 This approach furthermore applies the interpretation of cinema as "window and frame" (Elsaesser and Hagener 14 ff.).

12 For an argument on the inherent indexical relations in both animated and live action film based on the mechanical processes of creation and exhibition of the film print (similar to the digital as universal processing and exhibition space), see *The Virtual Life of Film* (Rodowick, 2007).

13 For a detailed discussion of modernist art influences on the animation industry and manifestations in style and production methods, see *Cartoon Modern: Style and Design in Fifties Animation* (Amidi, 2006).

14 Based on my survey of production methods publicized by Hollywood studios, productions of hand-drawn and computer-animated features drastically differ only at the stage of the moving image, created through sequences of drawings, or through computer-generated movement of models, respectively.

[15] Animation studios have stressed distinct silhouettes in character design and posing of animated characters in order to increase recognizability and display of personality on screen. For a detailed breakdown of such animation lectures and reference art, see *Drawn to Life* (Stanchfield, 2009).

[16] Though Cartoon Saloon's works primarily focus on an Irish lens, there is an intersection of a shared Celtic heritage between Ireland, Scotland, and other Celtic nations. This includes public initiatives to preserve and teach local languages and stories, which frequently collaborate with regional animation studios to visualize folk songs and fairy tales. For more information, see Cartoon Saloon's story heritage collections *Anam an Amhráin* (2011) and *Cúl an Tí* (2018).

[17] Paired with economic and political change—Barton's focus hones in on the contemporary socio-economic landscape termed "post Celtic Tiger era" (O'Brien)—such as the groundbreaking Marriage Equality referendum in 2015, a renewed engagement with pre-Christian cultural roots reflects a larger reinterpretation (i.e. *reanimation*) of Ireland as an autonomous country by posing crucial questions such as "what does Irish cinema tell us about Irish society?" (Barton Loc. 175).

[18] In the plot-central inability to escape the elements of the sea, *Song of the Sea* outlines parallels to one of the earliest internationally successful Irish film productions in *Man of Aran* (1934).

[19] For direct application of Bakhtin's chronotope in film and media in relation to representation of imagined time and space in fiction, see *Cinematic Chronotopes (*Hesselberth*, 2014), and *An Examination of Characters and Spaces in Film Narratives in the Context of Panopticon and Chronotope within the Framework of Narratology Theory* (Gülçin Özdemir, 2019).

[20] This further engages with Manovich's interpretation of the *Digital* transcending its origins in computing and digital cinema and entering the public consciousness due to the universal processing space in the digital realm mirroring abstraction in human mental processing (57 ff.).

[21] A push into digital release strategies complementing or replacing theatrical distribution is further accelerated due to the circumstances of the 2020 global pandemic.

[22] In comparison, Walt Disney Animation Studios have experimented with a graphic engine, "Meander," which successfully blends and simulates 2D aesthetics onto underlying CGI models in their short films *Paperman* (2012) and *Feast* (2014). The technology has never been used in feature-length productions due to the complicated and time-consuming nature of the process.

40

WORKS CITED

Arnheim, Rudolf. *Film as Art*. University of California Press, 1957.

Barton, Ruth. *Irish Cinema in the Twenty-First Century*. Kindle ed., Manchester UP, 2019.

Cholodenko, Alan. "Introduction." *THE ILLUSION OF LIFE: Essays on Animation*, edited by
Alan Cholodenko, Power Publications in association with the Australian Film
Commission, 1991, pp. 9-36.

Cholodenko, Alan. "Introduction." *THE ILLUSION OF LIFE II: More Essays on Animation*,
edited by Alan Cholodenko, Power Publications in association with the Australian Film
Commission, 2011, pp. 13-95.

Cholodenko, Alan. "Speculations on the Animatic Automaton." *THE ILLUSION OF LIFE II:
More Essays on Animation*, edited by Alan Cholodenko, Power Publications in
association with the Australian Film Commission, 2011, pp. 486-528.

Desowitz, Bill. "How Cartoon Saloon's Animated 'Wolfwalkers' Battled Covid-19 in Ireland."
IndieWire, accessed January 2021.

Elsaesser, Thomas. "Digital Cinema and Film Theory—The Body Digital." *Film Theory: An
Introduction through the Senses*, second edition, Routledge, 2015.

Furniss, Maureen. *A New History of Animation*. Thames & Hudson, 2016.

Manovich, Lev. *The Language of New Media*. MIT Press, 2002.

Moore, Tomm, and Ross Stewart. *Designing the Secret of Kells*. Cartoon Saloon, 2014.

Moore, Tomm, and Charles Solomon. *Song of the Sea Artbook*. Cartoon Saloon, 2015.

Moore, Tomm, et. al. *The Art of Wolfwalkers*. Cartoon Saloon, 2020.

O'Brien, Maria. "*The Secret of Kells* (2009), a film for a post Celtic Tiger Ireland?" *Animation*

    Studies, vol. 6, 2011, pp. 34-39.

Thomas, Frank, and Ollie Johnston. *The Illusion of Life*. Hyperion, 1981.

REFERENCE BIBLIOGRAPHY

Amidi, Amid. *Cartoon Modern: Style and Design in Fifties Animation*. Chronicle Books, 2006.

Arnheim, Rudolf. *Art and Visual Perception: A Psychology of the Creative Eye*. The New

    Version, University of California Press, 1974.

Bazin, André. *What is Cinema?* Essays selected and translated by Hugh Gray, University of

    California Press, 1967.

Beckerman, Howard. *Animation: The Whole Story*. Allworth, 2012.

Beckman, Karen, editor. *Animating Film Theory.* Duke University Press, 2014.

Bemong, Nele, et. al., eds. *Bakhtin's Theory of the Literary Chronotope: Reflections,*

    Applications, *Perspectives*. Academia Press, 2010.

Bishko, Leslie. "The Uses and Abuses of Cartoon Style in Animation." *Animation Studies*, vol. 2,

    2007, pp. 24-35.

Blair, Preston. *Cartoon Animation*. Walter Foster Publishing, 1994.

Bordwell, David. *Narration in the Fiction Film*. University of Wisconsin Press, 1985.

Buchan, Suzanne, editor. *Pervasive Animation*. Routledge, 2013.

Burke, Liam. "Drawing Conclusions: Irish Animation and National Cinema." *Estudios*

    Irlandeses Journal of Irish Studies, no. 4, 2009.

Cholodenko, Alan. "Animation—Film and Media Studies' 'Blind Spot.'" *SAS Newsletter*, vol.

    20, no.1, 2007, pp. 14-18.

Cholodenko, Alan. "The Animation of Cinema." *The Semiotic Review of Books,* vol. 18. no. 2,

    2008.

Cholodenko, Alan, "Animation (Theory) as the Poematic." *Animation Studies*, vol. 4, 2009.

Cholodenko, Alan, "The Animator as Artist, The Artist as Animator." *Animation Studies Online Journal*, 2015.

Cholodenko, Alan. "'Computer Says No', or: The Erasure of the Human." *Erasure: The Spectre of Cultural Memory*, eds. Brad Buckley and John Conomos, Libri Publishing, 2015, pp. 37-47.

Cholodenko, Alan. "(The) Death (of) the Animator, or: the Felicity of Felix, Part I." *Animation Studies Online Journal*, 2007.

Cholodenko, Alan. "(The) Death (of) the Animator, or: the Felicity of Felix, Part II." *Animation Studies Online Journal*, 2007.

Cholodenko, Alan, "The Expanding Universe of Animation (Studies)." *Animation Studies Online Journal*, 2016.

Cholodenko, Alan. "The Illusion of the Beginning: A Theory of Drawing and Animation." *Afterimage*, July/August 2000, pp. 9-12.

Cholodenko, Alan. "The Nutty Universe of Animation, The "Discipline" of All "Disciplines", And That's Not All, Folks!" International Journal of Baudrillard Studies, vol. 3, no. 1, 2006.

Cholodenko, Alan, "The Spectre in the Screen." *Animation Studies*, vol. 3, 2008.

Cholodenko, Alan. "Why Animation, Alan?." *SAS Newsletter*, vol. 21, no.1, 2008, pp. 12-13.

Cholodenko, Alan. "Who Framed Roger Rabbit, or The Framing of Animation." *THE ILLUSION OF LIFE: Essays on Animation*, edited by Alan Cholodenko, Power Publications in association with the Australian Film Commission, 1991, pp. 209-242.

Clarke, James. "Animated films are a powerful means of expressing our connection with

      Nature." *Resurgence & Ecologist*, no. 324, January 2021.

Cohen, Karl. "'The Secret of Kells' - What is this Remarkable Animated Feature?" *Animation*

      World Network, accessed January 2021.

Comet, Michael B. "Character Animation: Principles and Practice." *Comet Cartoons*,

      www.comet-cartoons.com/3ddocs/charanim/. Accessed January 2021.

Connolly, Maeve. "Theorising Irish Animation: Heritage, Enterprise and Critical Practice."

      National Cinema and Beyond: Studies in Irish Film 2, edited by John Hill and Kevin

      Rockett, Four Courts Press, 2005, pp. 79-89.

Curtis, Brian. *Drawing from Observation: An Introduction to Perceptual Drawing*. McGraw Hill,

      2008.

Deleuze, Gilles. *Cinema 1: The Movement-Image*. Translated by Hugh Tomlinson, and Barbara

      Habberjam, Continuum, 2005.

Deleuze, Gilles. *Cinema 2: The Time-Image.* Translated by Hugh Tomlinson, and Robert Galeta,

      Continuum, 2005.

Denslow, Phil. "What is Animation and Who Needs to Know?" *Reader in Animation Studies,*

      edited by Jayne Pilling, John Libbey & Co. Ltd, 1997.

Dobson, Nichola, et. al., eds. *The Animation Studies Reader*. Bloomsbury, 2019.

Edwards, Betty. *Drawing on the Right Side of the Brain*. The Definite, 4th Edition, Tarcher/

      Penguin, 2012.

Eisenstein, Sergei, and Jay Leyda. *Eisenstein on Disney*. Methuen, 1988.

Greenberg, Raz. "The Animated Text: Definition." *Journal of Film and Video*, vol. 63, no. 2, 2011, pp. 3-10.

Gülçin Özdemir, Berceste. *An Examination of Characters and Spaces in Film Narratives in the Context of Panopticon and Chronotope within the Framework of Narratology Theory*. Peter Lang, 2019.

Hahn, Don. *Dancing Corndogs in the Night*. Disney Editions, 1999.

Henri, Robert. *The Art Spirit*. J. B. Lippincott, 1923.

Hesselberth, Pepita. *Cinematic Chronotopes: Here, Now, Me*. Bloomsbury, 2014.

Holohan, Aisling. "Theorising aesthetic design in contemporary Irish animation: A Case Study of Cartoon Saloon's *The Secret of Kells* and *Song of the Sea*." University of Dublin, 2016.

Hooks, Ed. *Acting for Animators*. Fourth Edition, Routledge, 2017.

Jolin, Dan. "Cartoon Saloon founders talk 'Wolfwalkers,' future plans: 'We're not interested in being giants.'" *Screen Daily*, Accessed February 2021.

Kane, Kay. "Animation as Conservation: Classical Values in Contemporary Practice." *Animation Studies*, vol. 10, 2015.

Kriger, Judith. *Animated Realism: A Behind-the-Scenes Look at the Animated Documentary Genre*. Focal Press, 2012.

Kroon, Sjaak, and Jos Swanenberg. *Chronotopic Identity Work: Sociolinguistic Analyses of Cultural and Linguistic Phenomena in Time and Space*. Multilingual Matters, 2020.

Leslie, Esther. *Hollywood Flatlands: Animation, Critical Theory and the Avant-Garde.* London: Verso, 2002.

Leslie, Esther, and Joel McKim. "Life Remade: Critical Animation in the Digital Age."

    Animation: an Interdisciplinary Journal, vol. 12, no. 3, 2017, pp. 207-213.

Lindahl, Chris. "'Wolfwalkers' Filmmaking Team on Incorporating a Range of Animation Styles

    into their Film." *IndieWire*, Accessed January 2021.

Lorenzo Hernandez, Maria. "The *Double* Sense of Animated Images." *Animation Studies*, vol. 2,

    2007, pp. 36-44.

Lutz, E. G. *Animated Cartoons*. Scribner's Sons, 1926.

MacLean, Fraser. *Setting the Scene: The Art & Evolution of Animation Layout*. Chronicle Books,

    2011.

Maltin, Leonard. *Of Mice and Magic: A History of American Animated Cartoons*. Plume, 1987.

Méranger, Thierry. "L'Eire du Loup. / La vue des animaux." *Cahiers du Cinéma*, N° 772: Janvier

    2021, pp. 52-53.

O'Connell, Mark. "Cartoon Saloon and the New Golden Age of Animation." *The New Yorker*

    Magazine, December 21, 2020.

Osmond, Andrew. "Wolfwalkers: An Interview with Directors Tomm Moore and Ross Steward."

    Animation for Adults, Accessed January 2021.

Parr, Peter. *Sketching for Animation: Developing Ideas, Characters and Layouts in Your*

    Sketchbook. Bloomsbury, 2018.

Ramey, Lynn. "Immediacy, Hypermediacy, and New Media in *The Secret of Kells* (Moore

    2009)." *Medieval Perspectives*, vol 29, 2014, pp. 109-119.

Remm, Tiit, and Kadri Kasemets. "Chronotope as a framework for landscape experience

    analysis." *Landscape Research*, vol. 45, no. 2, 2019, pp. 254-264.

Ristola, Jacqueline. "Realist Film Theory and Flowers of Evil: Exploring the Philosophical Possibilities of Rotoscoped Animation." *Animation Studies*, 2017.

Rodowick, D. N. *The Virtual Life of Film*. Kindle ed., Harvard UP, 2007.

Sarrat, Álvarez, and Mario Lorenzo Hernandez. "*How Computers Re-Animated Hand-made Processes for Artistic Animation*" *Animation Studies*, vol. 7, 2012, pp. 1-12.

Sibley, Brian, editor. "Don Bluth on his search for classical excellence." *Animator Mag*, no. 26, 1990.

Sobchack, Vivian. "Meta-Morphing." *Art/Text*, vol. 58, 1997, pp. 43-45.

Solomon, Charles. *The Art of the Animated Image*. The American Film Institute, 1987.

Stanchfield, Walt. *Drawn to Life, Volume 1*. Focal Press, 2009.

Stanchfield, Walt. *Drawn to Life, Volume 2*. Focal Press, 2009.

Torre, Dan. *Animation—Process, Cognition and Actuality*. Bloomsbury, 2017.

Wells, Paul. *Animation: Genre and Authorship*. Columbia UP, 2002.

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

Zahed, Ramin. "'Wolfwalkers': A Trip to Kilkenny's Magical Past." *Technology, Business & Art of Animation & VFX*, Accessed January 2021 [Reprinted in *Animation Magazine*, December 2020].

FILMOGRAPHY

The Secret of Kells. Directed by Tomm Moore, produced by Paul Young, Didier Brunner, and

    Vivian Van Fleteren, Cartoon Saloon, distributed by Gébéka Films / Buena Vista

    International, 2009.

Song of the Sea. Directed by Tomm Moore, produced by Tomm Moore, et. al., Cartoon Saloon,

    distributed by Studio Kanal / O'Brother Distribution, 2014.

Wolfwalkers. Directed by Tomm Moore, produced by Paul Young, Nora Twomey, and Stéphan

    Rowlants, Cartoon Saloon, distributed by Apple TV+, 2020.

FURTHER FILMS REFERENCED

Cúl an Tí: Amhráin is Beochaintí, Songs and Cartoons. Cartoon Saloon, Kíla Records, Fócas
Films (Focus Films)*,* 2018.

Anam an Amhráin. Cartoon Saloon, Sónta, 2011.

Man of Aran. Directed by Robert J. Flaherty, Gainsborough Pictures, 1934.

The Breadwinner. Directed by Nora Twomey, Cartoon Saloon, Studio Canal / Elevation Pictures,
2017.

Fantastic Planet [*La Planète Sauvage*]. Directed by René Laloux, Les Films Armorial, 1973.

Loving Vincent. Directed by Dorota Kobiela and Hugh Welchman, Altitude Film Distribution,
2017.

Select works by Walt Disney Animation Studios.

Select works by Pixar Animation Studios.

Select works by Dreamworks Animation.

Select works by Studio Ghibli.

Select works by Sullivan-Bluth Studios.

Select works by UPA.

Select works by Zagreb Film.

Select works by GPO Productions and National Film Board of Canada.