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INDEPENDENT FILMMAKING IN THE FINAL FRONTIER: INTELLECTUAL PROPERTY ISSUES WITH MAKING INDEPENDENT FILMS IN SPACE.

Jesse M. Green¹

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¹ The author is a May 2020 graduate of Mitchell Hamline School of Law. His biographical information may be found on LinkedIn at: https://www.linkedin.com/in/greenjm/. He would like to thank Professor Mehmet Konar-Steenberg, Tim Kelly, Jennifer Madaras, and Sheila Niaz for all their assistance with this paper, especially during these unprecedented times. He would like to thank his family and fellow students for all their encouragement, especially his fellow members of Hybrid Cohort #3.

Introduction

Space: the final frontier...²

These words, spoken by actor William Shatner in the 1966 television series Star Trek have been proven to be true over and over in the nearly 54 years since Star Trek first aired on television.³ These words have inspired generations to push to explore not only space, but human potential as well. At the core of space exploration is a desire to broaden human knowledge.⁴ Exploration of space has led to numerous societal and technological advances over the past half century and will continue to do so going into the future.⁵

Roadmap

This paper will start with a discussion and brief history of space law. It will then move on to discuss intellectual property, focusing on copyright laws. As part of the discussion it will talk about U.S. copyright laws, the Berne Convention, and modern European copyright laws. Then the paper will discuss the intersection of intellectual property and filmmaking in space before providing our conclusions on film making in the final frontier.

A Short History of Filmmaking

Filmmaking has largely worked to broaden knowledge and benefit humanity.⁶ Since the invention of motion pictures in the mid to late 19th century, they have allowed audiences "to

² STAR TREK (Desilu Productions 1966).

³ See id.

⁴ *About NASA*, https://www.nasa.gov/about/index.html (last visited Mar. 6, 2020) ("NASA's Vision: To discover and expand knowledge for the benefit of humanity.").

⁵ See Steve Garber & Roger Launius, A Brief History of NASA, NASA, https://history.nasa.gov/factsheet.htm (last visited Mar. 6, 2020).

⁶ As works such as the 1915 silent film, *Birth of a Nation*, or the 1935 Nazi propaganda film, *Triumph of the Will*, demonstrate, motion pictures have not always served to benefit humanity. Along with many other human endeavors, film may also harm instead of benefit people, depending on the purposes the film is made and used for.

travel the world vicariously, and experience tragedy, love and nearly every other emotion."⁷ In the years following the development of photography, a number of inventors began to experiment with creating motion pictures.⁸ Thomas Edison and others pioneered advances that brought motion pictures to the world.⁹

At first, filmmakers were largely content to produce and show films of both everyday life and special occasions.¹⁰ An example of a special occasion was a brief film made in 1896 of Pope Leo XIII, which became the first motion picture made of a pope in which he gave the first blessings given on film.¹¹ Filmmakers started incorporating music and storylines into their films.¹² In the decades since the invention of motion pictures, filmmakers came up with more sophisticated stories and greatly improved their technical skills in making films.¹³ Movies with sound became popular in the 1920's as techniques for including sound with film were perfected, with the 1927 film *The Jazz Singer* being the first "talkie" to be a major hit.¹⁴

Independent Filmmaking

⁷ Mary Pickford, *The Early History of Motion Pictures*, PBS: AM. EXPERIENCE,

https://www.pbs.org/wgbh/americanexperience/features/pickford-early-history-motion-pictures/ (last visited Mar. 6, 2020).

⁸ Id.

⁹ *Id.* Some of the other individuals whose work brought motion pictures to the world were Eadweard Muybridge, Etienne-Jules Marey, William Dickson, and Auguste and Louis Lumière. *Id.* ¹⁰ *Id.*

¹¹ Carol Glatz, *Celluloid heaven: how popes took church, Gospel to the big screen*, NAT'L CATH. REP., (Oct. 19, 2013), https://www.ncronline.org/news/media/celluloid-heaven-how-popes-took-church-gospel-big-screen. The short film consisted of Pope Leo XIII showed him sitting with guards and attendants while giving an on-camera blessing. *Id.* The film also had footage of Leo walking from his carriage to a bench and giving another on-camera blessing. *Id.* From antiquity up through modern times the church has taken advantage of technological innovations. *Id.* In addition to film the church used television and radio in the 20th century, and used tools like Twitter and Instagram in the 21st century to communicate with people. *Id.* In 1903, Leo became the first Pope to be recorded on audio when he sang the Ave Maria at a gathering. J-P Mauro, *This is the oldest audio-visual recording of a pope*, Aleteia (Aug. 7, 2019). https://aleteia.org/2019/08/07/the-oldest-audio-visual-recording-of-a-pope-is-of-pope-leo-xiii/

¹² Pickford, *supra* note 7.

¹³ See id.

¹⁴ Marc Sollinger, *The birth of talkies*, PUB. RADIO INT'L (June 20, 2017), https://www.pri.org/stories/2017-06-20/birth-talkies.

Independent filmmaking has a very long history, stretching almost all the way back to the beginning of the film industry.¹⁵ Independent films are generally defined as those produced outside the established studio system and not financed or otherwise influenced by established Hollywood studios.¹⁶ Because independent film projects are not under the control of a major studio, producers have more freedom in crafting the film and ensuring finished products somewhat resemble their initial vision.¹⁷

Independent filmmaking runs the gamut. Independent films can be very well financed projects produced by major celebrities that are wildly successful, such as the 2004 film *The Passion of the Christ.*¹⁸ Independent films can also be obscure films made on a minimal budget and quickly forgotten, such as the 1966 film *Manos: 'The Hands of Fate.*'¹⁹ Independent films can be made on a minimal budget outside the studio system but become successful upon release and earn many times what the filmmakers invested in the film.²⁰

Current Status of Filmmaking

 ¹⁵ Carrie Szabo, Independent, Mainstream and In Between: How and Why Indie Films Have Become Their Own Genre, DIGITALCOMMONS@PACE (May 1, 2010), http://digitalcommons.pace.edu/honorscollege_theses/96.
 ¹⁶ Stuart K. Kauffman, Motion Pictures, Moral Rights, and the Incentive Theory Of Copyright: The Independent Film Producer As "Author", 17 CARDOZO ARTS & ENT. L.J. 749, 772 (1999).

¹⁷ See id. at 780.

¹⁸ David DiCerto, 'The Passion of the Christ' Revisited, NAT'L CATH. REG. (Apr. 11, 2014),

https://www.ncregister.com/daily-news/the-passion-of-the-christ-revisited. Actor and director Mel Gibson produced and independently distributed *The Passion of the Christ* after he could not find a major Hollywood studio to support his project. *Id.*

¹⁹ Richard Brandt, *The Hand That Time Forgot*, MIMOSA MAG., May 1996, at 35-38.

[[]http://web.archive.org/web/20181207101204/http://www.jophan.org/mimosa/m18/brandt.htm]. The brainchild of Texas businessman Harold P. (Hal) Warren, the movie was largely forgotten after its initial release until it was aired on an episode of Mystery Science Theater 3000. *Id.* A series of conversations between Warren and screenwriter Stirling Silliphant convinced Warren that he could make a movie. *Id.* With a budget of \$19,000 and a 16-millimeter Bell & Howell movie camera Warren proceeded to make his film with his friends helping both in front of and behind the camera. *Id.* After a disastrous premier and a limited release in Texas the film was largely forgotten about until it was aired on an episode of Mystery Science Theater 3000. *Id.*

²⁰ Jake Kring-Schreifels, *The Blair Witch Project' at 20: Why It Can't Be Replicated*, N.Y. TIMES (July 30, 2019), https://www.nytimes.com/2019/07/30/movies/blair-witch-project-1999.html. An example of an independent film produced on a minimal budget was *The Blair Witch* Project. The film was produced for a budget of about \$15,000 and shot on consumer grade video cameras. *Id.* The film made over \$190 million after its release. *Id.*

The movie industry will undergo significant changes in the coming years.²¹ This will affect the main Hollywood studios—such as Disney, Paramount, Fox, MGM, or Warner Brothers, and independent players as well.²² As streaming services continue to gain ground, people will opt to watch many movies in the comfort of their own homes.²³ However, the theater experience will continue to be part of the industry for the foreseeable future.²⁴ While many filmmakers aspire for the big screen release, having a movie released solely on or mainly to small screen streaming services like Netflix is no longer considered the "kiss of death" that straight to small screen or video once was for filmmakers and actors.²⁵

Along with the challenges already facing the industry, the Covid-19 pandemic of 2020-21 is having a major effect on the film industry.²⁶ Theaters saw reduced audience counts and then were shut down in the efforts to contain the virus.²⁷ Film production was curtailed or shut down as well.²⁸ Efforts to contain the outbreak have led to the closure of museums and other attractions, as well as the delay or even cancellation of movie releases, festivals, and other public events.²⁹ A number of movies were released on to home media (physical media or streaming services) early due to the virus causing large scale closures of movie theaters.³⁰ The industry

²⁴ *Id*.

²⁵ See Janice Rhoshalle Littlejohn, *Black Directors Using DVD to Their Advantage*, L.A. TIMES (Jan. 19, 2004, 12:00 AM), https://www.latimes.com/archives/la-xpm-2004-jan-19-fi-blackfilms19-story.html.
 ²⁶ Alissa Wilkinson, *How the coronavirus outbreak is roiling the film and entertainment industries*, VOX,

²¹ Geoffrey Macnab, "*Our jobs will all look a bit different": Experts predict the future of independent film financing,* SCREENDAILY (Oct. 1, 2018), https://www.screendaily.com/news/our-jobs-will-all-look-a-bit-different-experts-predict-the-future-of-independent-film-financing/5133107.article.

 $[\]overline{}^{22}$ Id.

²³ Id.

https://www.vox.com/culture/2020/3/10/21173376/coronavirus-cancel-movie-hollywood-bond-bts-mulan-sxswcoachella (last updated Sept. 11, 2020, 1:38 PM).

²⁷ *Id.*

 $^{^{28}}$ *Id.*

²⁹ *Id.*

³⁰ See Travis Clark, *15 movies you'll be able to watch at home much earlier than expected as theaters shut down*, BUS. INSIDER (Mar. 28, 2020, 1:21 PM) https://www.businessinsider.com/movies-being-released-to-home-digital-rental-streaming-early-2020-3.

and the wider economy will feel the ripple effects from the Covid-19 pandemic for many years to come.³¹ It will be some time before the industry is able to fully quantify the pandemic's impact on itself.³² Many independent filmmakers will face even more hardship than filmmakers working within the established studio system, especially independent filmmakers of modest means.

Innovation and Filmmaking

Innovation has been part of filmmaking since the beginning of the industry.³³ Innovation will continue to be part of the industry as improvements in CGI, cameras, editing tools, and drones change the industry in the coming years.³⁴

Directors have come up with innovative ways to use space in their projects. Director

Christopher Nolan integrated footage from space into his film Interstellar.³⁵ Colin Trevorrow—

who was originally slated to direct Star Wars: Episode IX-planned to integrate actual footage

from space into his version of the film.³⁶

The Filmmaking Process

The costs associated with spaceflight are still very high.³⁷ For the time being these high costs mean actual travel to space is out of reach to the majority of people and remains an activity

³³ See 6 Important Cinematic Innovations That Changed Film, ESQUIRE (Oct. 21, 2019),

https://www.esquire.com/uk/culture/a29396635/6-important-cinematic-innovations-that-changed-film/. Some examples of innovative techniques include the "dolly zoom" in which the camera was moved forward while zooming out to induce vertigo, or using enforced method acting to elicit genuine reactions from cast members. *Id.* ³⁴ Jourdan Aldredge, *Tech and Film: 7 Innovations Changing the Industry*, PREMIUM BEAT: THE BEAT (July 6, 2017), https://www.premiumbeat.com/blog/7-innovations-changing-film-industry/.

³¹ Wilkinson, *supra* note 26.

³² See id.

 ³⁵ Madeline Roth, 'Star Wars: Episode IX' Director Wants To Shoot 'On Location' -- In Space, MTV NEWS (Jan. 29, 2016), http://www.mtv.com/news/2734071/star-wars-episode-ix-director-shoot-space/.
 ³⁶ Id.

³⁷ Jason Davis, *How much does space travel cost?*, NBC NEWS: MACH (Oct.15, 2018, 10:46 AM), https://www.nbcnews.com/mach/science/how-much-does-space-travel-cost-ncna919011. Costs for private

undertaken by the wealthy.³⁸ That said, costs are continuing to fall as private companies take over sending people to space.³⁹ The time may come where the costs have come down enough that space is actually accessible to people of more modest means, including people who seek to make films in space.⁴⁰

Due to factors like cost, the ability of independent filmmakers of modest means to create movies in space is years or even decades away. Even filmmakers with financial means may balk at the challenges—financial, technical, and legal—involved with filmmaking in space at present. Still, it is important for filmmakers and the legal community to consider the legal implications of such activity now so that they are well prepared for the day when films like *Star Wars* are actually filmed in space.

When it comes to making independent films, there are a large number of challenges to overcome before a person can even start filming, both legal and non-legal.

In the non-legal realm, a filmmaker must first have a good idea that can be developed into a film.⁴¹ From there, a filmmaker has to turn that idea into a workable, linear story.⁴² Then they have to turn it into a script, and then create a storyboard, which is a visual representation of all the scenes in the movie.⁴³ If a filmmaker does not have an idea of their own, they may have to buy a script to turn into a finished film.⁴⁴

spaceflight in 2018 ranged from \$250,000 for brief sub-orbital flights to tens of millions of dollars for actual journeys into space. *Id.*

³⁸ See id. For example, wealthy American engineer Dennis Tito spent \$20 million for an eight-day trip to the International Space Station (ISS) while Cirque du Soleil founder spent Guy Laliberté spent \$35 for his trip to the ISS. See id.

³⁹ See id.

 $^{^{40}}$ See id.

⁴¹ *The Beginner's Guide to the Filmmaking Process*, N.Y. FILM ACAD.: STUDENT RESOURCES (May 5, 2017), https://www.nyfa.edu/student-resources/the-beginners-guide-to-the-filmmaking-process/. ⁴² *Id.*

⁴³ *Id*.

⁴⁴ DAN MIRVISH, THE CHEERFUL SUBVERSIVE'S GUIDE TO INDEPENDENT FILMMAKING 13 (2016).

Filmmakers then have to secure financing for their films.⁴⁵ While some filmmakers use their own money, others would rather use "other people's money."⁴⁶ Filmmakers have a number of options for getting funding for their projects, including asking friends and family, taking out loans, or securing equity financing.⁴⁷ They may also consider incentives offered by various governments.⁴⁸ Finally, a filmmaker has to consider that most movies (approximately 80 percent) do not make profit, and a filmmaker may be lucky to get their investment back.⁴⁹

Then, a filmmaker who has reached the point where the idea has become an actual script and is considering next steps should seek legal advice as soon as possible.⁵⁰ A number of legal questions have to be answered after someone has decided to actually make a film.⁵¹ The legal questions filmmakers have to answer represent several different areas of law.⁵²

When filmmakers intend to complete projects in space, decisions on each of the above issues will have to be made. Even as the amount of money required to go into space decreases over time, the nature of filming in space will require decisions to be made well before the filmmaker, cast, and crew leave Earth.

⁵⁰ Young, *supra* note 48.

⁴⁵ Id.

⁴⁶ ROBERT J. LABATE, DANIEL M. POMERANTZ, & DALISH SAPERH, 2006 LCA FILM AND LAW SEMINAR: LEGAL ISSUES IN FILM PRODUCTION 5 (2006).

⁴⁷ *Id.* at 4-5.

⁴⁸ See Aaron Young, Business of IP: Independent Film Production, MITCHELL-HAMLINE SCHOOL OF LAW, (Jun. 19, 2019). In this class, Professor Young stated that ideally filmmakers should seek legal counsel should be engaged as soon as possible in the process due to the complexity of entertainment law and the many factors that go into the making of a successful project. *Id.* There are a number of incentives offered by state and local governments ⁴⁹ See SCHUYLER M. MOORE, THE BIZ: THE BASIC BUSINESS, LEGAL, AND FINANCIAL ASPECTS OF THE FILM INDUSTRY 15 (4th ed. 2011).

⁵¹ See id. There are copyright clearances that have to be obtained, decisions to be made about the kind of business organization that the filmmaker will employ, music performance rights that have to be obtained, copyright registrations to be obtained—possibly in multiple countries, employment related issues, equipment rental contracts, working with agents, and deciding on distribution rights. *Id.* ⁵² See id.

Overview of Space Law

Introduction and History

Space law is the body of laws and other principles "that govern human activities in outer space."⁵³ As humans moved to explore space, the need to adapt laws and policies to govern human activity became obvious.⁵⁴

Space law began development in the first part of the 20th century, decades before the first launch of a manmade object in to orbit.⁵⁵ In 1910, Emile Laude wrote the first monograph on the subject.⁵⁶ V. A. Zarzar—an official in the Soviet Aviation Ministry—wrote about public air law in 1926.⁵⁷ Both Zarzar and Laude acknowledged that space was a physically and legally separate environment.⁵⁸ In 1931, Czechoslovakian lawyer Vladimir Mandl surveyed what he saw as legal problems that would emerge as man began serious exploration of space.⁵⁹

During the Second World War, Theodore von Kármán and other scientists at Caltech formed the Aerojet Rocket Company, with assistance from attorney Andrew G. Haley.⁶⁰ After forming the company, Kármán told Haley that it would be up to the legal field to set the ground rules for behavior in outer space.⁶¹ Following the Second World War, legal scholars began to wrestle with questions about the peaceful use of space and how state sovereignty over airspace

 ⁵³ 1 The George Washington Int'l Law Review, Guide to International Legal Research § 28.01 (2019).
 ⁵⁴ See U.S. Naval War Coll., 90 Int'l L. Studies, at 55-183 (2014).

⁵⁵ Stephen E. Doyle, *Nandasiri Jasentuliyana Keynote Address on Space Law: A Concise History of Space Law,* INT'L INST. OF SPACE L., no. 1, 2010, at 1, http://www.iislweb.org/docs/2010keynote.pdf (last visited Mar. 28, 2020). Laude was a Belgian lawyer who foresaw advancements in technology would necessitate the development of new areas of law, including space law. *Id.*

⁵⁶ *Id.* at 1-2.

⁵⁷ *Id*.

⁵⁸ Id. ⁵⁹ Id.

⁵⁷ Ia.

⁶⁰ ANDREW G. HALEY & LYNDON B. JOHNSON, SPACE LAW AND GOVERNMENT (1963). Andrew Haley (1904-1966) was considered the father of modern space law. Biography of Andrew G. Haley, NEW MEXICO MUSEUM OF SPACE HISTORY, https://www.nmspacemuseum.org/inductee/andrew-g-haley/_(last visited Sept. 16, 2020).
⁶¹ Id.

would affect flights at extreme altitudes as they saw nations like the United States and Soviet Union developing technology to explore space.⁶²

In July of 1955, the White House announced plans to put a satellite in to orbit in time for the International Geophysical Year ("IGY").⁶³ The Soviet Union, however, beat the United States to the punch by launching Sputnik 1 on October 4, 1957.⁶⁴

With the launch of Sputnik, space exploration finally moved beyond the realm of theory. In response, the United Nations passed General Resolution 1348 stating that space should be used for peaceful purposes.⁶⁵ The UN formed the Committee on the Peaceful Uses of Outer Space ("COPUOS") to consider the questions exploration of space was presenting.⁶⁶

In 1962, the UN passed the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space.⁶⁷ These principles established that international law was to be used to govern the activities of states in space.⁶⁸ The resolution also specified that outer space and celestial bodies were freely usable by nations but were not subject to the sovereign claims of any nations.⁶⁹

The UN codified the principles of the previous resolutions in the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the

⁶² Id.

⁶³ Sputnik and The Dawn of the Space Age, https://history.nasa.gov/sputnik.html (last visited Sept. 16, 2020). In 1952 the International Council of Scientific Unions declared July 1, 1957, to December 31, 1958 to be the International Geophysical Year (IGY) as solar activity would be particularly high during that time. *Id.* In 1954 the council passed a resolution calling for satellites to be launched in time for the IGY to map the Earth's surface. *Id.* ⁶⁴ *Id.*

 $^{^{65}}$ G.A. Res. 1348 (XIII), at ¶ 1 (Dec. 13, 1958). "Outer space should be used for peaceful purposes only" and that "present national rivalries" should not be carried into space. *Id.*

⁶⁶ *Id.* at ¶ 13.

⁶⁷ G.A. Res. 1348 (XVIII), at 1 (Dec. 13, 1963).

 $^{^{68}}$ *Id.* at ¶ 4. "[A]ctivities of States in the exploration and use of outer space shall be carried on in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding." *Id.*

⁶⁹ *Id.* at \P 2-3. In other words, a nation could not claim an area of space or part of a celestial body as its own territory. *Id.*

Moon and Other Celestial Bodies, more commonly called the Outer Space Treaty.⁷⁰ The Outer Space Treaty sought to prevent violent disputes between countries in space and foster a spirit of cooperation in the exploration of space.⁷¹ The treaty established "that the activities of nations in outer space are governed by public international law."⁷²

Other agreements followed. The Rescue Agreement came first after the Outer Space

Treaty.⁷³ Next was the Registration Convention of 1975.⁷⁴ It was followed by the Moon Treaty

of 1979.⁷⁵

During the lead up to the construction of the International Space Station (ISS), the

participating members-Canada, the European Union, Japan, Russia, and the United States-had

to decide on the legal framework under which the ISS would operate.⁷⁶ In early 1998, the fifteen

governments who worked on the project signed the International Space Station

Intergovernmental Agreement ("IGA").⁷⁷ The IGA provided a legal framework for a number of

issues, from liability to criminal law.78

⁷⁸ Id.

⁷⁰ See Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, *opened for signature* Jan. 27, 1967, 18.3 U.S.T. 2410, 610 U.N.T.S. 205 (entered into force Oct. 10, 1967) [hereinafter the Outer Space Treaty].

⁷¹ Zach Miller, *The Great Unknown of the Outer Space Treaty: Interpreting the Term Outer Space*, 46 DENV. J. INT'L L. & POL'Y 349, 353 (2018).

⁷² Hughes Aircraft Co. v. United States, 29 Fed. Cl. 197, 229 (1993).

⁷³ Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, *opened for signature* Apr. 22, 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119 (entered into force Dec. 3, 1968). The agreement spelled out the obligations of signatories to rescue and return astronauts and spacecraft components to their countries of origin. *Id*.

⁷⁴ The Convention on the Registration of Objects Launched Into Outer Space, *opened for signature* Jan. 14, 1975, 28 U.S.T. 695, 1023 U.N.T.S. 15 (entered into force Sept. 15, 1976). This convention dealt with registration of objects launched into space and provided a common means of identification for such objects. *Id.*

⁷⁵ Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, *opened for signature* Dec. 18, 1979, 1363 U.N.T.S. 3 (entered into force July 11, 1984). This agreement clarified the status of the Moon and other celestial bodies in space in the hopes of preventing the Moon from becoming a source of conflict between nations. *Id.*

⁷⁶ International Space Station legal framework, THE EUROPEAN SPACE AGENCY,

https://www.esa.int/Science_Exploration/Human_and_Robotic_Exploration/International_Space_Station/Internation al_Space_Station_legal_framework (last visited Apr. 1, 2020).

⁷⁷ Id.

One of the key areas the IGA focused on was intellectual property, as the multi-national nature of the station presented a number of challenges.⁷⁹ Article 21 of the IGA covers intellectual property.⁸⁰ Under the IGA, activities that generate intellectual property "occurring in or on a Space Station flight element shall be deemed to have occurred only in the territory of the Partner State of that element's registry."⁸¹ If the activity happens within a European registered element, any of the participating European states can deem the activity to have occurred in its territory.⁸²

Intellectual Property Overview

Intellectual Property Defined

Broadly speaking, intellectual property refers to "creations of the human mind."⁸³ While it did not define what Intellectual Property itself meant, the 1967 Convention Establishing the World Intellectual Property Organization provided a number of examples of intellectual property.⁸⁴ Chief among these were "literary, artistic and scientific works" along with "performances of performing artists, phonograms, and broadcasts."⁸⁵ Intellectual property seeks to "protect the interests of innovators and creators by giving them rights over their creations."⁸⁶

Copyright

⁷⁹ See id.

⁸⁰ Agreement Among the Government of Canada, Governments of Member States of the European Space Agency, the Government of Japan, the Government of the Russian Federation, and the Government of the United States of America Concerning Cooperation on the Civil International Space Station, art. 21, Jan. 29, 1998, 1998 U.S.T. LEXIS 303 (commonly referred to as the ISS "Intergovernmental Agreement" or "IGA").

⁸¹ *Id.* at art. 21(2).

⁸² Id.

⁸³ WORLD INTELL. PROP. ORG., UNDERSTANDING INDUSTRIAL PROPERTY 5 (2d ed. 2016).

⁸⁴ Id.

⁸⁵ Convention Establishing the World Intell.Prop. Org., art. 2, July 14, 1967, 21 U.S.T. 1749, 828 U.N.T.S. 3 (entered into force Aug. 25, 1970).

⁸⁶ WORLD INTELL. PROP. ORG., *supra* note 83.

One of the major tools used in protecting the interests of creators is copyright. The Bouvier Law Dictionary defines copyright as the "interest of a creator in a physical work of art, space, sound, or literature."⁸⁷ Copyright serves to limit the expression of ideas found in protected works without the permission of the copyright holder.⁸⁸ Many different types of works qualify for copyright protection, including motion pictures.⁸⁹

Copyright law goes back to 1710, when the Statute of Anne was passed by the British Parliament.⁹⁰ Applied only to written works at the time, the Statute nonetheless was the first to give protections of any kind to content creators.⁹¹

In the United States, Congress obtained power to pass copyright law through the Copyright Clause of the United States Constitution.⁹² In 1790, Congress passed the first Copyright Act.⁹³ The 1790 Copyright Act provided for authors to register their works to be protected for a fourteen-year term, with an option to renew the registration for a second fourteenyear term.⁹⁴ Like the Statue of Anne before it, 1790 Copuright Act primarily protected printed works.⁹⁵

⁸⁷ Copyright, BOUVIER LAW DICTIONARY (2012).

⁸⁸ WORLD INTELL. PROP. ORG., UNDERSTANDING COPYRIGHT AND RELATED RIGHTS 6 (2d ed. 2016).

⁸⁹ *Id.* at 7.

⁹⁰ Susan P. Liemer, How We Lost Our Moral Rights and the Door Closed on Non-Economic Values in Copyright, 5

J. MARSHALL REV. INTELL. PROP. L. 1, 13 (2005).

⁹¹ Id.

⁹² See U.S. CONST. art. I, § 8, cl. 8. "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." *Id.*

⁹³ See An Act for the encouragement of learning, by securing the copies of maps, Charts, And books, to the authors and proprietors of such copies, during the times therein mentioned, ch. 15, 1 Stat. 124 (1790) [hereinafter the 1790 Copyright Act].

⁹⁴ Id.

⁹⁵ See id. The 1790 Copyright Act granted rights to "any map, chart, book or books already printed within these United States" created by citizens or permanent residents to the author or authors, along with "executors, administrators or assigns." *Id.* at § 1.

The 1790 Act was amended a few times, most notably in 1802, when Congress expanded the act to include etchings,⁹⁶ and again in 1819, when they gave Federal Circuit Courts jurisdiction to hear copyright cases.⁹⁷

U.S. copyright law was overhauled with the passage and signing of the Copyright Act of 1831.⁹⁸ An amendment in 1865 expanded copyright protection to photographs.⁹⁹ The idea that photographs were copyrightable was later challenged, but the Supreme Court held the power given to Congress under the Copyright Clause in the U.S. Constitution was sufficiently broad enough to allow for copyright of phottographs.¹⁰⁰

The next overhaul came with the passage of the Copyright Act of 1909.¹⁰¹ In the years

before the passage of the Act, it became apparent that the act was in need of revision.¹⁰² The

1909 Act increased the renewal period from 14 years to 28 years, making the total period a work

could be protected 56 years.¹⁰³ The Townsend Amendment of 1912 expanded copyright

protection to specifically include motion pictures.¹⁰⁴ Prior to the Townsend Amendment,

⁹⁶ THORVALD SOLBERG, COPYRIGHT IN CONGRESS, 1789-1904, at 84 (1905).

⁹⁷ *Id.* at 85. "Circuit courts shall have cognizance of all actions arising under any law granting or confirming to authors or investors the exclusive right to their respective writings, inventions, and discoveries." *Id.*

⁹⁸ An Act to Amend the Several Acts Respecting Copyrights, ch. 16, 4 Stat. 436 (1831) [hereinafter the 1831 Copyright Act]. Among the changes made was expanding the initial term of protection from 14 to 28 years and expanding protected works to include musical compositions. *Id.*

⁹⁹ An Act to revise, consolidate, and amend the Statute relating to patents and copyrights, ch. 230, 16 Stat. 198 (1865).

¹⁰⁰ Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53, 58 (1884). "We entertain no doubt that the Constitution is broad enough to cover an act authorizing copyright of photographs, so far as they are representatives of original intellectual conceptions of the author." *Id.*

¹⁰¹ An Act to Amend and Consolidate the Acts Representing Copyright, ch. 320, 35 Stat. 1075 (1909) [hereinafter the 1909 Copyright Act].

¹⁰² H.R. REP. No. 66-2222, at 1 (1909). The report noted how President Roosevelt had urged an overhaul in 1905 in an address to Congress. *Id.* He noted that the were "imperfect in definition, confused and inconsistent in expression" and they did not cover many items that should be protected, and "impose[d] hardships upon the copyright proprietor which are not essential to the fair protection of the public." *Id.* He also noted the difficulty courts had in interpreting the patchwork of copyright laws, and that it was "impossible for the Copyright Office to administer with satisfaction to the public." *Id.*

¹⁰³ 1909 Copyright Act, *supra* note 101.

¹⁰⁴ Frank Evina, *Copyright Lore*, COPYRIGHT NOTICES, at 12 (Oct. 2004).

filmmakers had to use workarounds to protect their works.¹⁰⁵ Like previous versions of the law, formalities were still required in order for a work to receive copyright protection.¹⁰⁶

The shortcomings of the 1909 law were quickly becoming obvious by the middle of the 20th century.¹⁰⁷ Creators who did not follow the exact requirements for copyrighting their works found that they entered the public domain unprotected by copyright.¹⁰⁸ The 1968 film *Night of the Living Dead* was a victim of this, as was the 1966 film Manos: *'The Hands of Fate'*.¹⁰⁹

A new Copyright Act was passed into law in 1976, which is the copyright regime in effect today.¹¹⁰ The main impetus for the overhaul was to address shortcomings in existing law and to account for many technological advances that happened in the 20th century.¹¹¹ The 1976 law grants copyright protection to "original works of authorship fixed in any tangible medium of expression, now known or later developed, from which they can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device."¹¹² The Act also provided that "fair use" of copyrighted materials in certain situations without permission was not an infringing act.¹¹³

¹⁰⁵ *Id.* One method used by filmmakers was to print each frame of a film to a paper contact sheet direct from the negatives, that they would then deposit with the copyright office as "for registration as a collection of still photographs." *Id.* Technicians were later able to create projectable copies of films from these contact sheets long after the original negatives were lost, preserving over 3,000 works in the process. *Id.*

¹⁰⁶ See 1909 Copyright Act, supra note 101.

¹⁰⁷ See Erik Amaya, Manos: The Hands Of Fate Inspires Devotion; Copyright Battle, BLEEDING COOL (Oct. 31, 2015), [http://web.archive.org/web/20160401004300/http://www.bleedingcool.com/2015/10/31/manos-the-hands-of-fate-inspires-devotion-copyright-battle/]

 $^{^{108}}$ Id.

¹⁰⁹ *Id.* Manos creator Hal Warren had copyrighted the script for his film but had not put any of the required marks anywhere on the film itself. *Id.* This oversight caused the film to fall into the public domain upon its release. *Id.* ¹¹⁰ *See* An Act for the general revision of the Copyright Law, Pub. L. No. 94-553, 90 Stat. 2541 (1976) (codified as amended in scattered sections of 17 U.S.C.) [hereinafter 1976 Copyright Act].

¹¹¹ H.R. REP. NO. 94-1476, at 47 (1976).

¹¹²See 1976 Copyright Act, supra note 110 at § 102.

¹¹³ *Id.* at § 107. "Fair use" is the use of a copyrighted work for "purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research" that is not considered infringing. *Id.*

One of the major amendments to the 1976 Copyright Act was the passage of the Berne Convention Implementation Act of 1988.¹¹⁴ This had the effect of finally bringing the United States into the Berne Convention.¹¹⁵ Another major act was the Digital Millennium Copyright Act (DMCA), which was enacted in 1988.¹¹⁶ Continued advancements in technology will no doubt require further refinements to copyright law. It remains to be seen how current events will shape the law in the years to come.

Other countries developed their own copyright systems after the passage of the Statute of Anne.¹¹⁷ Through most of the 19th century, there was no international coordination or standard for copyright protection.¹¹⁸ The formalities and a lack of uniformity were serious obstacles to authors seeking to have their works protected in multiple countries.¹¹⁹ Seeing a need for simplified international copyright standards, in 1858 a group of authors and writers gathered together in Brussels at what came to be known as the Congress of Authors and Artists.¹²⁰

Work continued on establishing an international system for copyright protection for the next 28 years. In September 1886, a diplomatic conference was held in Switzerland in which an international convention for copyright protection was put forth.¹²¹ That convention came to be known as the Berne Convention for the Protection of Literary and Artistic Works (hereinafter the Berne Convention).¹²²

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¹¹⁴ Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853 (1988).

¹¹⁵ See Id.

¹¹⁶ See Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998).

¹¹⁷ A Brief History of Copyright, INTELL. PROP. RTS. OFFICE, http://www.iprightsoffice.org/copyright_history/ (last visited Apr. 4, 2020, 3:47 PM).

¹¹⁸ Id.

¹¹⁹ Ralph Oman, *The United States and The Berne Union: An Extended Courtship*, 3 J.L. & TECH. 71 (1988). ¹²⁰ *Id*.

¹²¹ *Id*.

¹²² Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, as revised at Paris on July 24, 1971 and amended in 1979, S. Treaty Doc. No. 99-27 (1986).

The Berne Convention has, as its basis, three principles.¹²³ First works created in one of the member states must be given the same protection the other member states grant to their own nationals.¹²⁴ Second, protection cannot depend on compliance with formalities.¹²⁵ And third, protection in member states is independent of the work's copyright status in the originating country.¹²⁶

The Berne Convention requires protection of "literary, scientific and artistic" works regardless of the type of work.¹²⁷ Member states must recognize a number of "rights that must be recognized as exclusive rights of authorization."¹²⁸ These include rights regarding the following in public settings: (1) communicate the work to the public; (2) broadcast performance of the work; (3) recite a literary work; and among other things, (3) adapt the work for use as an audio-visual work.¹²⁹

Generally, the Berne Convention requires that works be protected for a minimum of the life of the author plus fifty years.¹³⁰ However, there are important exceptions to this general rule, one of which deals with movies and other audio/visual works.¹³¹ For those types of works, the minimum term of protection is fifty years after the work is released to the public, or fifty years from creation for unreleased works.¹³²

- 126 Id.
- 127 Id.
- 128 Id.
- ¹²⁹ *Id*.
- ¹³⁰ *Id*.
- ¹³¹ Id.
- ¹³² *Id*.

 ¹²³ Summary of the Berne Convention for the Protection of Literary and Artistic Works (1886), WORLD INTELL.
 PROP. ORG., https://www.wipo.int/treaties/en/ip/berne/summary_berne.html (last visited Apr. 5, 2020, 12:41 PM).
 ¹²⁴ Id.
 ¹²⁵ Id.

The Berne Convention also provides for moral rights for content creators.¹³³ Arising out of civil law, moral rights are those "of a spiritual, non-economic and personal nature."¹³⁴ Two of the most important moral rights are "attribution and integrity."¹³⁵ Attribution is the right of the creator to be recognized by their name or either anonymously or by a pseudonym.¹³⁶ Integrity is the right of the creator to object to "prevent any deforming or mutilating changes to his work, even after title in the work has been transferred."¹³⁷

While moral rights have a long tradition in civil law, American jurisprudence has largely rejected attempts to import them into U.S. law.¹³⁸ American copyright law has long been more concerned with protecting the economic rights of an owner rather than their personal rights.¹³⁹ A main reason why the United States refused to join the Berne Convention for so long was that it would have been required to recognize moral rights of creators in copyright law.¹⁴⁰ When it finally joined the Convention, the United States argued it already had the functional equivalent to moral rights in case law, state statutes, and perhaps under trademark law.¹⁴¹ They pointed out moral rights may be protected if contracted between parties, and there were remedies available for breaching moral rights in such circumstances under contract law.¹⁴²

One of the other reasons the United States refused to join the Convention was due to the Convention's requirements that member states had to eliminate mandatory registration of

¹³³ Id.

¹³⁴ Carter v. Helmsley-Spear, Inc., 71 F.3d 77, 81 (2d Cir. 1995). Moral rights were originally called le droit moral in French.

¹³⁵ Id.

¹³⁶ Id.

¹³⁷ *Id*.

¹³⁸ *Id.* at 82.

¹³⁹ Laura Lee & Van Velzen, *Injecting a Dose of Duty into the Doctrine of Droit Moral*, 74 IOWA L. REV. 629 (1989).

¹⁴⁰ Oman, *supra* note 119, at 93.

¹⁴¹ *Id.* at 94-95.

¹⁴² Id. at 94.

copyrights and eliminate formalities putting conditions on copyright protection.¹⁴³ Under the 1909 Copyright Act, formal registration of works were still required in the United States.¹⁴⁴

Even though there was considerable pressure to eliminate formal registration, it remained part of U.S. Copyright law until the 1976 Copyright Act was passed.¹⁴⁵ Congress crafted the 1976 Act with an eye towards having it comply with the Berne Convention requirements.¹⁴⁶ Congress later modified the law to bring the U.S. system into compliance with the Berne Convention in 1988, and the Senate ratified the United States joining the convention in October of that year.¹⁴⁷

The last major revision to the Berne Convention was in 1971, and the Convention has essentially remained unchanged since that time.¹⁴⁸ This is due to a number of factors that make it very difficult to revise the Convention.¹⁴⁹

With respect to copyright the European Union ("EU") introduced some uniformity.¹⁵⁰

Works created within the EU are protected for the life of the author plus seventy years.¹⁵¹ For

jointly authored works, protection extends to seventy years after the death of the last surviving

¹⁴³ *Id.* at 82.

¹⁴⁴ Id.

¹⁴⁵ *Id.* at 82, 113. Prior to the 1976 Copyright Act a number of bills were proposed that would have eliminated the need to formally register works, none of which were signed in to law. *Id.*

¹⁴⁶ *Id.* at 113.

¹⁴⁷ Irvin Molotsky, *Senate Approves Joining Copyright Convention*, N.Y. TIMES (Oct. 21, 1988), https://www.nytimes.com/1988/10/21/arts/senate-approves-joining-copyright-convention.html.

¹⁴⁸ Sam Ricketson, *The International Framework for the Protection of Authors: Bendable Boundaries and Immovable Obstacles*, 41 COLUM. J. L. & ARTS 341, 349 (2018).

¹⁴⁹ *Id.* These factors include the number of countries that would have to participate in negotiations, increasing differences "between developed and developing countries," and the rapid pace of technological advancements. *Id.* A major stumbling block is the requirement for unanimity among the parties, with even just one party being able to veto any proposed changes. *Id.*

¹⁵⁰ Copyright, Subsection to Intellectual Property & Running a Business, EUROPEAN UNION, https://europa.eu/youreurope/business/running-business/intellectual-property/copyright/index_en.htm (last updated May 8, 2020).

¹⁵¹ *Id*.

author.¹⁵² It is important to note, however, there is no single EU copyright system, and each member nation maintains its own copyright system.¹⁵³

The Intersection of Intellectual Property and Space Law in Filmmaking

We now move on to how intellectual property and space law would intersect when independent filmmakers get to the point where they are able to make movies above the Karman Line, which marks the boundary between Earth and outer space.¹⁵⁴

Copyright in the Final Frontier

The transcendent nature of space has resulted in it being seen as an unregulated frontier.¹⁵⁵ In reality, human activity in space is the subject of considerable regulation—both for businesses and individuals. Looking ahead, governments will still be involved in regulation of activities in space, even when space flight is more the purview of private organizations rather than governments.¹⁵⁶ There will be a fair number of laws and regulations that filmmakers will have to comply with when leaving Earth to make movies.¹⁵⁷ Because space activities must be conducted in accordance with international law under the Outer Space Treaty, filmmakers will need to be aware of and follow international laws when engaging in activities in space.¹⁵⁸

https://euipo.europa.eu/ohimportal/en/web/observatory/faqs-on-copyright (last visited Apr. 5, 2020, 8:21 PM). ¹⁵⁴ See Elizabeth I. Winston, *Patent Boundaries*, 37 TEMP. L. REV. 501, 530 (2015). The Karman line is a line about 100km above sea level where the atmosphere is too thin for an aircraft's wings to the lift needed to sustain flight. *Id*. The Federation Aeronautique Internationale has defined this line as the boundary between Earth and space. ¹⁵⁵ Adam Faderewski et al., Feature, *SX SW 2019: The Intersection of Law and Technology*, 82 TEX. B. J. 326 (May

¹⁵² *Id*.

¹⁵³ FAQs on Copyright, EUROPEAN UNION INTELL. PROP. OFF.,

Adam Faderewski et al., Feature, SX SW 2019: The Intersection of Law and Technology, 82 TEX. B. J. 326 (N. 2019).
 ¹⁵⁶ Id.

¹⁵⁷ See id.

¹⁵⁸ See Hughes Aircraft Co. v. United States, 29 Fed. Cl. 197, 229 (1993).

A major issue is determining which laws the filmmaker and others involved in producing a film will apply.¹⁵⁹ As mentioned earlier, space by its nature transcends national boundaries, but there are still lines of "clearly delineated ownership recognized by national legal bodies."¹⁶⁰ A long recognized principle of space law is that vehicles launched into space belong to the launching party or state, along with any component parts.¹⁶¹ Similarly, structures built on the moon or other celestial bodies belong to the state or private parties that built the structures.¹⁶² The likely approach is that filmmaking activities that take place within a vehicle or in an extraterrestrial structure would be deemed to have taken place in the state or party that owned the structure.¹⁶³ For example, filmmaking activities in a permanent structure owned by a U.S. based entity (such as a corporation) located on Mars would likely be deemed to be subject to U.S. law. Filmmaking activities taking place on a space station owned and operated by Italy in Earth orbit would likely be considered subject to Italian law.

In 1997, the World Intellectual Property Organization ("WIPO"), working with American, European, and Japanese consultants, studied the need for regulations to protect IP created in space.¹⁶⁴ WIPO reached the conclusion at the time that there was no need for special legislation related to IP created in space.¹⁶⁵ Most countries so far have not considered it

¹⁶⁵ Id.

¹⁵⁹ Henry R. Hertzfeld & Frans G. von der Dunk, *Bringing Space Law into the Commercial World: Property Rights without Sovereignty*, 6 CHI. J. INT'L L. 81, 83 (2005).

¹⁶⁰ *Id.* ¹⁶¹ *Id.*

 $^{^{162}}$ *Id.* at 83.

¹⁶³ *Id.* at 82-83.

¹⁶⁴ TOMOKO MIYAMOTO, EUROPEAN SPACE AGENCY, SPACE-RELATED ASPECTS OF INTELLECTUAL PROPERTY: WIPO'S ROLE AND ACTIVITY (May 1999).

necessary to pass any special legislation.¹⁶⁶ Even if they did, it is unclear if the Outer Space Treaty would allow for such protections to extend to content or inventions created in space.¹⁶⁷

It will also be helpful to look at how laws apply in other settings where it is not easy to apply laws, such as cyberspace or international waters. Cyberspace is especially challenging as there is "no comprehensive international legal framework" in place.¹⁶⁸ It has always been difficult to apply traditional forms of jurisdictional-based law to cyberspace, owing to the transcendent nature of the Internet, which is accessible to anyone with a computer connection.¹⁶⁹ Similar challenges will exist in outer space, which is international or transnational in character, especially if people representing multiple nationalities are involved in making a film.

In cases where there are multiple authors of different nationalities, current U.S. laws allow for copyrights registration as long as "as long as any one of the authors' nationalities or domiciles is sufficient."¹⁷⁰ What this means is that as long as at least one of the authors is from a nation that has copyright agreements with the United States, that is enough to qualify for protection under U.S. copyright laws.¹⁷¹ In cases where a work was made for hire, the U.S. Copyright Office instead looks at the nationality of the organization or the person who hired the creator, rather than the nationality of the creator.¹⁷²

¹⁶⁶ Id.

¹⁶⁷ Stefan Paterson & Robert Wulff, *The role of intellectual property in space*, SPACETECH ASIA (July 31, 2018), https://www.spacetechasia.com/the-role-of-intellectual-property-in-space/.

¹⁶⁸ William M. Stahl, *The Uncharted Waters of Cyberspace: Applying the Principles of International Maratime Law to the Problem of Cybersecurity*, GA. J INT'L & COMP. L. 247, 261-62 (2011).

¹⁶⁹ Bradley J. Raboin, *Treacherous Waters: Jurisdiction in E-Commerce and on the High Seas*, 21 TUL. J. TECH. & INTELL. PROP. 1, 5 (citing Darrel C. Menthe, *Jurisdiction in Cyberspace: A Theory of International Spaces*, 4 MICH. TELECOMM. TECH. L. REV. 69, 70 (1998)).

 ¹⁷⁰ 11 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2005 (Matthew Bender rev.ed. 2019)..
 ¹⁷¹ Id.

¹⁷² Id. at ch. 2005.5.

Under the Berne Convention, works qualify for protection as long as the author or authors are a citizen of at least one of the member countries in the agreement.¹⁷³ Works also qualify if either the author or authors had their works first published in a member country or simultaneously in a country that is a member to the convention and one that is not.¹⁷⁴ Protection also applies to individuals who are permanent residents of a member country and are considered nationals of that member country for the purposes of the Convention.¹⁷⁵ For works with joint authors, protection applies until fifty years after the death of the last surviving author.¹⁷⁶

The likely outcome in situations where content creators collaborated on a film is that they would be able to choose what copyright protections to file for, as long as one of them is a national of a country that they seek to file for copyright protection, be it the United States or another country that participates in the Berne Convention, such as a European Union member state. When joint filmmakers have the ability to choose which copyright regime they will use to protect their works, these filmmakers will have to carefully weigh the benefits and costs that go with each system of copyright. For example, as mentioned earlier, the United States copyright regime has largely rejected the concept of moral rights for domestic works.¹⁷⁷ Filmmakers wanting to ensure their moral rights—such as those of attribution and integrity—are protected may want to choose to register under a copyright system that provides for moral rights if one of the filmmakers is from a country that has a strong moral rights tradition.¹⁷⁸ Congress provided some recognition of the moral rights of creators through the Visual Artists Rights Act ("VARA")

¹⁷³ Berne Convention for the Protection of Literary and Artistic Works art. 3(1)(a-b), Sept. 9, 1886, as revised at Paris on July 24, 1971 and amended in 1979, S. Treaty Doc. No. 99-27 (1986).

¹⁷⁴ Id.

¹⁷⁵ *Id.* at art. 3(3).

¹⁷⁶ *Id.* at art. 7bis.

¹⁷⁷ See Carter v. Helmsley-Spear, Inc., 71 F.3d 77, 81 (2d Cir. 1995).

¹⁷⁸ See id.

of 1990.¹⁷⁹ This law provided for attribution and integrity for certain visual works.¹⁸⁰ However, VARA is limited in scope and specifically excludes film from moral rights protections.¹⁸¹

Choice of Law in Orbit and Beyond

Choice of law questions will be especially tricky for filmmakers to resolve. This is an area that has not been sufficiently addressed in existing agreements.¹⁸² With multinational stations, vessels, structures and other elements, no uniform choice of law provisions work to state which laws would apply.¹⁸³ However, it is critical for choice of law questions to be answered, especially in situations where multiple creators have connections to multiple countries.¹⁸⁴

The ISS IGA did not provide clear guidance on which country's jurisdiction takes precedence when more than one country could assert jurisdiction.¹⁸⁵ Most of the international community has come to the consensus that a country cannot assert jurisdiction if the basis for doing so is unreasonable.¹⁸⁶ When weighing related jurisdictional questions, the United States currently balances its interests against those of the other country and defers only if the interests of the other country outweigh the United States' interests.¹⁸⁷

¹⁷⁹ Visual Artists Rights Act of 1990, Pub. L. No. 101-650, § 603, 104 Stat. 5089 (codified at 17 U.S.C. § 106A (2018)).

¹⁸⁰ *Id*.

¹⁸¹ Timothy M. Casey, *The Visual Artists Rights Act*, 14 HASTINGS COMM. & ENT. L. J. 85, 91 (1991). The original version of VARA provided moral rights for filmmakers, a provision that was thoroughly opposed by the film industry. *Id.* While lobbying groups for both sides made their respective cases to Congress, the studios ultimately succeeded in getting film excluded from VARA. *Id.*

¹⁸² See Helen Shin, "Oh, I Have Slipped the Surly Bonds of Earth": Multinational Space Stations and Choice of Law, 78 CAL. L. REV. 1375, 1377 (1990).

¹⁸³ *Id*.

¹⁸⁴ HAGUE CONFERENCE ON PRIVATE INTERNATIONAL LAW, PRINCIPLES ON CHOICE OF LAW IN INTERNATIONAL COMMERCIAL CONTRACTS 23 (2015), https://assets.hcch.net/docs/5da3ed47-f54d-4c43-aaef-5eafc7c1f2a1.pdf [hereinafter HCCH].

¹⁸⁵ Mary B. McCord, *Responding to the Space Station Agreement: The Extension of U.S. Law into Space*, 77 GEO. L. J. 1933, 1942-43 (1989).

¹⁸⁶ Id.

¹⁸⁷ Id.

It may be possible to adapt existing approaches to this problem. For example, in the area of criminal law, author Karen Robbins proposed using a minimum contacts approach to answer jurisdictional questions.¹⁸⁸ As Robbins noted, "federal law has consistently held that amenability of a party to suit [must be] based on the party's connections with the forum state."¹⁸⁹

Another approach is reflected in *Lauritzen v. Larsen*, where Justice Jackson identified seven factors used in cases taking place outside the United States.¹⁹⁰ While Robbins was primarily focused on criminal law in space, using the minimum contacts approach could be helpful in solving intellectual property jurisdictional questions as well in the event there is no clear indication of which laws should apply.¹⁹¹ Similarly, the *Lauritzen* factors could be useful in determining what laws to apply should there be a disagreement between joint filmmakers and no guidance—such as a contract—between the filmmakers exists.¹⁹²

In order to avoid choice of law issues when there are joint filmmakers working on a film made in space, it is critical to decide on choice of law early on—well before they leave Earth.¹⁹³ Deciding on the law to be applied and contracting around it can help the parties maintain party autonomy: the power for parties to choose which laws will apply to them.¹⁹⁴ Contracting around choice of law questions will enhance "certainty and predictability" of the contract and ensure that the parties know exactly what their rights and obligations are.¹⁹⁵ The law chosen by joint

¹⁸⁸ Karen Robbins, Comment, *The Extension of United States Criminal Jurisdiction to Outer Space*, 23 SANTA CLARA L. REV. 627, 652 (1983).

¹⁸⁹ McCord, *supra* note 185, at 1943 (quoting Robbins, *supra* note 188, at 654).

¹⁹⁰ Lauritzen v. Larsen, 345 U.S. 571, 583-90 (1953). The factors Justice Jackson listed included: (a) where the act in question took place; (b) the laws that applied to the country the vessel was flagged under; (c) the domicile and allegiance of the victim; (d) the domicile and allegiance of the defendant; (e) the laws the applied to any contracts; (f) if a foreign court was accessible or not; and (g) "the law of the forum state." *Id.* at 583-90.

¹⁹¹ Robbins, *supra* note 188.

¹⁹² Id.

¹⁹³ See HCCH, supra note 184.

¹⁹⁴ Id.

¹⁹⁵ Id.

filmmakers should be "the widest scope of application" within established limits.¹⁹⁶ These limits are mainly to ensure that the parties do not undermine policies or laws fundamentally important to the relevant states.¹⁹⁷ The Hague Conference on Private International Law Principles reinforce the need for joint filmmakers to contract around choice of law as they do not provide rules in the event the parties fail to make a choice.¹⁹⁸

Moral Rights Challenges in Space

When it comes to moral rights, U.S.-based content creators have to ask themselves how much they want to be able to avail themselves of moral rights when seeking to protect their films. When Congress last considered whether moral rights of content creators deserved more protection, most of the people who testified on the issue were opposed to expansion of such rights.¹⁹⁹ Expansion of copyrights in the United States to include moral rights on a national level is unlikely to happen anytime soon. This refusal has resulted in some states deciding to pass their own laws on moral rights.²⁰⁰ As a result, filmmakers in the United States face a patchwork of laws.²⁰¹

So, what are U.S.-based independent filmmakers supposed to do if they feel strongly about their moral rights? If films are significantly altered, a director may ask for an "Alan Smithee" type director's credit.²⁰² Negotiated by the Director's Guild of America ("DGA"),

¹⁹⁶ Id.

¹⁹⁷ Id. at 24-25.

¹⁹⁸ *Id.* at 25.

¹⁹⁹ Study on the Moral Rights of Attribution and Integrity, 82 Fed. Reg. 7870 (Jan. 23, 2017).

²⁰⁰ See 3 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 8D.02 (Matthew Bender rev. ed. 2019).

 $^{^{201}}$ *Id*.

²⁰² Tristar Pictures, Inc. v. Dir.'s Guild of Am., Inc., 160 F.3d 537, 538 (9th Cir. 1998). Smithee was a pseudonym used by directors not wanting to be associated with a film in general or a particular cut of a film. *Id.* If a director associated with the Director's Guild of America believes that he or she is entitled to an Alan Smithee pseudonym, they can ask a panel consisting of two representative's each from the studio and the Director's Guild of America for

such credits are a signal to the public that a director considers a particular cut to be terrible.²⁰³ For example, if after returning to Earth an independent filmmaker's work was subject to drastic alteration, the director could petition for the director credit to be awarded to a pseudonym. This would signal that he or she did not approve of the alterations to the work.²⁰⁴ From 1968 to 2000, the DGA used the pseudonym "Alan Smithee" before replacing it with other pseudonyms, such as "Thomas Lee".²⁰⁵

Apart from this, options in the United States are currently limited for filmmakers looking to protect their moral rights.²⁰⁶ The Supreme Court's decision in *Dastar Corp. v. Twentieth Century Fox Film Corp.* largely eliminated the use of the Lanham Act as a workaround for the lack of moral rights in U.S. copyright law.²⁰⁷ In *Dastar* the Court held that the "origin of goods" specified in the act referred to the producer of tangible goods offered for sale and not the original author of ideas, concepts, or communications embodied in such goods ²⁰⁸

As a result, the best avenue for a U.S. based filmmaker to protect their moral rights is to contract around them with distributors.²⁰⁹ Contracting around moral rights would be difficult

permission to use the Smithee credit. *Id.* If the majority agrees with the director, they will be allowed to use the Alan Smithee as the name of the director. *Id.*

²⁰³ Catherine L. Fisk, *The Role of Private Intellectual Property Rights in Markets for Labor and Ideas: Screen Credit and the Writers Guild of America, 1938-2000, 32 BERKELEY J. EMP. & LAB. L. 215, 275.*

²⁰⁴ *Id.* One of the more notable examples of a film credited to Alan Smithee was the TV version of the David Lynch film *Dune*. Bo Franklin, *Alan Smithee Is Officially the Worst Hollywood Director of All Time*, VICE (Aug. 17, 2015), https://www.vice.com/en_us/article/vdx78d/alan-smithee-is-officially-the-worst-hollywood-director-of-all-time-456. Unhappy with the way his film had been edited for television, Lynch successfully petitioned for the credit for the TV version to be given to Smithee. *Id.*

²⁰⁵ Amy Wallace, *Name of Director Smithee Isn't What It Used to Be*, L.A. TIMES (Jan. 15, 2000), https://www.latimes.com/archives/la-xpm-2000-jan-15-ca-54271-story.html.

²⁰⁶ Teresa Laky, Dastar Corp. v. Twentieth Century Fox Film Corp.: Widening The Gap Between United States Intellectual Property Law And Berne Convention Requirements, 14 SETON HALL J. SPORTS & ENT. L. 441, 441 (2004).

 ²⁰⁷ Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23, 37 (2003)
 ²⁰⁸ Id

²⁰⁹ Laky, *supra* note 205 at 477.

without a pre-existing relationship between a filmmaker and distributor.²¹⁰ However, using contract law to establish protection of moral rights is the best approach for the foreseeable future in the United States given the Supreme Court's issues with using workarounds to protecting such rights.²¹¹

The Final Frontier and Adult Movies

There are a number of other intellectual property issues that may confront independent filmmakers once they leave the atmosphere. As filmmakers boldly go out into space to create their works, those involved with the creation of pornographic films will no doubt be boldly going up there themselves.

In 2008, Virgin Galactic turned down an offer from an undisclosed party to allow them to shoot a pornographic film on board SpaceShipTwo.²¹² Later, in 2015, Pornhub launched a crowdfunding effort to finance the first pornographic film shot in space.²¹³ Since "all good case law is decided by the adult entertainment industry," there will likely be a large amount of case law generated from the numerous legal issues resulting from the creation of pornographic films made in space.²¹⁴ This case law can then be followed by filmmakers—both pornographic and non-pornographic—and the courts.²¹⁵

 $^{^{210}}$ Id.

 $^{^{211}}$ Id.

²¹² Peter B. de Selding, *Virgin Galactic rejects \$1 million space porn*, NBC NEWS (Oct. 2, 2008), http://www.nbcnews.com/id/26991760.

²¹³ Zack Guzman, *Pornhub launches crowdfund to film movie in space*, CNBC (June 10, 2015), https://www.cnbc.com/2015/06/10/pornhub-launches-crowdfund-to-film-movie-in-space.html.

 ²¹⁴ Gordon P. Firemark & Tamara Bennett, *Blackbeard's Revenge!*, ENTERTAINMENT LAW UPDATE (Mar. 25, 2020), https://podcasts.apple.com/us/podcast/entertainment-law-update/id313301718?i=1000469547378.
 ²¹⁵ Id.

In the United States, pornographic films that are not criminal in nature have been eligible for copyright protection since 1979.²¹⁶ Copyright protection was followed by establishment of legal principles that pornographic films "fell under dominant First Amendment jurisprudence if all parties are eighteen or older"²¹⁷

Other countries take a different approach to whether pornographic works qualify for copyright protection.²¹⁸ For example, in Germany, the District Court of Munich decided that Malibu Media could not claim protection for its works under German copyright law because their works were a "primitive depiction of sexual activities."²¹⁹

When considering the legal questions of filmmakers creating pornographic films in space, likely the best frameworks to use would be those concerning pornography on the Internet. Like space, cyberspace is vast and transcends national boundaries.²²⁰ It would be difficult for a single country to unilaterly act when pornographic filmmakers decide to embark on the final frontier of filmmaking.²²¹ And if there are to be restrictions on the type of content filmed in space, there would need to be international cooperation.²²²

Even if there were a strong desire in the international community to limit or bar creation of pornographic films in space, moves to restrict adult pornography or other material considered to be objectionable would likely run counter to fundamental ideals underpinning free societies.²²³

²¹⁶ Ann Bartow, *Copyright Law and Pornography*, 91 OR. L. REV. 1, 6 (2012) (discussing how the 5th Circuit found in Mitchell Bros. Film Grp. v. Cinema Adult Theater, 604 F.2d 852, 858 (5th Cir. 1979) that the 1909 Copyright Act contained no language barring copyright protection for pornographic works). This obviously does not extend to forms of pornography that are illegal, such as child or revenge pornography. *Id.* ²¹⁷ *Id.*

²¹⁸ See Eldar Habar, Copyrighted Crimes: The Copyrightability ofIllegal Works, YALE J.L.&TECH.454, 483 (2014).

 ²¹⁹ Victoria Slind-Flor, *Fresenius, Cronut, Malibu Media: Intellectual Property*, BLOOMBERG (July 3, 2013), https://www.bloomberg.com/news/articles/2013-07-03/fresenius-cronut-malibu-media-intellectual-property.
 ²²⁰ Alexander Shytov, *Indecency on the Internet and International Law*, 13(2) INT. J. L. & INFO. TECH. 260 (2005).
 ²²¹ Id.

 $^{^{222}}$ Id.

 $^{^{223}}$ *Id*.

Freedom of expression, of personal choice for those involved, and of privacy could be impacted if the international community moved to limit or bar material it considered objectionable.²²⁴

Independent filmmakers seeking to make pornographic films in space will have their own set of issues above what non-pornographic independent filmmakers will face when going into space. While some states may look the other way when filmmakers have consenting adults participating in their films, virtually no one would or should tolerate minors or non-consenting adults participating in such films.²²⁵ If a filmmaker insists on making a sexually explicit movie in space, there must be no doubt that the performers are adults and have fully and freely consented to participating in the film.²²⁶

Personality Rights for the Deceased in the Final Frontier

Personality rights are the rights to control the commercial use of an individual's "name, voice, signature, photograph, or likeness."²²⁷

One of the major challenges facing filmmakers is the inclusion of characters in new films where the original portrayers have passed on. The movie *Star Wars: Rogue One* is perhaps the best-known example of how the challenge was met.²²⁸ In *Rogue One*, filmmakers used a combination of digital effects and live action footage to re-create the character of Grand Moff

²²⁴ Id.

²²⁵ Clay Calvert & Robert D. Richards, *Stopping the Obscenity Madness 50 Years After Roth v. United States*, 9 TEX. REV. ENT. & SPORTS L. 1, 2-5 (2007).

²²⁶ Id.

²²⁷ Powell v. Burman (In re Powell), No. C17-1268, 2017 U.S. Dist. LEXIS 146875, at *5 (W.D. Wash. Sep. 11, 2017).

²²⁸ Chaim Gartenberg, *Rogue One animators on that character: 'Realism had to trump likeness'*, THE VERGE (Dec. 27, 2016), https://www.theverge.com/2016/12/27/14090152/rogue-one-animators-star-wars-grand-moff-tarkin-peter-cushing-cgi.

Tarkin about three decades after actor Peter Cushing passed away.²²⁹ This was not the first time Tarkin reappeared after Cushing's death in a live action setting.²³⁰

Carrie Fisher's death in late 2016 also raised questions of how Leia Organa's story would be concluded *in Star Wars Episode IX: The Rise of Skywalker*.²³¹ After J.J. Abrams was hired to direct *Episode IX*, he and the crew decided that while Leia needed to appear in the film to give closure to the Leia story arc, they were not going to re-create her digitally, nor were they going to recast her.²³² For that film, Abrams and his crew used extra footage of Fisher from *Star Wars Episode VII: The Force Awakens* in order to include Leia in the story.²³³

Even though Lucasfilm doesn't plan to make "a habit" of re-creating people digitally, that particular genie is out of the bottle.²³⁴ Other filmmakers—both on and off Earth—likely will use digital re-creations of deceased individuals especially if the costs decrease and the technical requirements become less extensive.²³⁵ Such digital re-creation of individuals raises a number of personality rights questions because of considerable variations among governments in the observation and protection of personality rights.²³⁶ And again, due to the international nature of

https://www.nytimes.com/2016/12/27/movies/how-rogue-one-brought-back-grand-moff-tarkin.html.²³⁰ Geek Dave, *10 Things You May Not Know About STAR WARS: Episode III - Revenge of The Sith*, WARPED FACTOR (Dec. 13, 2015), http://www.warpedfactor.com/2014/06/10-things-you-might-not-know-about-star_20.html. The reason that Tarkin was not digitally re-created in Revenge of the Sith was the quality of the footage Lucas intended to use was not good enough to use in digitally recreating the character. *Id.* Actor Wayne Pygram was cast to appear as Tarkin in a brief wordless scene at the end of the movie. Gwynne Watkins, *'Rogue One': The Digital Grand Moff Tarkin Is Terrifying for All the Wrong Reasons (Spoilers)*, YAHOO (Dec. 19, 2016),

²²⁹ Dave Itzkoff, How 'Rogue One' Brought Back Familiar Faces, N.Y. TIMES (Dec. 27, 2016),

https://www.yahoo.com/entertainment/rogue-one-the-digital-grand-moff-tarkin-is-terrifying-for-all-the-wrongreasons-203157451.html. Pygram was provided extensive makeup to make him look like a younger Cushing. *Id.* ²³¹ Anthony Breznican, *The Guardians of Leia*, VANITY FAIR (Dec. 10, 2019),

https://www.vanityfair.com/hollywood/2019/12/carrie-fisher-oral-history-rise-of-skywalker-star-wars. ²³² *Id.*

²³³ Id.

²³⁴ Gartenberg, *supra* note 224.

²³⁵ See id.

²³⁶ Id.

space, the question of whether or not personality rights applies very much depends on which country's law the filmmaker is operating under.

In the United States, there is considerable variation on the levels of recognition given to personality rights.²³⁷ About half the states give some recognition to them, either through common law or by statute.²³⁸ There is enough acceptance that the rights were included in the Restatement of Unfair Competition.²³⁹ As technology has expanded to the point where it is possible to create convincing facsimiles of real people, the legal system has moved to protect the rights of people who would be copied.²⁴⁰

In *Price v. Hal Roach Studios, Inc.*, the court held personality rights do not terminate upon a person's death.²⁴¹ However, since that holding U.S. courts have taken divergent views on whether an individual's personality rights survive their death.²⁴² Some courts have held personality rights are "not descendible to the deceased person's estate, so the likeness falls into the public domain at death."²⁴³ Other courts have held if a person exploited their rights during their lifetimes, their personality rights would pass on to their heirs. While still other courts have held that personality rights descend to their heirs regardless of whether or not the deceased exploited the rights while alive.²⁴⁴

²³⁷ Jennifer L. Carpenter, *Internet Publication: The Case for an Expanded Right of Publicity for Non-Celebrities*, 6 VA. J.L. & TECH. 3, 10 (2001).

²³⁸ Id.

²³⁹ Id. ²⁴⁰ Id.

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²⁴¹ Price v. Hal Roach Studios, Inc., 400 F. Supp. 836, 844 (S.D.N.Y. 1975).

²⁴² David Collins, *Age of the Living Dead: Personality Rights of Deceased Celebrities*, 39 ALBERTA L. REV. 914, 917 (2005).

 $^{^{243}}$ Id.

²⁴⁴ Id.

As with personality rights, when someone is alive, the states take differing views when dealing with post-mortem personality rights.²⁴⁵ Some states do not recognize them at all, while others recognize them for a set period after a person's death.²⁴⁶

Countries take differing views on personality rights, much like they do with other facets of law. Hong Kong, for example, offers very little in the way of protection for personality rights and has not generally recognized that people have property rights in their own identities.²⁴⁷ On the other end of the spectrum, South Africa has strong protections on personality rights, considering them as part of the fundamental right of privacy found in their 1996 constitution.²⁴⁸

Independent filmmakers creating films in space may want to use digital effects to resurrect deceased actors for their projects, especially as it becomes more technically and financially feasible to do so. Even if the cost and technical requirements decrease, there will be a number of legal challenges to overcome before the filmmaker can resurrect a deceased actor to play a role in their movie.

The most important thing for a filmmaker to do when they want to digitally insert a deceased individual in their film is to gain permission from the family or the estate.²⁴⁹ Doing so would minimize legal concerns.²⁵⁰ Additionally, having the family and/or estate participate in the process would allow for more lifelike re-creations.²⁵¹

 ²⁴⁵ Kevin Lincoln, *How Did Rogue One Legally Re-create the Late Peter Cushing?*, VULTURE (Dec. 16, 2016), https://www.vulture.com/2016/12/rogue-one-peter-cushing-digital-likeness.html.
 ²⁴⁶ Id

²⁴⁷ Peter K. Yu, *No Personality Rights for Pop Stars in Hong Kong?, in* DRAKE U. LEGAL STUD. RES. PAPER SERIES (2010), https://ssrn.com/abstract=1672311.

²⁴⁸ Jonathan Burchell, *The Legal Protection of Privacy in South Africa: A Transplantable Hybrid*, 13(1) ELEC. J. COMP. L., at 11-12 (2009) http://www.ejcl.org/131/art131-2.pdf.

²⁴⁹ See Lincoln, supra note 241.

²⁵⁰ Id.

²⁵¹ See Robbie Collin, Star Wars super-producer Kathleen Kennedy: 'Rogue One is not a political movie' THE DAILY TELEGRAPH (Dec. 15, 2016), https://www.telegraph.co.uk/films/2016/12/14/star-wars-super-producer-kathleen-kennedy-rogue-one-not-political/. Cushing's estate provided a great deal of input into the digital resurrection of

The exact legal requirements for using a deceased person would likely depend on the laws the filmmaker is operating under.²⁵² As with other areas of space law, the law that would most likely apply would be that of the country the spacecraft, structure, or station is registered under.²⁵³ For example, a South African filmmaker will likely face an entirely different set of legal requirements than an American filmmaker. As with other space-based legal issues, an independent filmmaker should secure legal counsel as soon as possible for advice on issues relating to bringing back deceased actors to work on a film.²⁵⁴

Conclusion

Both motion pictures and the exploration of space are largely about the same thing expanding horizons for humanity and continuing to explore the universe around us. Admittedly, we are years—if not decades—away from independent filmmakers being able to make movies in space. However, as it becomes more feasible both technologically and financially for humans to explore space and as spaceflight becomes more and more commercialized, the day will no doubt come when independent filmmakers will want to make movies in space.

While making movies in space would allow independent filmmakers and their audiences to explore the final frontier in a new way, making movies in space will involve working through numerous legal issues. We have touched on some of the intellectual property related legal issues that independent filmmakers will have to solve before leaving Earth. An overarching theme of

Tarkin in order to make Tarkin more life-like. *Id.* The input included suggestions on small, subtle adjustments, which Rouge One producers incorporated into the film. *Id.*

²⁵² See Hertzfeld & von der Dunk, supra note 159.

 $^{^{253}}$ Id.

²⁵⁴ See Young, supra note 48.

resolving these issues is that, due to the international nature of space, independent filmmakers will have to consider carefully which laws will apply to them in the making of their films.

A central message of dealing with these issues is that independent filmmakers should secure legal counsel the moment they make serious efforts to turn their idea into a movie.²⁵⁵ This is sound advice no matter what type of film a creator intends to make, regardless of location. This advice becomes even more important when dealing with issues of space law alongside the more traditional legal concerns that all filmmakers face.²⁵⁶ Experienced counsel will be able to tell their client about the legal opportunities and pitfalls they may face blasting off into space.

....to boldly go where no one has gone before!²⁵⁷

In the over fifty years since Star Trek was introduced to the world, both fictional and real-life space exploration have been about going where humans have not been before. Making films in space is an exciting idea and considering the legal issues now will make it easier when we are at that point where it is realistically possible both technically and financially for filmmakers to create films in space.

²⁵⁵ See id.

²⁵⁶ See id.

²⁵⁷ Star Trek: The Next Generation (Paramount Domestic Television 1987).

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