

Theorising aesthetic design in contemporary Irish animation:

A Case Study of Cartoon Saloon's *The Secret of Kells* and *Song of the Sea*.

Aisling Holohan

A research Paper submitted to the University of Dublin, in partial fulfilment of the requirements for the degree of Master of Science
Interactive Digital Media.

2016

Declaration

I have read and I understand the plagiarism provisions in the General Regulations of the University Calendar for the current year, found at: <http://www.tcd.ie/calender>

I have also completed the Online Tutorial on avoiding plagiarism 'Ready, Steady, Write', located at <http://tcd-ie.libguides.com/plagiarism/ready-steady-write>

I declare that the work described in this research Paper is, except where otherwise states, entirely my own work and has not been submitted as an exercise for a degree at this or any other university.

Signed: _____

Aisling Holohan

11/05/2016

Permission to lend and/or copy

I agree that Trinity College Library may lend or copy this research Paper upon request.

Signed: _____

Aisling Holohan

11/05/2016

Acknowledgements

I would like to thank my supervisor Vivienne O'Kelly for her remarkable help and guidance while completing this research. I would also like to thank my parents for their continued support and encouragement.

TABLE OF CONTENTS

| <u>CHAPTER</u> | <u>PAGE</u> |
|--|-------------|
| ABSTRACT..... | i |
| CHAPTERS | |
| CHAPTER 1 -Introduction..... | 1 |
| CHAPTER 2 – The Domination of Western Animation and Disney Studios..... | 3-18 |
| Brief history of techniques and practices of animation..... | 3 |
| The Rise of Feature Length Animation..... | 6 |
| The Golden Age of Animation..... | 10 |
| Modern Age and Digital Animation..... | 15 |
| CHAPTER 3 – A Discussion of Irish Animation in Context..... | 19-26 |
| History of Irish Animation overview..... | 19 |
| Irish Animation Aesthetic in Context..... | 22 |
| CHAPTER 4 – Irish Animation Challenging Western Influences..... | 27-50 |
| Case Study: Cartoon Saloon..... | 27 |
| A Discussion of Narrative in <i>Song of the Sea</i> and <i>The Secret of Kells</i> | 28 |
| Artistic and Creative Influences..... | 33 |
| Process of Animation..... | 45 |
| CHAPTER 5 – Summary and Conclusion..... | 51 |
| Works Cited..... | 54 |

ABSTRACT

This thesis shall examine and contextualise the development of aesthetic design in contemporary Irish animation, specifically applied to Cartoon Saloon's feature productions *The Secret of Kells*(2009) and *Song of the Sea*(2014). Irish animation is currently an extremely profitable export, and is renowned worldwide for a distinct and recognisable aesthetic design. From the earliest stop frame productions commissioned by national broadcaster Raidió Teilifís Éireann, to large scale animated features produced on Irish soil by American studios such as Sullivan Bluth, the Irish animation industry has an irregular and fascinating history. It can be argued the early animation scene in Ireland was shaped primarily by Disney-influenced animators and studios, which resulted in the medium developing without an authentic animation style and indigenous aesthetic for the majority of the 20th century. This study will offer an overview and contextualisation of the history of Western and Irish animation and practices.

Irish independent studios are currently creating content which conveys an aesthetic grounded firmly in Irish culture. This aesthetic design is produced through a number of influences ranging from Celtic symbolism, Irish medieval monastic art, the European art-house animation scene, and the traditionalism of Oriental and Eastern artwork. This investigation will consider the cultural and artistic significance of these influences in the development of contemporary Irish animation aesthetic. This study will also consider the narrative direction of these productions. While they are universally accessible to a world audience, they also serve to unobtrusively explore and celebrate the history, folklore and culture of Ireland.

The aim of this research is to theorize the current trends in Irish animation, specifically applied to feature productions *The Secret of Kells* and *Song of the Sea* by successful animation studio Cartoon Saloon, and whether the narrative and artistic themes of nationalist pride, exploration of history, folklore and culture, are consciously challenging the dominant styles and practices of past and current American studios.

Chapter One

Introduction

This study aims to track the progression of Irish animation, and contextualise the contemporary aesthetic style of the medium. From the earliest stop frame productions commissioned by national broadcaster Raidió Teilifís Éireann, to large scale animated features produced on Irish soil by American studios, the Irish animation industry has an irregular and fascinating history. It can be argued the early animation scene in Ireland was shaped primarily by Disney-influenced Western studios, which resulted in the medium developing without an authentic style and aesthetic. Currently Irish animation is one of the country's most profitable exports, and is showcased around the world in a myriad of commercials, television programming, and feature films. This paper aims to assert the conscious rejection of popular Western influences and animation techniques by contemporary Irish animation studios has resulted in a unique and indigenous aesthetic style and technical approach to animation. Irish independent studios are currently creating content which conveys an aesthetic grounded firmly in Irish culture. This aesthetic is produced through a number of influences ranging from Celtic symbolism, Irish medieval monastic art, the European art-house animation scene, and the traditionalism of Oriental and Eastern artwork. Similarly, the narrative direction of these productions, while universally accessible to a world audience, serves to unobtrusively explore and celebrate the history, folklore and culture of Ireland.

This study in Chapter Two focuses on the early history of animation practices, and the rise of the Western technical process of the medium. Chapter Two will also discuss the legacy and history of Disney Studios. Disney's animation is often hailed as the standard against which all animation is measured against, and is regarded as a pioneer of many advancements in animation technology. It

is imperative to consider the rise and domination of the Disney aesthetic and style, considering the connection of the studio to a number of famed animators who influenced early Irish animation. Further, the study will discuss the rise of feature length animation, the golden age of animation, 2d digitally assisted animation and digital animation, and the contemporary popularisation of hyper stylised CGI animation.

Chapter Three initially offers an overview of Ireland's animation history, dating from stop work animation of the Yougal tower in County Cork by John Horgan, in 1909, to the contemporary animation scene in 2016. The study then aims to contextualise the current aesthetic and style, and narrative employed in Irish animation, and how they often challenge Disney-inspired realism, and culturally shallow and simplified narratives.

Chapter Four considers a case study of Cartoon Saloon, an independent animation studio in Kilkenny, Ireland established in 1999 by Tomm Moore, Nora Twomey and Paul Young. Cartoon Saloon received world-wide acclaim for their feature length animation *The Secret of Kells* (2009) and subsequent feature, *Song of the Sea* (2014). Developed with a unique visual 2d aesthetic, the studio is praised for developing an animation style reflective of the rich history, fables and folklore of Ireland. Cartoon Saloon's productions can be argued to be the embodiment of the rejection of Disney realism, and PIXAR's stylised CGI and 3 Dimensional features. Rather the studio has developed through their aesthetic, narrative, artistic motifs, characterisation, and animation process, a style of animation which is recognisable around the world as distinctly Irish.

Finally, the Case Study will consider the future and progress of Irish animation. Ultimately this research aims to theorize the current trends in Irish animation, and whether the narrative and artistic themes of nationalist pride, exploration of history, folklore and culture, are consciously challenging the dominant styles and practices of past and current American studios.

Chapter Two

The Domination of Western Animation and Disney Studios.

Brief history of techniques and practices of animation

To explore the content of this paper it is imperative to distinguish ‘digitally assisted’ animation, from digital animation. The former refers to the process of blending 2d hand-drawn animation with computer generated imagery, while the latter refers to purely computer generated imagery. The term animation draws from the Latin verb, *animare*, which is translated to “give life to.” (Wells 10) While this research and Case Study of Cartoon Saloon will focus primarily on contemporary digital animation, it is critical to consider traditional 2d hand-drawn animation, and the influence, significance and legacy of the medium.

Traditional two dimensional celluloid animation simulates the illusion of movement between each distinct frame of a series of hand-drawings. As early as 1830 there were numerous experiments in attempt to form movement through sequences of multiple drawings. Optical devices, such as the thaumatrope, zoetrope, phenakistoscope, and the praxinoscope displayed movement generated from multiple rotating static images. (Rizzo 69) These appliances were intended for a singular viewing only. The invention of the electrotachyscope in 1887 by Ottomar Anschutz changed the experience of observing animation to a more communal experience. Both the electrotachyscope and later the zoopraxiscope were rudimentary projectors, and they allowed audiences to view a weak projection through a small window.

According to Michael Rizzo, as stated in *The Art Direction for Film and Television*, these early animation devices were primarily developed and sold as “amusement novelties”, carnival and parlour entertainment rather than created from genuine scientific inquiry. (69) However, in 1891 Thomas Edison invented the motion picture viewer the kinetoscope. The difficulty and eventual failure to patent the kinetoscope resulted in numerous imitations and improvements on the existing technology, which inevitably “gave birth to a new industry” known as cinema. (Parent 6) After the innovation of the kinetoscope there were a number of rapid developments in film technology. This includes the cinematograph by the Lumiere brothers in 1895, a camera that could both project and develop film.

In 1896 the first experiments deploying new film technology were executed to make lifeless objects move, which can be considered the conception of contemporary 2D animation. In 1902, illustrator Georges Méliès employed camera manipulations, cut-out and stop motion techniques to create the surrealist silent film *A Trip to the Moon*. He would later create *The Impossible Voyage*, (1904) in a similar fashion. The first drawn work of animation on standard film is *Humorous Phases of Funny Faces* (1906) by James Stuart Blackton. The film comprises of single exposures of drawings simulating movement, in which Blackton uses chalkboard sketches and then cut-outs to simulate movement, at 20 frames filmed per second. These early experiments and innovations in film and animation technology gave rise to the contemporary 2d hand-drawn feature length animation films most well known around the world throughout the mid, and late 20th century.

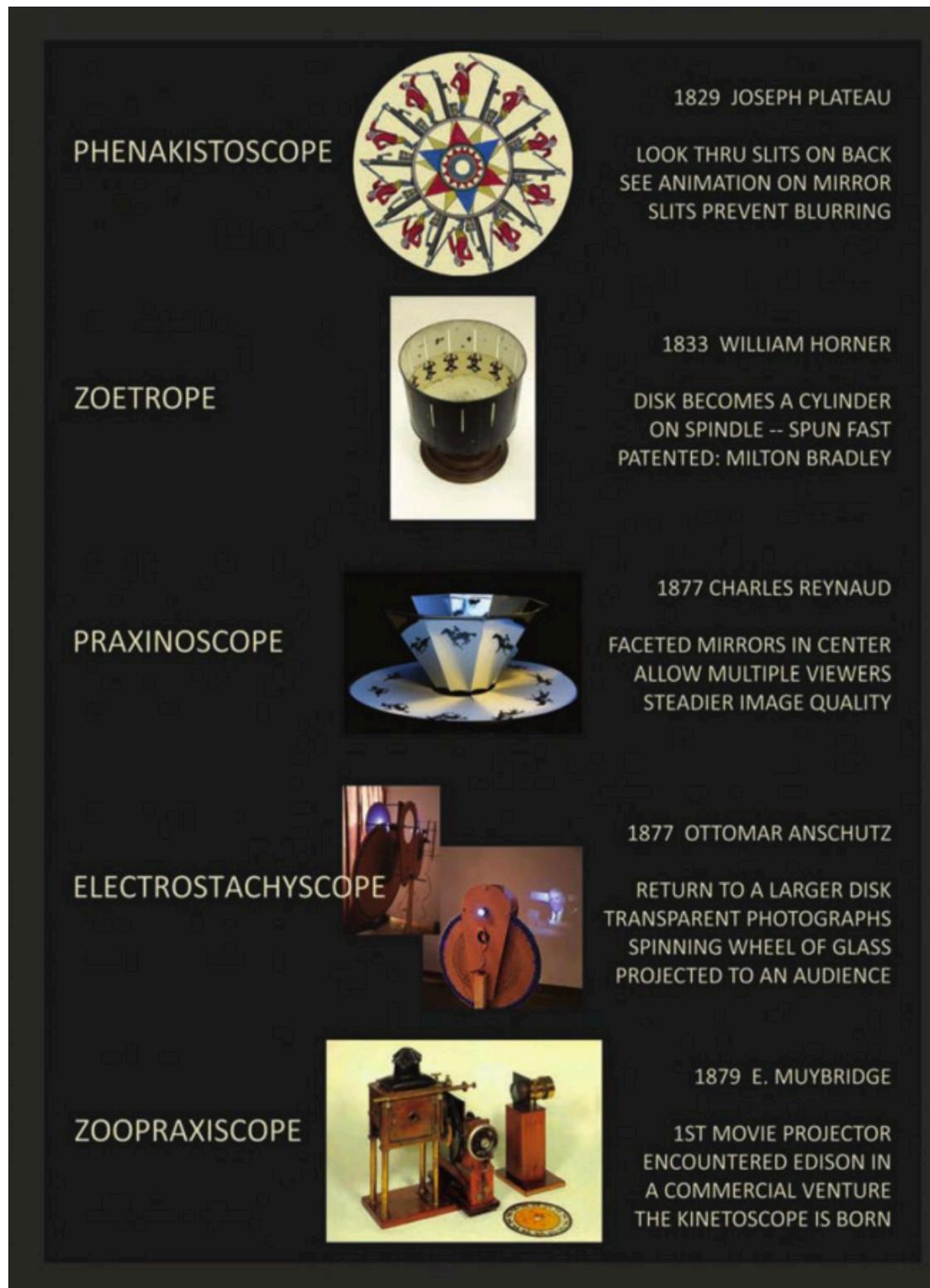


Fig. 1. Examples of early animation devices. (Rizzo 2015)

The Rise of Feature Length Animation

“The audiences had no idea how film worked much less what hand-drawn animation was. It was, indeed, magic.” (Parent 6) Feature length animation was conceived from the early experiments by aforementioned artists, illustrators and filmmakers in the late 19th century. By the beginning of the 20th century strides towards feature length animated projects were in progress. Windsor McCay was a notable early innovator of the medium of hand drawn animation, introducing methods and practices still commonly used in animation in the 21st century. “McCay is considered by many to have produced the first popular animations.” (Parent 6)

McCay’s vaudeville productions *Little Nemo* (1911), and *Gertie the Dinosaur* (1914) were the first renowned works of hand drawn 2d animation. These creations were constructed by filming each drawn frame of the animation separately, before compiling these frames to simulate movement of the characters, and then projected onto a screen. The naturalism, smoothness and technical prowess of McCay’s animation, (due to the 10,000 separate frames the artist illustrated for his production *Gertie the Dinosaur*), were characteristics admired by fellow artists and early innovators of the medium. Throughout his career McCay is heralded as pioneering a number of animation techniques which became standard for the art form. This includes an illustration practice referred to as “inbetweening”, “Inbetweening in traditional 2D animation is a process where animators draw a sequence of key frames first, and then draw in-between movement frames correspondingly.” (Weng, 282)

McCay also introduced a looping technique referred to as “cycling”. “An animation cycle is a segment of animation that is repeatable in a loop. The end state of the animation matches up the beginning state, so there is no hiccup at the loop point.” (Derakhshani 102) McCay later introduced

the use of colour to his creations through print marking, which served as inspiration for famed animators such as Len Lye, Oskar Fischinger, Walt Disney. McCay's use of colour in animation is one of the earliest executions of colour in any form of cinema and film. While these technical contributions of McCay served as invaluable to the advancement of the medium, and also proceeded to impact and inspire numerous practitioners, and are still in use in contemporary animation, it is animator John Bray who can be considered the most significant contributor to the early commercial success of the art-form.

Rick Parent in *The Algorithms and Principles of Non-Photorealistic Graphics* describes Bray as laying the foundation for conventional animation as it exists today. (7) This is due to his commercialization of animation by creating a dedicated production studio, Bray Productions, which employed many of the early 20th century's notable animators, and the patenting a range of major animation techniques. The employees of Bray Productions begot such artistic techniques as grey scaling (or the use of many shades of grey to represent an image), rotoscoping "drawing images on cells by tracing over previously recorded live footage" (Parent 7) peg systems for registration colouring, and the use of background artistry. Bray and his colleague Earl Hurd patented a number of techniques during the 1910s, included the use of translucent cels for drawing, greyscale and rotoscope Despite these methods and practices proving imperative to the future success of animation, the name most commonly associated with animation during the 20th century, and in contemporary animation, is Walt Disney.

In 2010 Walt Disney Studios released their 50th animated feature film, *Tangled*. Chris Pallant asserts, "No other studio can match this record of consistent feature animation production." (2). Disney, founder of the then Disney Brother's Cartoon Studio in 1923, and later, the Walt Disney

Studio in 1929, embarked on his career by creating comic strips, animating cut-out cartoons and creating celluloid animations. Disney contributed a number of technical innovations to the fledgling medium of animation. This includes storyboard and pencil sketches to review motion, dedicated storyboard and character development, multi-plane camera effects, and pioneering full-colour three-strip Technicolor¹ in film. Further to these advancements, Disney's *Steamboat Willie* (1928) a short film featuring a primitive Mickey Mouse character, became the first animated production to include synchronized sound². According to Animation historian Giannalberto Bendazzi, "this was an astonishing acceleration of filmic language in 1928." (96)

The use of multi-plane camera effects became Disney's advantage over competing studios, as the movement of multiple planes at varying rates produces the parallax effect. This is a displacement in the apparent position of an object viewed along two different lines of sight. This is measured by the angle or semi-angle of inclination between those two lines. The parallax effect is extremely effective "in creating the illusion of depth and an enhanced sensation of three dimensions." (Parent 7) The naturalism of Disney's characters, and the vibrant settings and environments they were placed in, is hailed as the chief contributor to the studios success, as the audience associated the animations with live-action footage.

Following a number of technically ground-breaking animations, such as *Flowers and Trees* of the *Silly Symphonies Series*³, Disney Studios released the first American feature length animated film,

¹ The process of colour cinematography using synchronized monochrome films, each of a different colour, to produce a colour print.

² Other animated projects as early as 1925 had included sound, such as *Song Car-Tunes* by the Fleischer Brothers, however the sound was not synchronized to the animation.

³ *Flowers and Trees* was the first first commercially released film to be produced in the full-colour three-strip Technicolor, as opposed to two-colour Technicolor. The following *Silly Symphonies* episodes, and Disney's future cartoons continued to be created in this fashion.

Snow White and the Seven Dwarfs in 1937. Disney was an early innovator of full-colour animation, and held an exclusive contract with Technicolor until 1935. This assured the studio's cartoons were far more popular with audiences than his peers, as coupled with synchronized sound, personable characters, and seemingly three dimensional environments, the animations could be argued to have resembled live-action features to an extent. Animation historian Michael Barrier in his study *Hollywood Cartoons: American Animation in Its Golden Age* claims Disney's allusion to reality, and the naturalism of his characters truly expanded the art-form, as previous to this animated characters "made no claim on the imagination outside the bits of cleverness in which they were used." (3) Thus Disney encouraged his audience to believe in his characters' existence, rather than exploiting them as purely visual artifices and parlour tricks. "No longer pure graphics, animation had become a real world caricature, which obeyed logical laws." (Bendazzi 100)

The feature length *Snow White and the Seven Dwarfs* resulted in a three-year animation process, which became the standard length of creating a feature film for Disney Studios. Dedicated departments were arranged specifically for animation, scene and setting design, unsophisticated special effects, design layouts, scripting and story, and inking, painting and filming. The sectoring of specialized department was an aspect Disney had borrowed from live-action productions, which may have helped legitimize the medium of animation further. For the creative process of *Snow White and the Seven Dwarfs*, Disney Studios employed 400 additional artists, inkers, and illustrators, which grew the number of artists working on the feature film to 700. The process of creating the film required lead artists to draw key frames of the various characters. Animators created the frame in-betweens. Later in the process, these celluloid frames were inked, and then

painted. Overall, 250,000 celluloid frames of the characters were crafted, with background artists illustrating various watercolour settings.

With the success of *Snow White and the Seven Dwarfs*⁴, various studios ventured into feature length animation including Paramount, MGM, and Warner Brothers. Disney was responsible for the popularisation of sound, colour and naturalism movement in animation, but also in the concept of character driven productions. Prior to the 1930s, the most endearing and well known character in animation was considered to be *Felix the Cat* created by Australian animator Pat Sullivan. Many animated projects until this time were frequently vignettes and shorts which featured non-recurring characters. Disney introduced recurring characters which had distinct personalities, “emotional truthfulness” (Barrier 4) and resembled protagonists in live-action productions. “He promoted the idea that the mind of the character was the driving force of the action, and that a key to believable animated motion was the analysis of real-life motion” (Parent 8) Disney’s devotion to engaging characters, story with narrative and psychological function continues to be a feature synonymous with Disney Studio productions to the present day.

The Golden Age of Animation

The golden age of western theatrical animation can be considered to span from 1928 to the late 1940s. During this period “several thousand sound cartoons were released”, according to animation historian Michael Barrier. (1999, xi) Production studios and many revered animators

⁴ The unprecedented success of *Snow White and the Seven Dwarfs*, which garnered more than 450 million at the box office, against a budget of 1.6 million, paved the way for Disney to expand their studio and scope of creativity.

crafted many memorable and pioneering feature length productions during this period. Throughout this era animation developed into a more cinematic, visual, immersive and emotional experience, forgoing their origins as simply moving drawings.

Due to the early financial success of Disney Studios, a number of production studios began dedicating funds and talent towards the creation and development of animation entertainment. Characters introduced during this era include *Bugs Bunny*, and the *Looney Tunes* by Warner Bros. Entertainment, *Popeye* and *Betty Boop* by Paramount Pictures, and several feature length Disney films such as *Pinocchio*, *Fantasia*, *Dumbo* and *Bambi*. According to Barrier, feature length productions of animation had become the standard of animation by the 1940s. “The shorts had lost their stride in the 1930s and never really regained it.” (Barrier 393) What could be considered the catalyst for a range of new characters, studios and animation talents emerging during this period was the Great Walt Disney Cartoonists Strike of 1941. A number of operative disputes within Disney Studios contributed to the strike of over 300 artists and animators.

By the 1940s, following the financial success of *Snow White and the Seven Dwarfs*, and the disappointing revenue of the technically demanding *Fantasia* (1940) and *Pinocchio* (1940), employee morale within the studio was waning. Due to the innovative yet experimental, and challenging animation practices Disney employed throughout this period, artists could be argued to have been exploited by the production studio.⁵ Due to the financially failings of the studio’s previous cartoons, Disney Studios, in May 1941 proceeded to layoff two dozen employees, most

⁵ Animators and artists laboured 6 day weeks, and were regularly denied, or randomly selected for pay increases, seemingly unconnected to their professional contributions or creative and artistic talents. Disney further isolated his workforce by denying screen credit to those who had actively created the features, in favour of expanding his own name and company brand. (Barrier 285)

of whom were associated and members of The Screen Cartoonist Guild. The Screen Cartoonist Guild had been formed controversially in the 1930s in response to the lack of union support for animators in a quickly growing and profitable industry. The union was officially declared in 1938, and was recognised by many of the major production studios including MGM, and Leon Schlesinger's Looney Tunes Studio, but not by Walt Disney.⁶ Thus on May 26 1941, the union voted to strike, which spurred a number of famed and significant animators to eventually defect from Disney Studios to forge their own paths in the animation industry. Art directors, Maurice Noble (*Roadrunner*, *Bugs Bunny*), and Art Babbit (*Arabian Knight*), and creative directors Bill Melendez (*Charlie Brown*), and Frank Tashlin (*Looney Tunes*), were laid off or defected from the studio during the strike and became noteworthy figures in animation throughout the 1950s and 1960s⁷. The strike hindered Disney through the loss of genuine talent, yet inspired a golden age of animation in the creativity which emerged from the dispute, away from Disney Studios.

Despite the losses in animators, directors and artists, WWII proved profitable for Disney. The studio was commissioned to produce entertaining propaganda, morale and recruitment content for the American military, government, and air-forces. "The Disney studio, as the war drew to an end, was in many ways a very different enterprise from the one that had been so badly divided a few years earlier." (Barrier 387) However, despite the more harmonious work environment, the company was producing cheaper and less visually impressive content, and required extensively skilled animators and artists to embellish and decorate settings and characters. "The freshness, the

⁶ Walt Disney had been disparaging of unions and guilds, and previous to the layoff within the studio had stated "the only people who belonged to unions are guys who want something for nothing or guys who want to get something out of dues." (qtd. in Barrier 284)

⁷ Similarly, artists and animators Hank Ketcham (*Dennis the Menace*), George Baker (*The Sad Sack*) and Walt Kelly (*Pogo*) were casualties in the strike and proceeded to produce their own popular content, influenced by the animation styles they had developed from their employment at Disney.

sense of excitement...[and]...the quality of the humour of Disney's animation diminished after WWII." (Sandler 41) Disney Studios in the early 1950s became more reliant on producing pictures which incorporated live-action sequences, which were carefully and rigidly rotoscoped, such as the feature length production *Cinderella* (1950). "Disney Studio's ability to make truly animated features, like *Snow White* and *Dumbo*, had withered, even as it's writers and animators become ever more skilled as craftsmen." (Barrier 402) Despite the production *Cinderella* integrating less technically demanding animation techniques, the film was an unprecedented success for the studio. However, while this feature thrived, the economic downturn in the 1950s, coupled with the invention and standardisation of the television drawing viewers from theatre, animation was now considered an "expensive luxury" for studios to continue producing. (Barrier 537)

Despite this worrying turn in audience preferences, and studio funds, Disney continued to produce feature length animations throughout the 1950s, the most notable of which is *Sleeping Beauty* (1959). This feature will be regarded as a chief contributor to the formulaic and unimaginative animation plaguing Disney features in the 1960s and 1970s, regardless of the feature itself employing extremely innovative techniques in animation, and displaying unique and lavish artistry. The studio began production for the film in 1951, and the feature proved exceedingly expensive⁸ and laborious to create. Despite the classical fairy-tale premise of *Sleeping Beauty*, which had become synonymous with Disney Studios, the animation style and aesthetic were significantly different to the studio's previously profitable films. Barrier claims *Sleeping Beauty* differed from Disney's previous features through the use of more modern artistry, utilising "flat bright colours and strong simple shapes." (555) Disney also attempted to delve into the historical

⁸ According to Michael Barrier the film "was far and away the most expensive Disney animated feature, with a cost – six million dollars – almost twice that of each of the three features that had preceded it." (559)

narrative of their source material, with an aesthetic inspired by Medieval tapestry, “it emphasized strong verticals and angles rather than curves [...] a tapestry-like density of detail.” (557) This was an artistic direction previously unseen in Disney productions. The process of animation proved more detailed than previous features, as production backgrounds were to be photographed behind the animation cels, to highlight the complex artistry.

The narrative of *Sleeping Beauty* is based on the medieval French fairy-tale *La Belle au bois* (*The Beauty Sleeping in the Wood*). The key animator and lead artist on the project was illustrator and artist Eyvind Earle, and could be argued to have been the first artist Disney had employed to incorporate a specific graphic aesthetic into a feature. The film is successful in grounding the audience in a specific place and time, purely through visual aesthetic. Disney’s foray into emulating tapestry works of art such as the Limbourg brothers’ *Tres Riches Heures*, was a significant aesthetic deviation from their previous animations. Despite the extensive and intricate artistic effort, and the unique historical stylisation the production demonstrated, the ultimate box office return on the feature was lacklustre. “The audiences that had responded so warmly to *Snow White* and *Cinderella* did not show up for *Sleeping Beauty* [...] the company suffered its first loss since the forties.” (559)

Thus, in the early 1960s, Disney Studios’ animation department was in a precarious position. The introduction of the Xerox camera effectively revived Disney’s feature animations. The technology rendered animations increasingly cheaper to produce as the process eliminated the requirement of hand-inking. While this style of animation proved popular and more economical, the features produced during this period were devoid of artistic finesse and a unique aesthetic style explored in *Sleeping Beauty*. If we are to consider the two most creative, imaginative and experimental features in terms of story and artistry Disney Studios created through the golden age of animation, *Fantasia*

and *Sleeping Beauty*, (both of which are critically acclaimed by contemporary animation standards, but failed to generate revenue) a trend emerges. Disney Studios throughout their history were consistently constricted by commercial performance of their features, thus it can be argued, progressive and imaginative animation faltered in favour of formula, profits and conformity.

Modern Age and Digital Animation

The traditional processes of animation continued as the chief method of creating productions throughout the 1960s, 1970s and early 1980s. Multiple feature length animations were released during this period, yet the medium was waning in commercial viability, and audience popularity, in comparison to other forms of popular media. However, by the late 1980s the digitalisation of animation was emerging. The predominant use of computer and digital animation was popularized at the end of the 20th century. According to Rick Parent there are two categories of computer animation: computer-assisted animation and computer generated animation. Computer-assisted animation usually refers to 2D and 2^{1/2} dimensional systems that computerize the traditional animation process. Purely computer generated animation, according to Wells, has “become the dominant approach in TV and feature work.” (125) Computer generated imagery completely enhanced the standard of animation in 1995 with the release of PIXAR and Disney’s feature length film *Toy Story*.

Computer graphics and hardware in the 1980s and early 1990s had advanced significantly and thus major animation studios such as Disney ventured into blending CGI with traditional animation.

Similarly, modernizations in the colouring and filming processes reduced the expensive practice of transferring animated drawings to cels, inking and painting. 2D hand-drawn digitally assisted animation was initially introduced in the 1985 Disney film *The Black Cauldron* (1985), and more notably, in Disney's 1991 feature *Beauty and The Beast*. While Disney's *The Rescuers Down Under* (1990) was the first completely digitally assisted feature length animation, *Beauty and The Beast* was a pioneering project for new animation technologies as the film integrated 2D and 3D aspects. The film utilised a revolutionary colouring, editing and filming technology, Computer Animation Production Systems(CAPS). Computer Animation Production Systems was a collection of software which eliminated the process of cel inking and painting. CAPS, developed by PIXAR⁹ (then named GraphicsGroup), improved colour tones, digitalised and expanded colour palettes, enhanced colour blending, and allowed sequences of film to be digitally stored and edited. The software also developed complex, three dimensional multi-plane camera effects which had been previously unseen in animated features. The Waltz sequence (Fig. 2) in *Beauty and The Beast* remains the most significant scene of early CG integration in digitally assisted 2D animation. Rick Parent explains "three dimensional environments were constructed for conventionally animated figures[...]to produce an entertaining commentary on the use of technology."(35)¹⁰. The commercial and critical success of *Beauty and The Beast* and the techniques utilised in the film, are hailed as chief motivations for the financial investments extended towards computer animation in the 1990s.

⁹ PIXAR, then known as GraphicsGroup began as a computer hardware, and computer graphics development agency in 1979.

¹⁰ The most profitable animated feature film to date, *Frozen*(2013), and the extremely successful *Tangled*(2010) were created by blending traditional 2D animation and computer generated imagery in a similar process to the early digitally assisted animation features.



Fig.2 Waltz scene in *Beauty and The Beast* exhibiting the CAPS digitally produced 3D environment. (Trousdale and Wise 1994)

In 1995 *Toy Story*, the first feature length entirely three dimensional, computer generated feature film was released by Disney Studios and PIXAR animation studios. PIXAR was, and continues to remain, the most dedicated contributors to the advancement of computer generated animation. Prior to *Toy Story*, PIXAR received numerous accolades for the short film *Tin Toy* (1988), including an academy award for best animated short feature, and became the first entirely computer animated project to do so. Parent asserts PIXAR's early productions "were among the first fully computer-generated animations to be taken seriously as animations, irrespective of the technique involved." (26) PIXAR (acquired by Disney Studios in 2006) are still considered pioneers of many

CGI technologies and technical advancements in digital animation; as of 2016 the studio has produced 16 entirely digitally animated films¹¹. With the introduction of advanced rendering software, computer hardware, graphics, and superior 3D modelling and digital drawing programs, purely digital animation is now “well-established as a principal medium for doing animation.” (Wells 35)

It can be argued digital animation as a whole has surpassed concerns of high production cost and laborious artistic process due to profitable returns and popularity among audiences of all demographics. Despite the legacy and esteem the medium of 2D hand drawn animation retains, as of 2016, Disney Studios no longer accepts traditional animation portfolios and has closed their traditional animation department for theatrical releases. Entirely traditional hand-drawn animation is more commonly executed by artistic and independent animation studios, and is more commonly produced in European studios.

Due to high production costs and the significant time and artistic ability required to produce a traditional 2D feature, the art-form has become all but obsolete for commercial productions. While Disney can be considered the most innovative animation studio in terms of technology, and successful in producing popular narratives, over the last 80 years, and particularly in the era of digital animation, a number of significant competitors in terms of innovation and critical acclaim have emerged. These studios include American rivals DreamWorks Animation (*Shrek*, *How to Train your Dragon*), Blue Sky Studios (*Ice Age*, *Rio*), and more recently, the Irish animation studio, Cartoon Saloon (*Secret of Kells*, *Song of the Sea*.)

¹¹ Renderman is the most significant software developed by PIXAR and has been used to create all in house 3d features. The creators have received an Oscar for the software’s contributor to feature films.

Chapter Three

A Discussion of Irish Animation in Context

History of Irish Animation Overview

Irish animator Steve Woods asserts the practice of Irish animation in the 20th century had “the promise of much to come and stopped really before it got started.” (2) The first production of Irish animation was a small stop work frame animation of the Yougal tower in County Cork by John Horgan, in 1909. This event was “quite significant” according to Woods, as the short appeared exceptionally soon after the first methods of animation were introduced in 1906 in the US. (2)

After initial excitement of the medium, the trail of animation creation and innovation in Ireland ran cold until the late 1950s, when Irish television production company RTE began requesting simple form animated shorts, and stop motion vignettes to run on their network. “Before RTÉ there was nothing except for James Horgan who experimented in animation in the early 1900s.” (2, Woods) *Dáithí Lacha* (1963) by Flann O’Riain was an example of RTE’s early foray into broadcast animation. The animation was decidedly unsophisticated, with the 5-minute episodes ultimately amounting to a flip book style comic strip. 1978 saw the creation of Ireland’s first traditionally animated series *An Saol ag Dul Thart* by Aidan Hickey for RTE. Small scale productions such as *The Prisoner* by Jim Murakami, and *An Inside Job* are considered the most significant animation projects to have been produced in Ireland throughout the 1970s and early 1980s. “On the whole prior to 1985, the animation sector in Ireland was little more than a cottage industry.” (Dobson 12) The golden age of animation may have been underrepresented in Irish

history, yet, the arrival of major animation studios in Ireland in the mid 1980s resulted in a momentous boom in the industry.

The Irish Industrial Development Authority during this period offered tax incentives (10 percent rate of corporation tax) and grant aid to foreign companies to set up operations in the country. The IDA “recognized that animation was a labour-intensive growth industry”. (Dobson 12) Thus large international studios such as Emerald City Productions, Murakami Wolf Swenson and Sullivan Bluth were drawn to Ireland and proceeded to produce numerous noteworthy animation features. Further to this, 1980 also saw the introduction of the the Irish Film Board Act. This recognised the Irish Film Board as a “dedicated agency with a mandate and funding to assist in the development of Irish film making and in the development of an industry in Ireland for the making of films.” (Audiovisual Strategic Review Steering Group 3) While the larger studios made the most impact on the Irish economy, smaller studios also began producing content in Ireland during this period, including Quateru, Animedia Teo, Fred Craig Paramedia and Shepherd Films.

Don Bluth can be considered to have a major influence on Irish animation. In 1979 Bluth defected from Disney studios, with his partners, and renowned animators Gary Goldman and John Pomeroy. “Bluth walked out of Disney, complaining that the studio was skimping on the production values that made the classics so remarkable. [...] Bluth also declared that Disney’s stories had degenerated into saccharine mush.” (Osmond 190) In 1985 Bluth relocated his newly formed studio Sullivan Bluth (with his financial partner, Michael Sullivan) to North Dublin, and became a leading competitor of Disney in feature length animations. The studio released many popular and profitable productions such as *American Tail*, *All Dogs go to Heaven*, and *The Land Before Time*. Sullivan Bluth studios developed feature length classical animations through traditional 2D

methods in an era which required a significant workforce of artists and animators. Thus various educational and artistic courses, such as Irish School of Classical Animation in Ballyfermot, was established in partnership with the studio, and began providing training primarily in traditional animation.

At this time a degree programme in animation at Dun Laoghaire College of Art and Design was also established. This program differed stylistically from classical animation, and concentrated on a European experimental art-house style. By 1991 over 500 hundred skilled individuals were employed throughout Ireland in animation, one-third of all persons working in the Irish audio-visual industry at that time. (Dobson, 13) The eventual closure of the large animation studios in the 90s¹², due to revoking of tax incentives, irregular project opportunities, outsourcing of mechanical labour¹³ and the downturn of the Irish economy, resulted in the oversaturation of qualified artists and animators with few job prospects within Ireland. “The burst bubble left behind a skilled and determined workforce, which constituted the basis for the modern Irish animation sector.” (Dobson 13)

Due to the enthusiasm of the animation community numerous efforts were made during this period to kept the medium alive. This includes the founding of Anamu Animation Base in 1992, a creative community which encouraged the art form, and the establishing of animation festivals such as the Cartoon Forum Festival in 1996. The late 1990s and early 2000s ushered in a new era of success for Irish animation. Small scale studios began emerging and producing content for international

¹² Emerald City closed down in 1991, with the loss of 50 jobs. At this time Murakami and Wolf also went their separate ways. Sullivan Bluth closed in 1995 with the loss of 300 jobs. (Dobson 13)

¹³ While the creative side of animation, such as scripting, storyboarding, key-frame design and character conception was produced in Ireland, the more technically heavy and mechanical aspects of animation, such as cel inking and painting, were outsourced by American studios to the Philippines and Korea due to lower labor costs. (Dobson 13)

television advertisement and programming markets, and film feature projects. Brown Bag, Boulder Media, Campbell Ryan Productions, Cartoon Saloon, Magma Films and Telegael were formed during this period and Irish productions such as Edith Pieperhoff's *An Bonnán Bui* (1995), Brown Bag's *Give up Yer Aul Sins* (2001) and Cartoon Saloon's *Celtic Maidens* (2003) were released to critical success.

Animation Dingle has reported in 2016 that the animation industry in Ireland is booming. Projects created in Ireland have generated almost €100 million euros into the economy with profits growing year on year. Currently, there are over 650 highly skilled people in full time employment within the industry, alongside over 1000 contract workers employed on ongoing projects. (Business World) According to these findings, animation could be considered one of Ireland's most profitable exports. What is particularly noteworthy is the rapid popularisation of Irish animation all over the world, despite the relatively brief history of the native productions. Thomas Walsh states the success of the Irish animation industry could be attributed to the "postcolonial aesthetic" of the artistry, which "reflects the postcolonial conditions of Irish society itself." (1)

Irish Animation Aesthetic in Context

"Disney was criticized as the one who destroyed the graphic freedom of animation in favour of live-action-style realism, or the sly propagandist of American ideology all over the world."(Bendazzi 107)

Thomas Walsh states, "ex-Disney animation director Don Bluth, played a pivotal role in the development of the indigenous Irish industry, and constituted a colonial moment in Irish animation

history.” (1) Bluth’s previous connections with Disney Studios suggests his visual design style was heavily influenced by Disney’s naturalism aesthetic, and traditional animation practices. “The films Bluth began making, quoted from Walt Disney’s films as reverently as if they were scripture.” (Barrier 570) Having begun his career as an apprentice in 1955 in Disney studios, Bluth continued to work as a lead animator for the company until 1979, and contributed to popular features such as *Robin Hood*, *Winnie the Pooh* and *The Rescuers*.

What can be deduced from the history of Irish animation, is indigenous animators had but a modest impact on the development and evolution of the medium, techniques and resulting artistic aesthetic. Prospective Irish artists and animators were trained by the Irish School of Classical Animation in Ballyfermot with a distinctly “Hollywood-style conveyer belt” (Dobson 14) path to employment in the major American studios. “So carefully engineered are the Disney-studio features that they lend themselves to close imitation by anyone who can come up with the money required to do it.” (Barrier 570) Thus the aspiring animators, and artists were educated in the practices, techniques and mechanics of Bluth’s Disney-inspired realism.

Steve Woods states in his overview of the history of Irish animation, “Overall an observer couldn't say there is a particular "style" to Irish animated films or a "school" of Irish animation.” (4) This opinion could be based on the early influences of US studios producing the content which reflected the trends of animation in their own culture. Thus the lack of locally sourced investment, particularly by the Irish Film Board and IDA at this time, affected Irish animation to evolve without a signature style, practices and aesthetic for the majority of the 20th century. However, Maeve Connolly in her article *Theorising Irish Animation: Heritage, Enterprise and Critical Practice* argues against the lack of personality and signature aesthetic in Irish animation, and references animator Andrew Kavanagh’s statement, “Irish animation is particularly well-placed to reach

global audiences because it is characterised by distinct, recognisable aesthetic qualities.” (1) Presently, this statement more accurately reflects the development of the last 15 years in Irish animation, rather than the overarching narrative of the medium. Connelly argues the discussion and theorization of Irish animation as a genre within Irish cinema has been “marginal” (80), however, due to the relatively high profile the industry has garnered in recent times, the need for discussion and contextualization has become imperative. Ireland, particularly the 2000s, developed as a highly digitalized country, partly due to the arrival of large technological and scientific corporations such as Intel, Facebook, Google, Microsoft, Dell, Pfizer and Apple. These international companies established major development compounds and EU head quarters due to low tax rates, the country’s proximity to Europe, and the native English speaking and highly educated workforce.

The digitalisation and technologicalisation of Ireland has had a major impact on the global perception of the country. Previously, Ireland was predominantly renowned for literary prowess, Celtic mysticism and a pious sentimentality, or “the land of saints and scholars”. Connolly states Ireland as a nation is often “seen as a repository of mythic ‘pre-modern’ values and as the locus of cutting-edge developments in technology.” (3) However, Irish artistic ventures have often remained influenced by the historical, political and cultural events of the county. The artistic representation of Irish myths and folklore has historically held a distinctly recognisable aesthetic. Insular¹⁴ inspired design and aesthetic is closely connected to Irish identity.

The most celebrated and recognisable example of this design is unarguably western calligraphy masterwork, illuminated manuscript of the Bible, The Book of Kells, held in Trinity College

¹⁴ A style of art closely connected to the British Isles. Predominately features ornate swirling motifs. To be discussed in more detail in Chapter 4.

Dublin. Tomm Moore, director of Irish animated feature *The Secret of Kells* has stated Celtic iconography, crafts and motifs are so prevalent, rich and ingrained in Irish culture, that the masterfulness of the aesthetic is almost unappreciated, “a French artist, who came to work on the film, taking a photo of a manhole cover that had some Gaelic writing on it which was spelled in a “Book of Kells” style font. He was amazed how it was everywhere, and yet we hardly notice it.” (Cohen AWN) (Fig. 3) While Ireland may be more famed for traditional Celtic music, and storytelling, audio-visual representation is proving to be every more accessible through mediums such as animation.

The juxtaposition of digital advancement, and historical and cultural artistic representation has fared well for Irish 21st century animation. Connolly states the outward view of animation in Ireland in the 20th century was an aesthetic cultivated by “state investment in enterprise and education” (5), while the indigenous artistic style was focused towards the folklore, literature and stories exploring the often austere narrative, or mythical fables of Ireland.

With the subsequent closure of large American studios, the medium of Irish animation and the creative community shifted further towards a native and accurate representation of the culture. Animation communities exploited the digital advancements in their creative endeavours, marrying modernistic technologies with the mysticism, art, magic, and melancholic beauty synonymous with Irish identity. Certainly it can be argued with productions such as Brown Bag’s *Give up Yer Aul Sins* (2001) and Cartoon Saloon’s *Celtic Maidens* (2003), *The Secret of Kells* (2009), and *Song of the Sea* (2014) a specific and recognisable artistic aesthetic in Irish animation has emerged, unrelated to the commercial investments of the industry’s origins. Rather, the characters represented in Irish animation, and the manner in which they are animated often challenge the

realism aesthetic popularised by Sullivan Bluth, and Disney Studios¹⁵ to create a wholly unique and indigenous visual. Further, less commercialisation and a focus on productions as works of art, and Ireland’s focus on cultural heritage has increased creativity. “Production budgets are modest enough that individuality and creativity can flourish without having to worry about what formula will be most appealing for product tie-ins, sequels, and Super Bowl ads.” (Cohen, “‘The secret of Kells’ - What Is This Remarkable Animated Feature?’”)



Fig. 3 A manhole cover in the city of Galway, Ireland, decorated with a Celtic triskele symbol. (Dooley 2015)

¹⁵ To be discussed further in case study regarding Cartoon Saloon’s *The Secret of Kells* (2009), and *Song of the Sea* (2014).

Chapter 4

Irish Animation challenging Western influences

Case Study: Cartoon Saloon

“Disney adaptations have been attacked for plundering and simplifying grand historical narratives, being responsible for the impoverishment of youth, and for closing the minds of their viewers through their insistence on closure – the endings of these films, repeatedly, resolve all the ambiguities and complexities of their literary sources.” (Slethaug 212)

Cartoon Saloon is a successful Irish animation studio operating from Kilkenny, in southeast Ireland. The studio was established in 1999 by animators and illustrators Tomm Moore, Nora Twomey and Paul Young. The trio first began collaborating while studying at Ballyfermot Senior College Dublin, a classical animation training degree previously set up in conjunction with Sullivan Bluth Studios. Cartoon Saloon have become internationally recognized in the past decade for their critically acclaimed feature animated films *The Secret of Kells* (2009) and *Song of the Sea* (2014). The studio also creates animation for various programming networks and advertising and commercials. Popular Cartoon Saloon series include *Skunk Fu*(BBC), *Anam na Amhrain*(TG4), and *Puffin Rock* (RTE Jr.) Upcoming projects by Cartoon Saloon involve an animated adaption of the popular young adult novel *The Breadwinner*(2016) by Deborah Ellis, and *Wolfwalkers*. This feature is in a similar vein as *Song of the Sea*, and *The Secret of Kells* and will centre on Oliver Cromwell’s extermination of Ireland’s wolf population, intertwining with fables and mythology. This feature is due for release in 2018.

A Discussion of Narrative in *The Secret of Kells* and *Song of the Sea*

“I felt it important to reinforce that losing folklore from our everyday life means losing connection to our environment and culture.” (Moore qtd. in Thill)

The animated feature *The Secret of Kells* had been in development by director Tomm Moore, and his Cartoon Saloon colleagues since 1999. “The project, developed and directed with Nora Twomey, came from an ambition that Moore had since his college days to base an animated film on something significant in Irish art.” (Bendazzi 92) *The Secret of Kells* began official production in 2005, after financing from the Irish film board, in union with a number of European distributors such as Gébéka Films, Kinopolis, Buena Vista, and Studio Canal. The physical animation process was divided between 5 countries, with the animation completed in batches in France, Belgium, Brazil, Hungary, and Ireland. The final number of animators and artists working on the film reached over 500. Moore stated of *The Secret of Kells*, “we have been able to find a style of animation that’s uniquely Irish. It’s the first Irish animated feature film based on Irish history and legends, and we looked to the European tradition in animation as inspiration to find our style.” (qtd. in Milligan, “Cartoon Saloon’s Secret is Out.”)

The narrative of *The Secret of Kells* concerns a young Irish monk named Brendan, residing in the guarded and remote monastery of Kells in the 8th century A.D. Brendan is under strict supervision by his uncle and guardian, the joyless and pious Abbot Cellach. He is tasked with assisting to build a wall against the inevitable arrival of fierce invaders who have been plundering and destroying Irish monasteries. A master illuminator arrives in Kells from the distant monastery Iona in

Scotland, with a mysteriously beautiful and intricate manuscript, and Brendan's journey into the fairy-tale and folklore of Ireland begins.

With the support of a wood fairy(fae), Aisling, and a magical cat, Pangur Bán, Brendan defeats a host of mythical foes in his quest to capture a mystic lens, the eye of Colm Cille, which is required in the artistic completion of the Book of Kells. Moore asserts *The Secret of Kells* is a story of redemption, continuity, friendship and hope. The narrative and tone of *The Secret of Kells* is distinctly Irish, with the inclusion of a cast of native voice actors, and musical style accompaniment by Kila and neo-Celtic music by French composer Bruno Coulais. The themes of the film, while noticeably and unarguably rooted in Irish history, mythology and folklore, are also appealing to a universal audience. Moore elected to ensure the film was not created so as to be esoteric and only comprehensible to an Irish audience, "the film is careful not to spell out specifics that might limit its audience." (Cohen "The secret of Kells' - What Is This Remarkable Animated Feature?")

Thus, while the Book of Kells is the chief influencer of the film's aesthetic and narrative, a specific religion or spiritual ideology is never overtly discussed. According Maria O'Brien in her article "*The Secret of Kells, a film for a post Celtic Tiger Ireland?*" the feature is unique in terms of the "anti-clerical fixation" of an industry film piece regarding Irish culture, and subverting of tropes of Ireland a bleak, sanctimonious country. (1) Similarly, while there is a historical awareness regarding Viking attacks on Irish and British monasteries, the evil forces attempting to destroy Iona and Kells in *The Secret of Kells* are merely faceless abstract shapes rather than the traditional cinematic representation of Nordic Vikings. "Ireland, on the margins of Europe, and animation (considered often as on the margins of the film industry) come together in *The Secret of Kells* to interrogate ideas of the nation and Irishness within a world context." (O'Brien 4)

The Secret of Kells is distinctly Irish in tone, art and content, yet the film can never be accused of “plundering and simplifying grand historical narratives”, as unlike many Irish productions, historical content is not the prime focus of the feature. Rather it is the exploration of ancient mysticism, folklore, fables, magic and cultural identity which emanate throughout the feature. *Song of the Sea* produced in 2014, and directed by Moore was Cartoon Saloon follow on feature production to *The Secret of Kells*. Similar to *The Secret of Kells* the piece was internationally co-produced, and animated in Ireland, Luxembourg, Belgium, France and Denmark. The music of the feature was composed once again by Kila and Bruno Coulais.

The narrative of *Song of the Sea* concerns the relationship between Ben and his younger mute sister, Saoirse. The children reside on an island off the coast of Ireland, with their lighthouse keeper father, Conor. Bronagh, the ethereal mother of the two siblings, is conveyed to have vanished during the night six years previously. It is implied Bronagh passed away while giving birth to Saoirse, which has inevitably placed a strain on the relationship between Ben and his sister. Before her disappearance, Bronagh had entrusted a musical conch shell to Ben and instilled him with knowledge of ancient Irish folklore, fables, myths and traditional songs. In the wake of Saoirse unearthing a mysterious white fur coat from a locked chest in the attic, and appearing to endanger herself by swimming late at night with the island’s seals, the children are taken to Dublin City to live with their Grandmother.

In an attempt to return to their home, the children embark on a journey through the Irish countryside and encounter many mythical Irish faeries, and fabled creatures who are slowly turning to stone. It is revealed through a number of encounters with the fae folk, that Saoirse, like

her mother, is a Selkie¹⁶. Specifically, the last Selkie in all of Ireland. She must return to the sea and recite an ancient song to free the fae of Ireland from a curse which has caused them to fade into the landscape of Ireland forever. Similar to *The Secret of Kells* the feature serves to firmly place the viewer in Ireland, through the use of symbolism, colloquial dialogue, visual setting and unobtrusive Irish iconography. However, the feature further marries the past mysticism of Ireland's legends and folklore and the contemporary narrative of Ireland through motifs and themes unexplored in *The Secret of Kells*. *Song of the Sea* succeeds in incorporating psychological and sociological issues such as grief, abandonment, personal loss, loneliness, industrialisation, and alcoholism with the fairy-tale elements of the folklore of Ireland.

Similar to *The Secret of Kells*, the film does not attempt to dissect the historical narrative of Ireland, rather the feature endeavours to connect the romanticism of Ireland's mythology with contemporary industrialised Ireland. (Fig. 4) The narrative also implies the dangers of ancient folklore of Irish culture dissipating in an increasingly modernised country. Arguably, the central message is accepting and celebrating one's true identity, and embracing and accepting the past can heal the injury caused by misunderstanding, loss and separation.

Both *Song of the Sea* and *The Secret of Kells* are innovative narratives. While they are grounded in various literary sources concerning Irish folklore and mythology, they are unique in adapting and utilising their source materials, the fables and folklore of Ireland, in an accessible and contemporary manner. Not only by crafting a charming visual aesthetic, but also through traditional song, and emotional and humorous dialogue. They do not attempt to achieve a

¹⁶ A Selkie is a figure found in Gaelic mythology. The Selkie takes the form of a seal in water, and upon reaching the shore will shed their coats and become a human.

resolution to the “ambiguities and complexities” of their mythological and historical foundations, rather, they strive to explore Irish culture and history, both past and present¹⁷.



Fig. 4 Fae Folk in the *Song of the Sea* build their sanctuary within a roundabout in Dublin City Centre, juxtaposing ancient and industrialised Ireland. This scene conveys the fairy’s souls being taken and turned to stone, effectively causing them to meld and disappear into the landscape. (Moore 2015)

¹⁷ To be discussed further in Artistic and Creative Influences.

Artistic and Creative Influences

While the narratives, music, cast, dialogue and folklore element contribute to the cultural consciousness of each of these features, the most arresting and astonishing aspect of the feature is the visual art. “The overall style is inspired by Celtic and medieval Irish art [...] from the masterly backgrounds created to the character animation.” (Bendazzi 93) Moore has asserted his aesthetic inspirations for *The Secret of Kells* and *Song of the Sea* span the artistic works of Irish and Gaelic ancient myths, fables and folklore, and the chief inspiration, of course, illuminated medieval manuscripts, primarily The Book of Kells. “The illustration shows a combination of old pagan and new Christian concepts and ways of life, and transmits the Celtic tradition of ornamentation in a new version tied to Christianity.” (Heniz 14)

In terms of animation processes and peer influences there have also been notable muses from outside Ireland, which contributed to Moore’s visual design and method. Moore has claimed the animation epic *The Thief and the Cobbler* by director Richard Williams, as an inspiration for the landscape design and aesthetic direction of *The Secret of Kells* and later feature *Song of the Sea*.¹⁸ The animation aesthetic for *The Thief and the Cobbler* was inspired by “Oriental and Eastern art” (Beck 23), and is remarkable for creating artistic optical illusions through perspective, and an in-

¹⁸ *The Thief and the Cobbler* (1995) has an extensively troubled production history. The feature began production in the early 1960s, and eventually, a heavily edited version of the animation was released in 1995 by Miramax studios, under the name *Arabian Knight*. The most notable aspect regarding the feature is the elaborate art direction and ambitious animation techniques by Errol Le Cain, Art Babbitt (who defected from Disney Studios during the Cartoonist Strike of 1941) and Roy Naisbitt.

the-round¹⁹ animation, through 2D animation patterns. This style of animation was utilized to achieve three dimensional environments before the invention of digitally assisted animation. (Fig. 5&6) Williams hired aspiring and novice animators to contribute to the creation of the film, as he endeavoured for the animation to appear unique and uninfluenced by the popular commercial US films of the time i.e. Disney Studios. The feature was created entirely through traditional hand drawn animation, and the final incomplete version is hailed as a lost masterpiece by many animators, artists and illustrators. Inspired by the “mad-architect ornamentalism” of *The Thief and the Cobbler*, “*The Secret of Kells* is built from swirls and semi-circles, jigsaw-shape collages and a funhouse of perspectives disguised as flat backgrounds.” (Osmond 101) (Fig. 7&8)

Moore has also attributed the artistic style and character design of *The Secret of Kells* and *Song of the Sea* to the Disney Studios animation feature *Mulan* (1998). *Mulan* is significant in Disney’s catalogue of animations, purely due to the attractive artistry and character design, heavily influenced by traditional block print artworks ranging from the Ming and Qing Dynasties in Chinese history. (Fig. 9, 10 & 11) As previously discussed, Disney Studios, in the aftermath of the box office failure of *Sleeping Beauty*, (the aesthetic of which was influenced by Medieval French tapestry) was reluctant to experiment with indigenous and historically recognisable artistry. Thus Disney’s aesthetic remained largely stagnant, and formulaic until the 1990s.

¹⁹ In-the-round refers to a form of theatre seating, with the audience placed on at least three sides of the stage. This is the viewing perspective Williams envisioned for *The Thief and the Cobbler*.



Fig 5. Location drawing of the kingdom in *The Thief and the Cobbler*. While the film was drawn as flat 2d animation the aesthetic creates optical illusions through scaling, patterns and perspective to produce 3D environments without the use of digital interference. (Williams 2011)

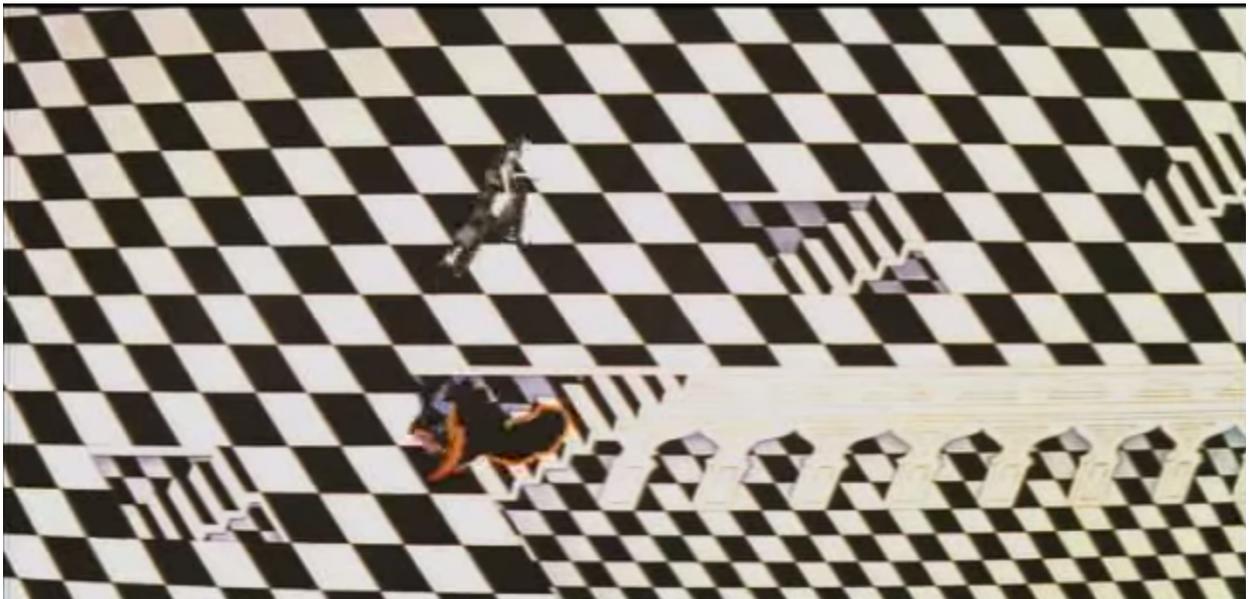


Fig. 6. Staircase scene in *The Thief and the Cobbler*. Displays perspective illusions created by 2D checked patterns of various sizes. (Williams 2011)



Fig. 7 Establishing shot of Dublin City in Moore's *Song of the Sea*. Utilizes similar styles and 2d optical illusions as Williams' *The Thief and the Cobbler*, through abstract setting sketches, and perspective manipulation. (Moore 2015)

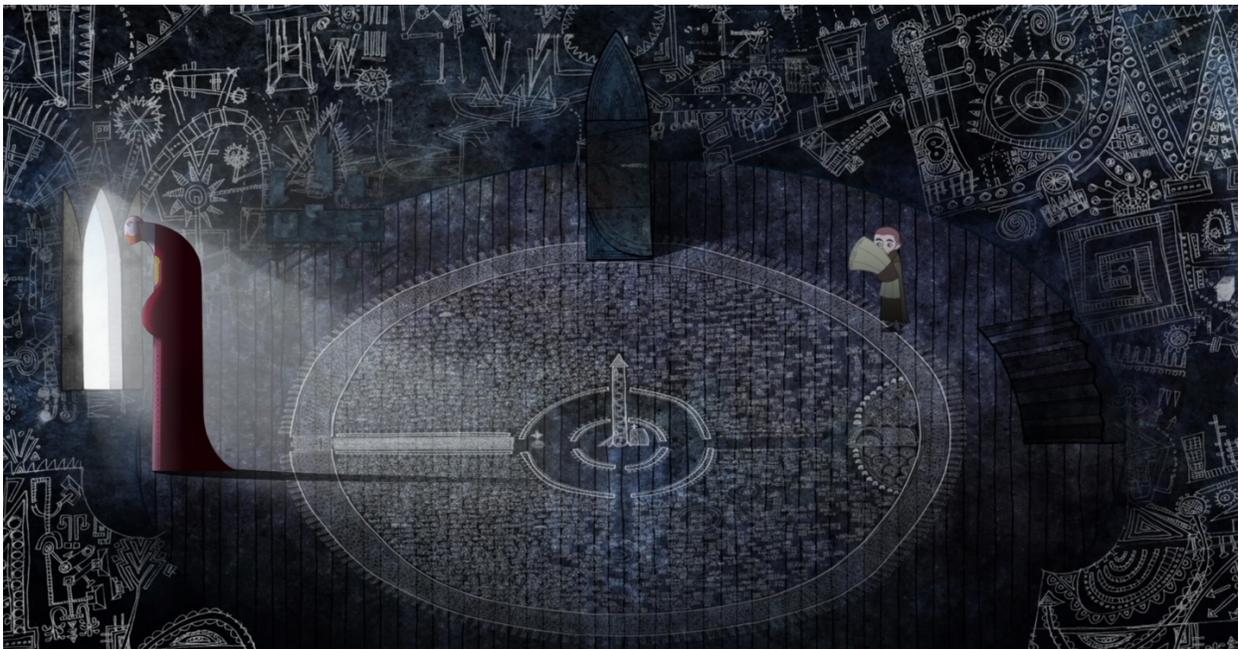


Fig. 8 Monastery scene in *The Secret of Kells* conveying a flat 2D scene with elements such as lighting, patterns and character placement to create a three dimensional space. (Moore and Twomey 2009)

Moore has also claimed the aesthetic and tone of *Song of the Sea* and *The Secret of Kells* were inspired by the art-house, international co-production *The Triplets of Belleville* (2003). Sylvain Chomet's critically acclaimed feature is shaped by contemporary French comic strips, and merges elements of 2D hand drawn traditional animation and three dimensional computer generated settings, environments and backgrounds. While the artistic style of Chomet's *The Triplets of Belleville* is a notable aspect of the feature, the film also serves to incorporate many French tropes in characters and integrates traditional, and cultural symbols and settings of French culture. (Fig. 12 & 13) These rich and recognisable representations of the French customs and traditions inserts the viewer in a particular place, time and location.

Similarly with *The Secret of Kells* and *Song of the Sea*, the distinctly Celtic aesthetic is recognisable from both the character and setting design, but also through the symbolism, and iconography laced throughout the features. (Fig. 14 & 15)

Thus, when considering the key and peer influences of *The Book of Kells* and *Song of the Sea*, it is apparent the realism and naturalism of 20th century Disney Studios and Sullivan Bluth, and the hyper-stylised computer generated imagery of PIXAR, are not primary sources of aesthetic or technical inspiration for Cartoon Saloon. "The designs were too Disney and traditional, that I should use the chance to do something different. That night I started sketching something really flat." (Moore qtd. Osmond 100) Rather, it is the European art-house animation scene, Celtic symbolism, coupled with the traditionalism of Oriental and Eastern art which have accumulated to produce the distinctly unique aesthetic of *The Secret of Kells* and *Song of the Sea*.



Fig. 9 Ming Dynasty landscape artistry, by the Wu School painters (1600s).



Fig. 10 Qing Dynasty landscape artistry by Wang Hui and Wang Shimin. (1674)

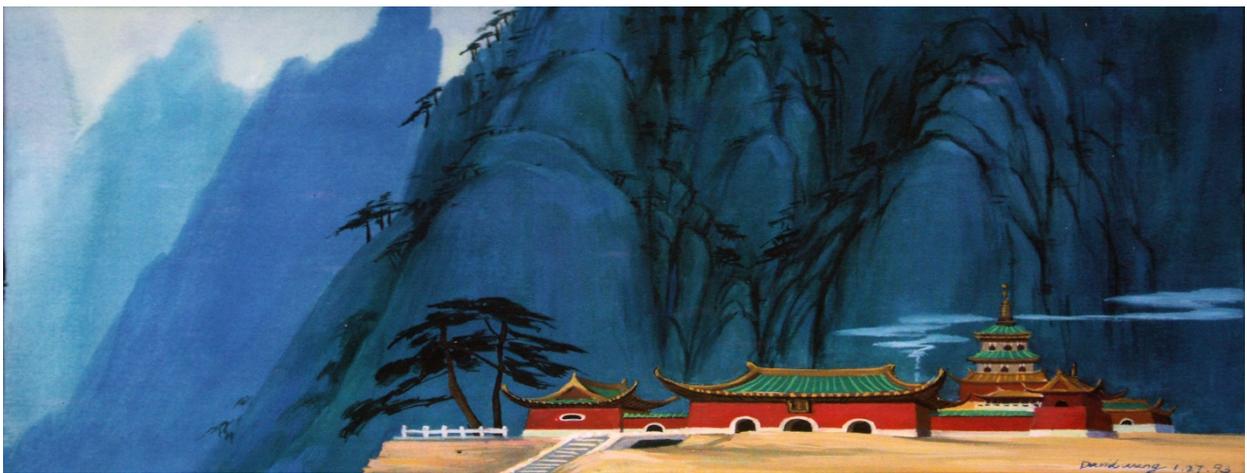


Fig. 11 Landscape drawing from Walt Disney Feature Animation Studio's *Mulan* (Cook and Bancroft)



Fig. 12. Establishing shot of a digitally painted background in *The Triplets of Belleville*. The colour palate, shop fronts, street lamp and architecture are successful in providing a distinct location for the audience. (Chomet 2003)



Fig. 13. *The Triplets of Belleville* utilising French caricatures such as a Gendarmerie, and Cornett nun to establish a particular setting. Similarly, the French language graffiti and title of the truck serve to indicate the location the animation is taking place. (Chomet 2003)



Fig. 14 The living room scene, in the home of Ben and Saoirse's Grandmother. The framed picture of Jesus with a candle lighting underneath is a stereotypical depiction of devout Catholicism associated with elderly Irish individuals. (Moore, *Song of the Sea*)



Fig. 15 Saoirse and the fae folk within their roundabout haven in *Song of the Sea*. There is a number of Celtic spirals located on the stone statues, but also there is also a feather carving on the wall behind the characters. Feathers were often worn by pagan druids before the arrival of Christianity in Ireland. (Moore 2015)

In terms of artistry, the aesthetic designs of *The Secret of Kells* and *Song of the Sea* are heavily influenced by ancient Celtic art motifs, and medieval illuminated manuscripts. While the style of Celtic art popularised during the Iron Age in Ireland (beginning in 500 BC), which commonly includes circular forms, spirals and triskeles, is synonymous with the Irish cultural identity, the origins and specifics of the style are often underrepresented. Lloyd Robert Laing asserts in his study *Later Celtic Art in Britain and Ireland*, the contemporary incarnations of Celtic motifs and designs have become diluted in meaning by copies of ancient works of art. “Celtic art of the golden age was controlled and intellectual, the product of a disciplined reason, not an unfettered imagination.”(53) While the art is extremely intricate and expertly crafted, the Celts of the Iron Age failed to leave dated artworks and sculptures, thus the imagery of their craft “is elusive, non-representational and non-narrative, and thus difficult to analyse.”(Megew and Megew 81)

Despite the lack of archaeological details, the ornate style of art is considered to have been a means to express self-identification and nationalism. (Laing 43) Similarly the repeated use of curves and spiral design has been connected to an affinity with the patterns which biologically occur in flora and fauna, and the natural world. The artwork, sculptures and metalwork of the ancient Celts made use of curvilinear design, interlace and geometric patterns, complex engraved lines, zoomorphic motifs, and symbolic colours, such as red and gold. (Garrow 159) Illuminated manuscripts entered into the Irish historical timeline significantly later than Bronze Age Celts, however, the aesthetic design demonstrated in these scripts is noticeably similar. Unlike the Celts who rarely inscribed or dated their artwork, illuminated manuscripts which were commonly crafted in monasteries by learned scholars, contained a wealth of written information. The rise of these lavishly decorated manuscripts, and religious works of art coincided with the spread of Christianity across Western Europe.

The craft of monastic art broadened throughout Ireland as early as the 7th century. Significant Irish monasteries such as Kildare, Durrow, Clonmacnois, Clonfert and Kells produced an abundant illuminated manuscripts during this period, which survive to this day. The aesthetic origins of the designs and embellishments found in illuminations are varied. The manuscripts are described as a fusion of Roman biblical art, Continental and Byzantine art, tradition Celtic culture and design, and Anglo-Saxon crafting techniques. They exhibited a wide range of painted colours and intricate metalwork, including combinations of gold leaf, green, yellow, blue and red. In terms of content, they were passages from biblical text, Gospel passages, religious writings typically written in Latin. These writings were often intersected by large illustrated pages of “abstract or representation art”. (Arnold 13) Common imagery tropes and illustrations depicted in these manuscripts include historiated letters²⁰, high Celtic crosses, three-dimensional woven torques, rhombuses and diamonds, branched and interlocking spiral designs and elaborate depictions of nature. These manuscripts were extremely valuable and striking, and were routinely plundered by Nordic Vikings during raids in the 8th and 9th century.

Illuminated manuscripts were created with the intention to preserve teachings of the Church, exhibit the craftsmanship of the artists and monks, and the monastery’s devotion to the word of God. Figures 17 and 18 convey the aesthetic impact of Celtic motifs on the visual design of the *The Secret of Kells* and *Song of the Sea*. It can be argued Moore through his use of Celtic symbolism and imagery is vying to convey the values of these icons, artistic motifs and themes in Irish culture and history, without overtly stating it through the narrative or dialogue. Imagery,

²⁰ A common trope of medieval artistry, a large and lavishly decorated letter at the beginning of a passage. Can be seen in Fig. 16.

artwork and symbolism executed by the Celts is often associated an affinity with nature, flora and fauna, and a passion for expressing cultural identity, spirituality and nationalism.

Song of the Sea and *The Secret of Kells* are designed in a fashion which honours the mastery in which Illustrated manuscripts of Christian monasteries were created, while also connecting the spirituality and representation of Celtic paganism through nonintrusive symbolism. Thus, these features are more than a depiction of a single era, spirituality, or ideology in Irish history. Rather they are a celebration of ancient Ireland through symbolism, medieval Irish artistry through colouring and aesthetic, and the future of Irish animation artistry, through their technical processes.



Fig. 16 The Chi Rho page of the Book of Kells (Trinity College Dublin), commonly considered the most famous manuscript page in medieval artistry is replicated in *The Secret of Kells* credit scene. (Moore and Twomey)



Fig. 17 Forest scene in *The Secret of Kells* depicts the use of Celtic spirals and curvilinear patterns. The marrying of natural imagery and Celtic design is also a theme found in Illuminated manuscripts. (Moore and Twomey)



Fig. 18 Scene in which Ben encounters the Great Seanchaí (Irish story teller), depicting the use of Celtic interlocking spirals in connection with oral Irish tradition, rebirth and the natural world. (Moore, *Song of the Sea*)

Animation Process

“I've realised that it's been a liberation for traditional animation, to be marginalised, as it were... All the potential that traditional animation always had is back in the hands of artists rather than corporations.” (Moore qtd. in Lambie)

A largely celebrated aspect of Cartoon Saloon is its use of 2D traditional hand drawn animation, or more accurately, the use of seemingly 2D animation. The process of animation for *The Secret of Kells* falls into the category of 2D digitally assisted animation, while *Song of the Sea* was created completely digitally. Moore has asserted the aesthetic of 2D animation conveys narrative in a way purely CGI and live-action pictures cannot. “You can mask yourself in simple character design, really immerse yourself in the world [...] It can't go after realism, because there is no point; it has to do something only 2D can do.” (Moore qtd. in Thill) Likening 2D to the arts of photography and painting, Moore claims 2D animation style has to consistently attempt reinvent itself in an effort to remain engaging and current. Since 1995, following the release of *Toy Story* by PIXAR and Disney, 3D and CGI animation has become the industry standard. “In the 2000s, cartoons sprouted virtual dimensions, and in 3D to boot. Irish director Tomm Moore wanted to move the other way, towards artistically animated *flatness*.” (Osmond 101) This flatness of design can certainly be seen in the finished features, as well as the fluidity and distinct personality of the animation.

The animation process for *The Secret of Kells* began in 2005. While the initial art design and storyboarding had been in production since 1999, original character sketching and posing, and background design and artistry was completed in Kilkenny, before the process of animation was continued in Belgium, France, Brazil and Hungary. *The Secret of Kells* was animated at 12 frames

per second, with primarily hand drawn and painted backgrounds, and utilises linear cel animation for the movement of characters. Considering traditional hand drawn features are standardly animated at 24 frames per seconds, the slower pace contributes to the distinctive animated style of *The Secret of Kells*. The rate of 24 frames per second is designed to smooth the movements of character animation, and to increase the aesthetic of realism for the audience, as live-action pictures are filmed at this rate. The decision to deny this aspect of realism in the technical process is further indication of Cartoon Saloon's aspiration to stray from the convention of corporate produced animation.

Despite the traditional 2D flat aesthetic, *The Secret of Kells* is a digitally assisted picture. Digital Graphics, a studio in Belgium, completed ink, toning and painting, compositing and adding digital effects, such as flash animated features. These effects were required for key scenes in which characters were required to navigate in a three dimensional fashion, or where lighting and ambient special effects were necessary, although they are used sparingly throughout this film.

Song of the Sea in contrast to its predecessor, was animated completely digitally. Certain backgrounds and environments were watercolour artistic pieces which characters were then animated against. (Fig. 19) Moore has stated that each film is "an appropriate mash-up of traditional media, like pencil and watercolour and modern computer techniques." (qtd. in Desowitz) The primary programs utilised to create the animation in *Song of the Sea* include TvPaint, Anime Studio Pro and open source animation software, Blender. Similar to *The Secret of Kells*, Digital Graphics studio were involved in compositing, painting, inking, SFX and CGI effects. TvPaint, the primary program on which *Song of the Sea* was animated, is a software based on bitmap technology. A bitmap defines a display space and the colour for each pixel in this space, and TvPaint is intended for natural renderings (watercolour, crayon, oil painting) in the style of

traditional cel animation. Moore has stated the digital applications and software have improved the quality of 2D animation, “With today’s computers, we can make hand-drawn animation on a feature scale with much smaller teams and lower budgets, and still make it more personal than high-level CG [...] Through technology, hand-drawn animation has actually become more accessible.” (qtd. in Thill)

What is evident from the creation of these animation is the importance of the artist displaying their creativity. The animation processes of Cartoon Saloon productions, much like the blended thematic nature of the narrative and visual aesthetic, are a conjunction of past and present technologies and techniques. The studio succeeds in the creation visually stunning and charming 2D digitally assisted animation, through the mastery of classical animation, and the spectacle of digital advancements. Arguably Cartoon Saloon’s blend of the modern and archaic is present in all facets of their processes from script to screen, from the combination of pagan, Celtic and Christian artistic themes in *The Secret of Kells*, to the balancing of ancient and modern-day characters in *Song of the Sea*, and through the fusion of traditional and contemporary media utilized in the production of these features.



Fig. 19. Flat watercolour painted background which the characters were digitally animated against. (Moore 2015)

Cartoon Saloon studio is not wholly responsible for the revival and popularity of Irish animation. Although they are the studio who incorporate Irish themes and motifs most regularly, there are many independent Irish studios creating content for worldwide programming, and commercials²¹. Many of the feature and short films created by studios such as Brown Bag films, And Maps and Plans Studio, Kavaleer Productions and the shorts commissioned by the Irish Arts Council and the Irish Film Board are incorporating certain technical and artistic trends also found in Cartoon Saloon's productions. Thus many produce a comparable 2D aesthetic. While these films may not explore Irish history exclusively, or incorporate symbols of Celtic and Irish mysticism, there are

²¹ Irish studio Brown Bag Films animate *Doc Macstuffins* an extremely popular children's television program broadcast around the world.

arguably many similarities weaving throughout the collective aesthetic of contemporary Irish animation. Notably, a denial of realism, the inclusion of abstract characters and settings, a distinctly 2D design, the use of traditional hand-drawn animation with digital assistance, and a focus on highlighting artistic creativity rather than relying on hyper-stylised CGI. (Fig. 19, 20 & 21) Arguably the continued use of these elements are creating a distinct national animation aesthetic, wholly removed from the Westernised origins of the medium.



Fig. 20 Short animated film *Coda* by And Maps and Plans studio depicting a night scene in Dublin city. Utilises abstract shapes, and patterns to convey a 3D perspective similar to the techniques used in *The Secret of Kells* and *Song of the Sea*. (Holly 2014)



Fig. 21 *Give Up Yer Aul Sins* by Brown Bag Films created 8 years before Cartoon's *Song of the Sea*, establishing Dublin as the location for the animation through cultural signifiers such as the double-decker bus, and Irish Houses of Parliament. (Gaffney 2001)



Fig. 22 *The Missing Scarf* includes abstract and block characters in both 2 and 3 Dimensions, with simple yet visually appealing background detail. (Duffy)

Conclusion

Animation as a whole can be considered a marginalised and under researched medium of both film and art. Often dismissed as light entertainment purely intended for children and adolescents, the excessive artistic skill and technical talent required to produce cartoons is often underestimated. From animation's humble beginnings as simple parlour tricks, the medium pioneered many early film technologies, such as synchronised sound, and three strip Technicolor. With the rise of dedicated production studios, and creation of theatrical feature length productions, animation delighted audiences worldwide, and asserted animatronics as a genuine medium of filmmaking. However, the popularity and notoriety of Hollywood's Disney Studios, and their signature realist live-action style of animation, can be argued to have arrested the development of graphic freedom in animation, not only in the United States, but around the world.

Similarly, the esteem of Disney and PIXAR's hyper-stylised CGI feature films, in the age of digital animation, have become the standard contemporary animation is held to. Animation is rapidly becoming one of Ireland's most profitable exports, and independent studios are creating high quality content for programming and commercials (Brown Bag Studios, Cartoon Saloon). Irish produced features and shorts are also regularly critically acclaimed for their unique aesthetic design and distinctive animation style. (*The Secret of Kells*, *Song of the Sea*, *Give up Yer Aul Sins*, *Coda*, *The Missing Scarf*)²² This study has asserted the appeal of Irish animation has been partly

²² *Give up Yer Aul Sins*, *The Secret of Kells*, *Song of the Sea*, have won numerous critics awards, and have each been nominated for the Academy Award in the category of Best Animated Feature in 2002, 2010, 2015 respectively. *Coda* and *The Missing Scarf* were each shortlisted for the Academy Award for Best Animated Short in 2014.

due to the conscious denial of many Western and Disney popularised staples of animation. This study has also theorised the Irish animation aesthetic “reflects the postcolonial conditions of Irish society itself” (Walsh 1) and may be an artistic reaction to the commercialisation of animation in the 1980s. The arrival of large animation studios in Dublin in the 1980s, such as Sullivan Bluth, due to government tax incentives, resulted in Irish animation developing without an indigenous style. However, these incentives did result in the establishment of dedicated training courses for artists and animators, which has contributed to the vibrant, skilled and thriving animation workforce in Ireland today.

Cartoon Saloon can be argued to have contributed a significant amount to the reinvention of the Irish animation aesthetic. The studio’s critically acclaimed feature films *The Secret of Kells* and *Song of the Sea*, are influenced by Celtic symbolism, Irish medieval monastic art, the European art-house animation scene, and the traditionalism of Oriental and Eastern artwork. The animation style is reminiscent of flat 2D animation, and utilises both traditional cel animation and digital effects. The features also project, through the use of Irish, Celtic, and Catholic symbolism, a uniquely Irish impression.

Irish films such as *Coda* (2014) and *The Missing Scarf* (2014) can be argued to have incorporated themes, animation fundamentals and aesthetic elements produced in Cartoon Saloon features, specifically the denial of Disney-inspired realism, the use of abstract characters and settings, a distinctly 2D aesthetic, the use of traditional animation with digital assistance, and the rejection of excessive and overt CGI. Tomm Moore director of *The Secret of Kells*, and *Song of Sea*, speaks of famed animator Richard Williams who asserted “animation could do Rembrandt but just hasn’t yet, that the height of animation wasn’t Disney, that the height of animation hasn’t even been reached.”(qtd. in Thill)

Ultimately the current Irish animation aesthetic reflects a return to artistic creativity unfettered by corporate interest, marked instead by expressions of indigenous and cultural identity, and the continued journey to reach the heights of animation.

Works Cited

Arnold, Bruce. *Concise History of Irish Art*. London: Thames & Hudson, 2002. Print.

Audiovisual Strategic Review Steering Group. "Building Ireland's Audiovisual Creative Economy- Minister for Arts, Heritage and the Gaeltacht Report" *Creative Capital Report*. April 2011. 1-8. Print.

Barrier, Michael. *Hollywood Cartoons: American Animation in Its Golden Age*. Oxford: Oxford University Press. 2003.

Beauty and the Beast. Dir. Trousdale Gary and Wise Kirk. Buena Vista Pictures, 20 Oct. 1994. DVD.

Bendazzi, Giannalberto *Animation: A World History: Volume I: Foundations - The Golden Age*. Florida: CRC Press. 2015.

Bendazzi, Giannalberto *Animation: A World History: Volume III: Contemporary times*. Florida: CRC Press. 2015.

Business World. "Animation could soon be one of Ireland's highest grossing exports." *Businessworld.ie* 18 Mar. 2016. Web. 11 Apr. 2016.

Coda. Dir. Alan Holly. Irish Film Board, 1 Jan. 2014. Film. 10 May 2016. Web.

Cohen, Karl. "'The secret of Kells' - What Is This Remarkable Animated Feature?" *Animation World Network* 16 Mar. 2010: n.pag. Web. 1 May 2016.

Connolly, Maeve. "Theorising Irish Animation: Heritage, Enterprise and Critical Practice." *National Cinema and Beyond: Studies in Irish Film 2*. Ed. John Hill and Kevin Rockett. Dublin: Four Courts Press, 2005. 79-89. Print.

Derakhshani Dariush, and Randi L. Derakhshani. *Autodesk 3ds Max 2013 Essentials*. Indiana: Wiley Press. 2013.

- Desowitz, Bill, and Tomm Moore. "Immersed in Movies: Tomm Moore Talks 'Song of the Sea'." *Indiewire* 30 May 2014: n.pag. Web. 7 May 2016.
- Dobson, Nicola. *The A to Z of Animation and Cartoons*. Maryland: The Scarecrow Press Inc, 2010.
- Dooley, Zoraida. "Celtic symbols and the imagined Celtic essence." *SUNY Geneseo. Irish Studies*, 22 Aug. 2015. Web. 10 May 2016.
- Geng, Weidong. *The Algorithms and Principles of Non-Photorealistic Graphics: Artistic Rendering and Cartoon Animation*. China: Zhejiang University Press. 2010.
- Give Up Yer Aul Sins*. Dir. Cathal Gaffney. Irish Film Board, 2001. Web.
- Heinz, Sabine. *Celtic Symbols*. London: Sterling Publishing Company, 2008.
- Hui, Wang, and Wang Shimin. *Landscapes After Ancient Masters*. n.d. Web. 10 May 2016.
- Lambie, Ryan. "Song of the Sea: How an Animated Treat Was Made." *Den of Geek* 9 Nov. 2015: n.pag. Web. 6 May 2016.
- Laing, Lloyd Robert. *Later Celtic Art in Britain and Ireland*. London: Osprey Publishing, 1987. Web. 9 May 2016.
- Megaw, Ruth, and J. V. S. Megaw. *Early Celtic Art in Britain and Ireland*. 2nd ed. Buckinghamshire: Osprey Publishing, 2005.
- Middleton, J. Henry. *Illuminated Manuscripts in Classical and Mediaeval Times: And Their Art and Their Technique*. Cambridge: Cambridge University Press, 2010.
- Milligan, Mercedes. "Cartoon Saloon's Secret is Out." *Animation Magazine*. Dec 2009 – Jan 2010. n.pag. Web. 30 April 2016.
- Mulan*. Dir. Barry Cook and Tony Bancroft. Buena Vista Pictures, 9 Oct. 1999. DVD.

O'Brien, Maria. "The Secret of Kells (2009), a Film for a Post Celtic Tiger Ireland?" *Animation Studies Online Journal* Vol.6. (2011): Web. 1 May 2016.

Osmond, Andrew. *100 Animated Feature Films*. London: Palgrave Macmillan, 2010. Print.

Pallant, Chris. *Demystifying Disney: A History of Disney Feature Animation*. London: Bloomsbury Academic Publishers. 2011.

Parent, Rick, et al. *Computer Animation Complete: All-in-One*. Burlington: Elsevier, 2010.

Ramey, Lynn. "Immediacy, Hypermediacy, and New Media in the Secret of Kells (Moore 2009)." *Medieval Perspectives* 29 (2014): 109–129. Web. 3 May 2016.

Rizzo, Michael. *The Art Direction Handbook for Film & Television*. London: Focal Press, Taylor and Hanson Group. 2015.

Sandler, Kevin S. *Reading the Rabbit: Explorations in Warner Bros. Animation*. New Jersey: Rutgers University Press, 1998. Print.

Slethaug, Gordon E. *Adaptation Theory and Criticism: Postmodern Literature and Cinema in the USA*. London: Bloomsbury, 2014. Print.

Song of the Sea. Dir. Tomm Moore. StudioCanal, 17 Mar. 2015. DVD.

The Missing Scarf. Dir. Eoin Duffy. Irish Film Board, 31 Jan. 2014. Web.

The Secret of Kells. Dir. Tomm Moore and Nora Twomey. StudioCanal, 9 Aug. 2009. DVD.

The Thief and the Cobbler Original Cut - Full Length! Dir. Richard Williams. Nemorzuz, 30 Nov. 2011. Film.

The Triplets of Belleville. Dir. Sylvain Chomet. Tartan Films, 4 May 2004. DVD.

Thill, Scott, and More Articles. "Tomm Moore on 'Song of the Sea,' Reinventing 2D, and Dodging the Studio System." *Cartoon brew* 2 Jan. 2015: n.p. Web. 7 May 2016.

Walsh, Thomas. *The in-Betweeners: Irish Animation as a Postcolonial Discourse*. 1-68.: Thomas Walsh, 2008. Web. 2 Apr. 2016.

Wells, Paul. *The Fundamentals of Animation*. New York: Ava Publishing, 2006.

Woods, Steve. Overview of Animation History. Dublin: IFI, June 2008. PDF.

Wu School. *Ming Dynasty Artwork on Display in Washington DC*. 21 Apr. 2016. Web. 10 May 2016.