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Infinite Diversity or Infinite Opportunity: a Look at Star Trek and its Cultural Influence

By Kendra Vaughan

In 1966 the original *Star Trek* series premiered on national television.¹ It was the creation of Gene Roddenberry (1921-1991), a former police officer, who had a vision for the future of humanity. It took Roddenberry several years and a failed pilot episode before the show was ultimately picked up by Desilu Studios and aired on television.² By the time they were ready to film the second pilot episode, the lead actor Jeffrey Hunter (1926-1969), who played Captain Pike, had decided he would no longer be taking roles in television series, believing roles on the small screen to be beneath him. This led to a quick recasting of nearly the entire crew.³ From the outset, Roddenberry attempted to break the status quo by casting a woman, Majel Barrett (1932-2008), as the ship's first officer and creating a character that looked like a devil with red skin and pointed ears that would later be known as Mr. Spock. The studio objected to the original character design for Spock, noting that it was visually too similar to satanic characters and would likely disturb their intended audience. He was ultimately changed to have a more human skin tone to make him more palatable for audience members.⁴ Test audiences who viewed the original pilot found the casting of Majel Barrett and her character, the female first officer, unbelievable, as women did not hold powerful positions of that nature at the time. Forcing these changes gave us the *Star Trek* we know today complete with

¹ News from the Past, "A&E Biography: Gene Roddenberry (1994)," YouTube (July 13, 2021), <https://www.youtube.com/watch?v=9gqdtv14mE>.

² News from the Past, A&E Biography.

³ News from the Past, A&E Biography.

⁴ News from the Past, A&E Biography.

William Shatner (b.1931) as Captain Kirk and the more human-looking, less devilish, Mr. Spock played by Leonard Nimoy (1931-2015).



Figure 1: Star Trek: The Original Series cast photo.

Left to right: James Doohan, DeForest Kelley, Walter Koenig, Majel Barrett, William Shatner, Nichelle Nichols, Leonard Nimoy, and George Takei; copyright Paramount Studios.

Roddenberry's vision, while not exactly as he had originally written it, still flourished with a diverse cast complete with an alien; an African American woman, Nichelle Nichols (b.1932); a Japanese man, George Takei (b.1937); and a Russian character played by Walter Koenig (b.1936), all serving together on the bridge of the USS Enterprise. His push for diversity and inclusion made television history and spawned a franchise that has lasted over fifty years and inspired millions of people. Roddenberry's vision for a better humanity questioned and challenged the status quo for over fifty years. It preached "infinite diversity in infinite combinations" and showed a utopian Earth without poverty, greed,

prejudice, or war where every human being is accepted.⁵ *Star Trek* is well known for its social commentary and inclusive casting; it has promoted infinite diversity and inclusion, inspired the development of new technologies, influenced people on their career choices, and inspired some to question and condemn social injustices. It has not, however, been able to influence the masses to the point of achieving the ultimate utopian vision of humanity, YET. What follows is evidence that *Star Trek* has indeed had a profound impact on society in more ways than simply acting as entertainment for the masses. Its influence and impact have not only inspired many to choose careers in Science, Technology, Engineering, and Mathematics (STEM) fields, but to develop new and innovative technologies, and has inspired some to question the very fabric of the social foundations operating within our modern society through the use of social commentary throughout its many iterations.

It is well known that *Star Trek* has been influential in the lives of its fanbase. One of the most documented effects has been its influence on the career paths taken by fans who have been inspired by the characters they love. From Chief Engineer Scotty's miracle work on the Enterprise's engines in *the Original Series*, to the doctors of Starfleet and their varied and sometimes humorous bedside manner, Counsellor Deanna Troi's profound ability to keep the *Next Generation* Enterprise crew sane, and *Next Generation's* Captain Picard's quest for anthropological knowledge and peaceful diplomacy, the characters of *Star Trek* have inspired many people to reach for the stars.

One of the most notable effects that *Star Trek* has had on the career choices of its fans is found in the fields of engineering and technology. Montgomery "Scotty" Scott (played by James Doohan 1920-2005) and Geordi La Forge (played by Levar Burton b.1957), the engineers of the Enterprise ships in the first two series,

⁵ *Star Trek: The Animated Series*, Season 1 Episode 7 "The Infinite Vulcan," directed by Hal Sutherland, written by Walter Koenig, featuring William Shatner, Leonard Nimoy and George Takei, aired October, 20, 1973 on NBC, <https://www.paramountplus.com/shows/video/1792775590/>.

have been noted to have inspired two generations of students to pursue degrees in engineering. James Doohan was awarded an honorary doctorate in engineering from the Milwaukee School of Engineering.⁶ Who found that his portrayal of the Scottish engineer on *Star Trek* had inspired upwards of 50% of their students to pursue engineering.⁷ Due to his influence, the school added as a question whether applicants were influenced by James Doohan on their applications to track how many were inspired by this one television character.⁸ Doohan has also been credited for saving the life of a suicidal fan who wrote him a letter. She expressed how distraught she was and how he'd always brought her joy. He reached out to this fan and asked that she meet him at a convention he was due to appear at two weeks later.⁹ They communicated for a few years after that at various conventions, and after a time, Doohan stopped hearing from her. Eight years later, the woman contacted him to thank him for everything he did to help her at her darkest hour.¹⁰ She let him know that she had turned her life around and had received her master's degree in electrical engineering.¹¹ Geordi, the Chief Engineer from *Star Trek: The Next Generation*, is also often referenced as a popular influence for engineering students in more recent decades.¹² The positive portrayal of Geordi's physical disability of blindness, which was overcome by the use of his trademark visor, has been inspirational

⁶ YouTube Movies, "Trekkies: 25th Anniversary Edition," YouTube (August 24, 2022), <https://www.youtube.com/watch?v=tsILzNjvYn0>.

⁷ Larry Lange, "Long Run for an Enterprising Engineer," *Electronic Engineering Times*, no. 919 (September 16, 1996): 22; Peter Reynolds, "James Doohan on Engineering Students," YouTube (September 9, 2006), <https://www.youtube.com/watch?v=rqedcvB8MKw>.

⁸ Peter Reynolds, "James Doohan on Engineering Students."

⁹ YouTube Movies, "Trekkies: 25th Anniversary Edition."

¹⁰ YouTube Movies, "Trekkies: 25th Anniversary Edition."

¹¹ YouTube Movies, "Trekkies: 25th Anniversary Edition."

¹² Kendra Vaughan, "Anthropology Student Writing a Research Paper about Trek Here... Mind Telling Me If Star Trek Has Influenced Your Education and/or Career Choices?...", Facebook, May 2, 2022, https://www.facebook.com/groups/1477972915840370/?multi_permaLinks=2935826840054963.

to those seeking equal opportunity employment for those with accessibility challenges.¹³ While LeVar Burton may not have inspired as many engineering students as Doohan, he did inspire a generation of children through a different series which encouraged children to read and grow their imagination. Burton was the host of the popular series Reading Rainbow.¹⁴

While Trek's influence in the STEM fields is extensive, it has inspired those far beyond the fields of engineering and science.¹⁵ Nichelle Nichols, the actress who played Nyota Uhura, the Communications Bridge Officer on *the Original Series*, has been incredibly influential for women of color, not only in STEM careers, and most notably in the National Aeronautics and Space Administration (NASA) but for being the first African American actress in a regular supporting role on a series.¹⁶ This portrayal of Uhura as the communications officer on the bridge of a starship opened doors for other actors and women of color. Nichols told a story she heard from *Star Trek* creator Gene Roddenberry of the moment actress Whoopi Goldberg (b.1955) realized she could be or do anything she wanted. As a nine-year-old girl, she saw a woman of color on television who, for the first time in her memory, was not portraying a maid.¹⁷ This inspired her to become an actress. For the first time, women of color were represented in the media as being the intelligent, capable, and successful people they knew themselves to be. Nichols has been honored in recent

¹³ Mike Straus, "What Geordi La Forge Can Teach STEM About Accessibility," Star Trek, CBS Studios Inc., November 8, 2021. <https://www.startrek.com/news/what-geordi-la-forge-can-teach-stem-about-accessibility>.

¹⁴ *Reading Rainbow: The Tin Forest*, Season 14, Episode 7, edited by Douglas Schuetz, featuring LeVar Burton and Jeff Bridges, aired September 2, 2002, on PBS, <https://www.pbs.org/video/the-tin-forest-xew5hj/>.

¹⁵ Vaughan, "Anthropology Student Writing a Research Paper about Trek."

¹⁶ YouTube Movies, "Trekkies: 25th Anniversary Edition."

¹⁷ YouTube Movies, "Trekkies: 25th Anniversary Edition."

years with the NASA Exceptional Public Achievement Medal for her forty years of activism that helped diversify their ranks.¹⁸

Along with *Star Trek*'s influence on the career paths of its fans, the show's penchant for sticking to science and keeping things as realistic as possible has inspired many technological advancements in the last fifty years. All great advancements begin with a simple idea and some of the most utilized modern technology was inspired, at least in part, by *Star Trek*. Marty Cooper (b.1928) of Motorola saw how Captain Kirk's use of his clamshell communication device was capable of two-way communication with a starship, as well as using GPS signals to pinpoint the location of crew members and decided it was something he'd like to achieve. Motorola eventually went on to develop StarTAC. It was the first clamshell-style cell phone released to the public, and its design was inspired by the communicators of *Star Trek*. While Cooper began developing a portable phone at Motorola before *Star Trek* began airing, an idea for which he credits the comic book character Dick Tracy and his watch communicator for inspiring, the physical design of the StarTAC flip phone was credited to Captain Kirk's communicator from *Star Trek: the Original Series*.¹⁹ The talking computers, voiced by Majel Barret Roddenberry, from the second generation of *Star Trek* ships, inspired our own talking computer devices like Apple's Siri and Amazon's Alexa. Both Jeffrey Bezos and Steve Wozniak, the founders of Amazon and Apple respectively, have credited *Star Trek* for influencing them in their pursuit of technological development. Wozniak, who was heavily influenced by science fiction as a child, co-created the Silicon Valley Comic Con to bring together the two things he loves: science fiction and science-fact. This convention was aimed at supporting the STEM fields and celebrating shows like *Star Trek*. Wozniak said in an

¹⁸ Shanique Yates, "Nichelle Nichols Honored With Prestigious NASA Award For Her Contributions To STEM - AfroTech," AfroTech, December 8, 2021, <https://afrotech.com/nichelle-nichols-receives-prestigious-nasa-award>.

¹⁹ Julian Jones, "How William Shatner Changed The World (2006) Whole Film," Vimeo, May 1, 2023, <https://vimeo.com/208007135>.

interview, “I’m not sure I would’ve had the inspiration that I had to ever start Apple, and do all these technical things and I don’t think I would’ve had the meaning in my life if I hadn’t gone to *Star Trek* conventions when I was young...”²⁰ Jeff Bezos’ desire to found Blue Origin, a company that envisions humanity shifting its damaging industries to space in order to preserve Earth, is directly related to his fondness for *Star Trek* as a child and its portrayal of the exploration of the galaxy. In 2021, Bezos and Blue Origin began launching their passenger ships into lower orbit manned with varying guests. Bezos invited William Shatner, of Captain Kirk fame, to accompany him on one of the flights due to his inspiration and influence as the first Captain of the Enterprise that captured his imagination as a child. Without the inspiration of *Star Trek*, Bezos may not have pursued the path that led him to the founding of Amazon which allowed him to invest in projects like Blue Origin.²¹ Amazon Prime films created a movie to document William Shatner’s experience with Bezos and Blue Origin entitled *Shatner in Space*.²²

The Personal Access Display Device or PADD, from *Star Trek: The Next Generation* resembles the wide range of computer tablets on the market today. They are widely used devices, as their functionality and portability make them a favorite among consumers. These devices were inspired by the PADD, much in the same way that communicators inspired the design of the StarTAC flip phone. Steve Wozniak credits his love of *Star Trek* for influencing his development of Apple iOS and the founding of Apple Inc., which brought the ever-popular Apple iPad complete

²⁰ Zaki Hasan, “Interview: Steve Wozniak on Sci-Fi, Comic Books, and How *Star Trek* Shaped the Future,” *HuffPost* (blog), April 19, 2017, https://www.huffpost.com/entry/interview-steve-wozniak-on-sci-fi-comic-books-and_b_58f7e86de4b081380af51897.

²¹ Atomic Network, “Great Tech Innovators Influenced by Star Trek,” YouTube (August 15, 2018), <https://www.youtube.com/watch?v=m2jnenfB21o>.

²² *Shatner in Space*, episode 1, featuring William Shatner, Sarah Knights and Jeff Bezos, released December 15, 2021, on Amazon Prime, <https://www.amazon.com/Shatner-in-Space/dp/B09NCH5D56>.

with Siri, the Apple voice interface.²³ PADDs function in much the same way as modern tablets do, acting as a handheld terminal connected to a main computer wirelessly so that the user can perform a variety of tasks. The iPad's data can be shared and stored via wireless and mobile internet and the battery life of the iPad is only slightly less than that described for the PADD. The two devices also have very similar security features and functionality. A user of the PADDs can remotely access or control other devices aboard the ship. Users of iPads and other tablets have the same capability over Wi-Fi networks and via Bluetooth.²⁴

There are several other technologies, both established and in development, that have also been inspired by *Star Trek* shows. The communications earpiece worn by Lieutenant Uhura in *the Original Series* inspired the Motorola Bluetooth headsets that have now evolved into a variety of wireless headphone devices.²⁵ Developers seeking to create a form of *Star Trek*'s replicator technology have developed 3D printing technologies.²⁶ Some are widely used today, such as the home models that can be purchased to print plastic items via a computer program along with an extruder that uses polyvinyl chloride (PVC) and other plastics. NASA has also been working on a similar device that can print food items in space to satisfy the cravings of astronauts on the International Space Station, ISS.²⁷ Several groups across the

²³ Liz W. Faber, "What the Journey from Star Trek to Siri Says about Our Culture," *Psyche*, September 20, 2022, <https://psyche.co/ideas/what-the-journey-from-star-trek-to-siri-says-about-our-culture>.

²⁴ Karn Bulsuk, "iPad and Star Trek's PADD Compared: The Technical Showdown," Karn Bulsuk: Full Speed Ahead, May 23, 2012, <https://www.bulsuk.com/2012/05/ipad-and-star-treks-padd-compared.html>.

²⁵ *5 Product Innovations That Were Inspired by STAR TREK - Part 2 | Some Serious Engineering - Ep10*, vol. 2, 2 vols., Some Serious Engineering, 2021, https://www.youtube.com/watch?v=4_3YW0iDa14.

²⁶ *5 Product Innovations That Were Inspired by STAR TREK - Part 1 | Some Serious Engineering - Ep9*, 2021, <https://www.youtube.com/watch?v=i8ZArSsmbOs>.

²⁷ David Dickinson, "NASA Looks at 3-D Food Printer for Star Trek-like Replicator," *Universe Today* (blog), May 22, 2013,

United States have also been working on a type of replicator technology that can print organic material such as replacement parts for people. The idea is to be able to replicate a vital organ from the cells of an individual that can replace a defective organ without the possibility of rejection, as rejection can happen with donated organs. Justin Minck, a biology graduate from California State University, San Bernardino, developed his own version of a biological 3D printer and was able to successfully print an ear-like structure with his device.²⁸ Automatic doors were first seen in *the Original Series* and have become commonplace in public buildings.²⁹ Transporter technology, while a long way from *Star Trek*'s level of capability, has also been in development for some time and scientists have been able to transport a single molecule with some success.³⁰ Other developed semi-functional counterparts derived from *Star Trek* are universal translators, subspace communications, and VR technology, similar to the holodecks which were recreational facilities in which users could immerse themselves in holographic environments and stories seen in *Star Trek: The Next Generation*.³¹ While it may be hard to believe that one science fiction television series launched in the 1960s could have such a profound impact on technological development, *Star*

<https://www.universetoday.com/102328/nasa-looks-at-3-d-food-printer-for-star-trek-like-replicator/>.

²⁸ Justin Stewart Minck, "Developing A Low Cost Biological Additive Manufacturing System for Fabricating Gel Embedded Cellular Constructs," accessed May 4, 2023,

<https://scholarworks.lib.csusb.edu/cgi/viewcontent.cgi?article=1922&context=etd>.

²⁹ *5 Product Innovations That Were Inspired by STAR TREK - Part 1 | Some Serious Engineering - Ep9*.

³⁰ Mete Atatüre and John J. L. Morton, "A Gem of a Quantum Teleporter: Diamond-Based Quantum Teleportation Works Every Time," *Science* 345, no. 6196 (2014): 510–11.

³¹ David Schneider, "To Boldly Go (Again)," *American Scientist* 93, no. 4 (August 7, 2005): 312–13; *5 Product Innovations That Were Inspired by STAR TREK - Part 1 | Some Serious Engineering - Ep9*; *5 Product Innovations That Were Inspired by STAR TREK - Part 2 | Some Serious Engineering - Ep10*.

Trek's impact has been one of the most inspirational and widespread in history.

The final aspect of *Star Trek*'s impact on society is through its use of social commentary and depiction of a post-capitalist utopian society. *The Original Series*, as well as *The Next Generation*, *Deep Space 9*, and *Voyager*, are known for their depiction of a utopian earth born of the ashes of World War III and what the writers called the Eugenics Wars. In *Star Trek* lore, Earth scientists in the late 1990s began tampering with human genetics to build a better human race free of disease and defects. It led to the extermination of millions of people. After this, an all-out war erupted across the planet resulting in nuclear detonations that ravaged most world governments and over 60 percent of the Earth's population. After the wars, warp technology was developed and on its first test, Earth was visited by representatives from Vulcan, the home planet of Mr. Spock from *the Original Series*. Upon discovering that humanity was in fact not alone in the universe, the world population was united like never before and grew into the utopia that is shown in all the *Star Trek* shows and movies.

This vision of humanity that follows the Vulcan edict of "Infinite Diversity in Infinite Combinations" suggests that diversity should be celebrated, not shunned or merely tolerated.³² The Eugenics Wars concept comments clearly on the actions of Adolf Hitler (1889-1945) in Germany during World War II (1939-1945) with the eradication of large numbers of Jewish, disabled, and otherwise impure individuals. Gene Roddenberry was a bomber pilot during WWII and witnessed the horrors of this war firsthand.³³ The Eugenics Wars also touched on the eugenics theory of Francis Galton (1822-1911) that surmised one could artificially produce a better human race through selective

³² Robert V. Kozinets, "Utopian Enterprise: Articulating the Meanings of *Star Trek*'s Culture of Consumption," *Journal of Consumer Research*, June 1, 2001, <https://doi.org/10.1086/321948>.

³³ News from the Past, *A&E Biography*.

breeding.³⁴ Galton's theories led to the passing of laws in thirty-two states in the United States that led to the sterilization of tens of thousands of Americans until about 1963.³⁵ One of the most popular *Star Trek* villains, Khan, who originated in the episode "Space Seed," is discovered to be one of the genetically modified humans from the Eugenics Wars era who believed himself superior and thus sought to eliminate those beneath him.³⁶ The Eugenics Wars and World War III are described in minor detail in the pilot episode of the new series, *Star Trek: Strange New Worlds*, and was lightly touched upon in *Star Trek: The Next Generation*'s pilot episode, "Encounter at Farpoint."³⁷

Star Trek also comments on diversity in its choice of captains in the shows from the 1990s, casting an African American man named Avery Brooks as Captain Benjamin Sisko, who commands Deep Space 9, and its first female captain, Katherine Janeway played by Kate Mulgrew, on *Voyager*. Colonialism is a common theme in the *Deep Space 9* series, as well as themes of terrorist/freedom fighters striving to fight against oppressive colonizers. Gender and capitalist commentaries are common among all three series of the 1990s, the most striking of which is the introduction of the plight of all female Ferengi in *Deep Space 9*. Female Ferengi are forbidden from acquiring profits nor are they allowed to wear clothing. They are subservient to the males of the species who are the sole acquirers of wealth and status. In the episodes titled "Family Business" and "Profit and Lace" a prominent *Deep Space 9* character's mother, Ishka (aka Moogie),

³⁴ "Eugenics and Scientific Racism," Genome.gov, September 14, 2022, <https://www.genome.gov/about-genomics/fact-sheets/Eugenics-and-Scientific-Racism>.

³⁵ California eugenics accessed May 4, 2023, <https://www.uvm.edu/~lkaelber/eugenics/CA/CA.html>.

³⁶ *Star Trek: The Original Series (Remastered)* season 1, episode 22: "Space Seed" directed by Marc Daniels, written by Carey Wilber. Aired February 16, 1967. <https://www.paramountplus.com/shows/video/1179117705/>.

³⁷ *Star Trek: The Next Generation* season 1, episodes 1 and 2: "Encounter At Farpoint" directed by Corey Allen, written by D.C. Fontana and Gene Roddenberry. Aired September 28, 1987.

proves herself to be more capable of the acquisition of wealth than even the ruler of their planet, Ferenginar.³⁸ She is a depiction of the ultimate feminist and eventually proves that a female Ferengi's worth and abilities are equal, or even superior, to that of their male counterparts. Moogie is a symbol of radical feminism at its finest. She has become a feminist symbol in the *Star Trek* fan community and, as such, has been turned into an icon resembling Rosie the Riveter by artist Will Burrows. This image of Moogie has since been used as inspiration for tattoos, stickers, enamel pins, and countless memes.³⁹



Figure 2: Moogie enamel pin by Will Burrows Art 2023

³⁸ *Star Trek: Deep Space Nine*, season 3, episode 23, “Family Business” directed by Rene Auberjonois, written by Ira Behr and Robert Wolfe, Aired May 15, 1995,

https://www.paramountplus.com/shows/video/eG0YrhGAkckHXDO_ekNcGrLSivSi62pf/; *Star Trek: Deep Space Nine*, season 6, episode 23, “Profit And Lace” directed by Alexander Siddig, written by Ira Steven Behr and Hans Beimler, Aired May 11 1998,

<https://www.paramountplus.com/shows/video/aMfIMHioMKIBfsezKm9MRoWWCxnOR1mk/>.

³⁹ “Ishka ‘The Future Is Female’ Vinyl Sticker,” Will Burrows Art, May 3, 2023, <https://willburrowsart.com/product/future-is-female-sticker/>.

Star Trek had a unique opportunity to relate contemporary problems to the struggles faced by the characters in the shows. Always ending with what is likely to be the best possible outcome, usually by overcoming the hurdle and finding acceptance where there previously was none. These shows have given audiences the ability to find perspective and meaning in their daily struggles that were not grasped before. Many fans will agree that not only is it entertaining but being able to survive the struggle with their favorite characters every week has helped them survive their own daily struggles in life. While the franchise cannot capture the minds of everyone, it certainly does well for those who have found a home in it.

The newer *Star Trek* shows, of which there are five currently airing new episodes, do not have the same format as the older series. As such, they have become more prone to arcing storylines that no longer have the episodic commentary of old, but they have attempted to keep some of the radical perspectives and commentaries relevant to today's audiences. The newest and most like the older model of shows, entitled *Strange New Worlds*, has gone back to the episodic format of old, so there is hope that today's viewers will gain similar inspiration from the new shows as fans from past series have.⁴⁰

What was originally believed to be a failed science fiction show in the 1960s has become a franchise with more than a half-century of inspiring and influential storytelling. While it remains to be seen what the current shows can do for today's audiences, it is clear that in these unsettled times, we need the guiding light that once was *Star Trek*. Hope for a better future full of peace and prosperity and journeys to the stars would do everyone a bit of good. Perhaps the reformatting of the newer shows can draw in more viewers and can inspire unity to create a better future for the human race.

⁴⁰ *Star Trek: Strange New Worlds (Official Site) Watch on Paramount+*, 2022, <https://www.paramountplus.com/shows/star-trek-strange-new-worlds/>.

Bibliography

- “5 Product Innovations That Were Inspired by Star Trek - Part 1 | Some Serious Engineering - EP9.” YouTube. YouTube, February 11, 2021. <https://www.youtube.com/watch?v=i8ZArSsmbOs>.
- “5 Product Innovations That Were Inspired by Star Trek - Part 2 | Some Serious Engineering - EP10.” YouTube. YouTube, February 24, 2021. https://www.youtube.com/watch?v=4_3YW0iDa14.
- “A&E Biography: Gene Roddenberry” (1994) YouTube. YouTube, July 13, 2021. <https://www.youtube.com/watch?v=9gqdqtv14mE>.
- Academic Dictionaries and Encyclopedias. “James Doohan.” Accessed May 6, 2022. <https://en-academic.com/dic.nsf/enwiki/47590>.
- Atatüre, Mete, and John J. L. Morton. “A Gem of a Quantum Teleporter: Diamond-Based Quantum Teleportation Works Every Time.” *Science* 345, no. 6196 (2014): 510–11.
- Atomic Network. “Great Tech Innovators Influenced by Star Trek.” YouTube, August 15, 2018. <https://www.youtube.com/watch?v=m2jnenfB21o>.
- Bulsuk, Karn. “iPad and Star Trek’s Padd Compared: The Technical Showdown.” K Bulsuk: Full Speed Ahead, May 22, 2012. <https://www.bulsuk.com/2012/05/ipad-and-star-treks-padd-compared.html>.
- California Eugenics. Accessed May 4, 2023. <https://www.uvm.edu/~lkaelber/eugenics/CA/CA.html>.
- Dickinson, David. “NASA Looks at 3-D Food Printer for Star Trek-like Replicator.” Universe Today (blog), May 22, 2013. <https://www.universetoday.com/102328/nasa-looks-at-3-d-food-printer-for-star-trek-like-replicator/>.
- Faber, Liz. “What the Journey from Star Trek to Siri Says About Our Culture.” *Psyche*, September 20, 2022,

- <https://psyche.co/ideas/what-the-journey-from-star-trek-to-siri-says-about-our-culture>.
- Hasan, Zaki. "Interview: Steve Wozniak on Sci-Fi, Comic Books, and How *Star Trek* Shaped the Future." HuffPost. HuffPost, April 19, 2017.
https://www.huffpost.com/entry/interview-steve-wozniak-on-sci-fi-comic-books-and_b_58f7e86de4b081380af51897.
- Jones, Julian, dir. *How William Shatner Changed the World*. Woodland Hills, CA: Discovery Channel Canada, 2005. DVD.
- "James Doohan on Engineering Students." YouTube, September 9, 2006.
<https://www.youtube.com/watch?v=rqedcvB8MKw>.
- Kozinets, Robert V. "Utopian Enterprise: Articulating the Meanings of Star Trek's Culture of Consumption." *Journal of Consumer Research*, June 1, 2001.
<https://doi.org/10.1086/321948>.
- Lange, Larry. "Long Run for an Enterprising Engineer." *Electronic Engineering Times* no. 919, September 16, 1996.
- Minck, Justin Stewart. "Developing a Low-Cost Biological Additive Manufacturing System for ..." Accessed May 4, 2023.
<https://scholarworks.lib.csusb.edu/cgi/viewcontent.cgi?article=1922&context=etd>.
- Rhodes II, Mark Alan. "Alternative Pasts, Presents, and Futures in Star Trek: Historical Engagement and Representation through Popular Culture." *Geographical Bulletin* 58, no. 1 (May 2017): 29–39.
- Schneider, David. "To Boldly Go (Again)." *American Scientist*, August 5, 2022.
<https://www.americanscientist.org/article/to-boldly-go-again>.
- Straus, Mike. "What Geordi La Forge Can Teach STEM About Accessibility." StarTrek. CBS Studios, Inc., November 8,

2021. <https://www.startrek.com/news/what-geordi-la-forge-can-teach-stem-about-accessibility>.
- Star Trek: Strange New Worlds (Official Site) Watch on Paramount+*, 2022.
<https://www.paramountplus.com/shows/star-trek-strange-new-worlds/>.
- “Trekkies: 25th Anniversary Edition. YouTube, August 23, 2022.
<https://www.youtube.com/watch?v=tsILzNjvYn0>.
- “Watch Shatner in Space | Prime Video - Amazon.com.” Accessed May 4, 2023. <https://www.amazon.com/Shatner-in-Space/dp/B09NCH5D56>.
- Star Trek: Deep Space Nine*, season 3, episode 23, “Family Business” directed by Rene Auberjonois, written by Ira Behr and Robert Wolfe. Aired May 15, 1995,
https://www.paramountplus.com/shows/video/eG0YrhGAKckHXDO_ekNcGrISivSi62pf/.
- Star Trek: Deep Space Nine*, season 6, episode 23, “Profit And Lace” directed by Alexander Siddig, written by Ira Steven Behr and Hans Beimler. Aired May 11 1998,
<https://www.paramountplus.com/shows/video/aMfIMHioMKIBfsezKm9MRoWWCxnOR1mk/>.
- Star Trek: Strange New Worlds*, season 1, episode 1, “Strange New Worlds” directed and written by Akiva Goldsman. Aired May 5, 2022,
https://www.paramountplus.com/shows/video/vD_dS02AvEtutf2mdwdiOU0WZlphkMPA/.
- Star Trek: The Animated Series*, season 1 episode 7, “The Infinite Vulcan” directed by Hal Sutherland, written by Walter Koenig. Aired October 20, 1973.
<https://www.paramountplus.com/shows/video/1792775590/>
- Star Trek: The Next Generation* season 1, episodes 1 and 2: “Encounter At Farpoint” directed by Corey Allen, written by D.C. Fontana and Gene Roddenberry. Aired September 28, 1987.
https://www.paramountplus.com/shows/video/U3K8gtRktnFknQKIoz_M7z5_zV93Wb7w/.

- Star Trek: The Original Series (Remastered)* season 1, episode 22: “Space Seed” directed by Marc Daniels, written by Carey Wilber. Aired February 16, 1967. <https://www.paramountplus.com/shows/video/1179117705/>
- Wiseman, Orly and Nicole Silver, producers. *Reading Rainbow*, “The Tin Forest.” PBS, 2023. <https://www.pbs.org/video/the-tin-forest-xew5hj/>.
- Yates, Shanique. “Nichelle Nichols Honored with Prestigious NASA Award for Her Contributions to Stem.” AfroTech, December 8, 2021. <https://afrotech.com/nichelle-nichols-receives-prestigious-nasa-award>.

Author Bio

Kendra Vaughan is currently finishing her Bachelor of Arts in anthropology at California State University, San Bernardino after taking a years-long break. She intended to study Forensic Anthropology and Criminology after being forced to change majors from performing arts to anthropology, but her interest in film could not be forgotten. Her focus on pop culture stems from her passion for the arts and their ability to influence the masses. She currently works as an independent artist doing graphic design, photography, painting, and music and is the co-owner and creative manager of an indie record label operating out of San Bernardino County. She hopes to continue working in creative positions that allow her the freedom to enjoy her family while making meaningful contributions to other's lives through art. She would like to thank Professor Lauren Adams for her feedback and suggestion to submit her paper for publication. She would also like to thank Christina Monson and the other editors of *History in the Making* for their wonderful help and acceptance during this process. Live long and prosper friends.

