Board 74: Are All Engineers Brilliant White Men? What Television Tells Us About Engineers

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Abstract
From MacGyver to Howard Wolowitz to Tony Stark, depictions of engineers cultivated in popular media inform our cultural understanding of engineering. These depictions can have a profound impact on public perceptions of engineering as well as on who chooses to enter the engineering profession. While the underrepresentation of non-white and non-male individuals remains a persistent and critical problem at all levels of engineering, engineering educators must take a critical look at how the profession is being depicted in popular media and the influence of these narratives on broadening participation efforts in engineering. Drawing on feminist narrative theory and themes from feminist media studies, in this paper I explore several key depictions of engineers on modern television. By analyzing the character and casting, genre, plot, and narrative worlds of three television series featuring an engineer as a main character (MacGyver, The 100, and The Expanse), I reveal how they all, in different ways, perpetuate problematic ideologies (e.g., meritocracy) within engineering even when providing much-needed representation of engineers as women of color. As we strive to make engineering more inclusive, educators must grasp the cultural meanings associated with the profession. Understanding these cultural nuances is key to understanding who enters the field and the perceptions of students as they enter our classrooms.

Introduction

When you think of an engineer, what is the first image that comes to mind? Is it a man in a hard hat standing over a set of engineering drawings, a computer programmer, or a solitary person working on math problems? Whatever the image may be, it has likely been shaped by the portrayals of engineers within popular media. From Dilbert to Howard Wolowitz to Tony Stark, depictions of engineers cultivated in popular media reinforce cultural narratives about what engineers do and who engineers are. These narratives impact not only public perceptions of engineering but also who chooses to enter the engineering profession (Ellestad, 2013; National Academy of Engineering, 2008; Sochacka et al., 2014; Tang, 2013). While the underrepresentation of non-white and non-male individuals remains a persistent and critical problem at all levels of engineering (Lichtenstein et al., 2014), engineering educators must take a critical look at how the profession is being depicted in popular media and the influence of these narratives on broadening participation efforts in engineering.

Drawing on theory from feminist media studies and feminist narrative theory (Herman et al., 2012), in this paper I explore three depictions of engineers on modern television. Specifically, I aim to explore the following research questions; *what narratives are being told about engineers through popular television shows and how do they contribute to exclusionary stereotypes about engineering*? To do this, I analyze the character and casting, genre, plot, and narrative worlds of three television series featuring an engineer as a main character. First, I examine "MacGyver" (originally 1985–1992, rebooted in 2016-2021) and will reveal how it reinforces stereotypes by portraying an engineer as a white cisgender man who effortlessly and individually solves

complex problems. Additionally, I analyze two other series, "The 100" (2014–2020) and "The Expanse" (2015–2022), which present empowering depictions of engineers as complex women of color. While these portrayals offer crucial representation, they still, in different ways, perpetuate the problematic ideologies within engineering. As we strive to make engineering more inclusive, educators must grasp the cultural narratives associated with the profession. Understanding these cultural nuances is an important yet under-researched way of understanding who enters the field and the perceptions of students as they enter our classrooms.

Background

Changing the Conversation About Engineering

In 2008, the National Academy of Engineering issued a report titled, *Changing the Conversation*, which focused on the need for revising public messaging regarding the engineering profession (National Academy of Engineering, 2008). The report found that most public perceptions about engineering emphasize the role of math and science in engineering work, which has resulted in poor public understanding of what engineers actually do and a strong sense that engineering is "not for everyone". The report further argues that in order to attract more students (and particularly a more diverse group of students) to the engineering profession, current messaging about engineering needs to change to instead focus on the role of creativity in engineering problem-solving, teamwork, and a greater concern for public welfare.

Given the emphasis on the role of public messaging and the need to "change the conversation" about engineering, researchers within engineering education have begun exploring how media informs public understanding of engineering. For example, Sochacka et al. (2014) conducted a study to explore the dominant stories being told about engineering in news publications. The study found five dominant stories within engineering news publications which mainly centered on the need for more engineers (at times using inappropriately alarmist language) to maintain economic superiority and (again) the importance of math and science skills in engineering. The authors conclude that these narratives and the underlying assumptions behind these narratives, such as the importance of math and science skills and the expressions of superiority are indeed failing to change the conversation about engineering and thus failing to make engineering more inclusive. In another example, Ellestad (2013) interviewed graduate students to explore how three depictions of engineers in pop culture (Dilbert, MythBusters, and The Big Bang Theory) aligned with the students' perceptions of engineering. Ellestad (2013) found that these media depictions aligned with the common perception of engineers as nerdy, white, and male, despite the students expressing that the depictions do not match the real engineers they know. In a final example, Tang (2013) found key contrasts between actual practices of engineers and media representations of engineering resulting in students entering the classroom with an unrealistic understanding of being an engineer.

STEM Television Depictions Matter

Television portrayals can have an impact on who chooses to enter into a profession, and it can be particularly salient for minoritized groups entering fields that are traditionally associated with dominant social groups, like many STEM fields (Matabane & Merritt, 2014; Mendel, 2023). For example, the character of Dana Scully, a medical doctor and FBI agent, from the X-Files television series was one of the first television depictions of a multidimensional, valued female

character trained and skilled in a STEM field. In 2018, a study was conducted in partnership with 20th Century Fox, The Gena Davis Institute on Gender and Media, and J Walter Thompson Intelligence aimed at understanding the actual impact of the "Scully Effect" (Gena Davis Institute on Gender in Media, 2018). The study surveyed women working in the STEM fields who were familiar with the X-Files and found that two-thirds of the women stated that Dana Scully increased their belief in the importance of STEM, that the character was a role model for them, and that the character increased their confidence to pursue a STEM career. The study revealed that the "Scully Effect" did indeed have a very real impact on women's participation in the STEM fields.

The power and importance of STEM media representations were even taken up by the Office of Science and Technology Policy from the Obama Administration White House (The Office of Science and Technology, 2016). The 2016 report titled, STEM Depiction Opportunities, had the overarching goal "to support the inclusion of diverse and compelling STEM images, stories, and positive messages in mainstream entertainment media to help promote greater diversity in the STEM workforce." The report highlighted the need for a larger STEM workforce, the power of storytelling, and the current lack of representation of women and underrepresented minorities in media STEM depictions. The report ended by providing three goals for entertainment media; include diverse STEM role models, highlight the breadth of STEM careers and societal impacts, and debunk STEM stigmas and misconceptions.

Despite the persistent and critical issue of the underrepresentation of non-male and non-white individuals in engineering, the need to "change the conversation" of public messaging about the engineering profession, and the impact of media representations on those who choose to enter STEM fields, there is little engineering education research dedicated to understanding the narratives conveyed in popular media about who can be an engineer and what engineers do.

Methods

Feminist Media Studies and Narrative theory

To explore the narratives about engineers being reinforced on television, I drew on feminist narrative theory and themes from feminist media studies. According to feminist narrative theorist Robyn Warhol, *"what began as a "feminist narratology" that focused on the impact of culturally constructed gender upon the form and reception of narrative texts has broadened to feminist narratologies that include race, sexuality, nationality, class, and ethnicity as well as gender in their analysis of text"* (Herman et al., 2012, p. 9). Additionally, according to Herman et al. (2012), feminist narrative theory:

- frames its analysis within the socio-historic context of the author and reader,
- considers affective and emotional impacts of the narrative.
- deconstructs gender, sexuality and class within the dominant culture,
- looks for positions the text takes on class, race, and the history of colonialism.

Attending to culturally constructed gender, race, sexuality, nationality, class, and ethnicity within narrative theory provides a novel approach to understanding the narratives being told about engineers on television shows as well as how do they contribute to exclusionary stereotypes about engineering.

As this paper is centered on television depictions and not text, I also drew on themes from feminist media studies to translate the elements of textual narrative analysis to television. Therefore, in addition to considerations of genre, plots, and narrative worlds (Herman et al., 2012), I also attend to considerations of characterization and casting. When unpacking cultural narratives through television, casting is a key consideration because casting is indeed a cultural production (Warner, 2015). As Warner describes, "*assumptions…revolving around the best portrayal of identities are tied up in cultural understandings of what the identities look like, and more important, how the identities can best be represented*" (Warner, 2015, p. 32). Thus, by analyzing casting decisions, we can further our understanding of cultural narratives and assumptions about engineering.

Selected Television Depictions of Engineers

I selected to perform the feminist narrative analysis on three television depictions of engineers. First, I chose MacGyver given the cultural significance of the character. MacGyver is perhaps the most well-known fictional engineer. He entered American homes and popular culture in the mid-1980s airing on ABC. The significance of MacGyver within popular culture can most prominently be seen in the way the name alone has become synonymous with resourcefulness and ingenuity. Colloquially, "MacGyvering" is often used as a verb to describe fixing something or improvising a repair (e.g., "I just MacGyvered this broken door handle"). In 2016, CBS rebooted MacGyver following a younger, 20-something, version of the character. For this paper, I chose to focus on the MacGyver reboot since it is a more recent depiction of an engineer.

I then selected two additional depictions to analyze, both of whom challenge stereotypical notions of engineers on television. While there certainly have been more women in STEM on TV in recent years, few are officially given the title of engineer and even fewer are women of color. I chose Raven Reyes from *The 100* (2014-2020, airing on the CW) and Naomi Nagata from *The Expanse* (2015-2022, airing on Syfy and Amazon Prime) for analysis because they are two of the only depictions of engineers as women of color I could find when I did my initial search in 2021. Both women are strong, intelligent, and known for their technical and problem-solving abilities.

Feminist Narrative Analysis and Interpretation

The analysis and interpretation consisted of viewing episodes from the first season of each of the three series selected. I then selected key episodes within the first season to explore in-depth, specifically, those that more heavily featured the depiction of each character of interest. Since MacGyver is the main character of the series and is prominently featured in each episode, I focused my analysis on the pilot episode and the final episode of the first season. In *The100*, Raven Reyes is not introduced until the second episode of the series, so I focused my analysis on the second episode of the first season as well as episode 4, episode 10, and episode 13, each of which features her engineering skills. In *The Expanse*, Naomi Nagata is in every episode of the first season, but I focused my analysis on the pilot as well as episode 2, episode 7, and episode 10 because they more heavily showcase Naomi's problem-solving and engineering skills.

While viewing the selected episodes, I crafted detailed analytic memos (Miles et al., 2018) reflecting on questions related to the depictions of each engineer as well as how they interact with the elements of plot, genre, and narrative worlds around them. I drew heavily on the

elements of feminist narrative theory according to Herman et al. (2012) to inform my reflection questions. Reflection questions included, for example:

- What are the key aspects of genre, plot and narrative world?
- How does this narrative reflect the socio-historic context of the time?
- How does this narrative deconstruct gender, sexuality and class within the dominant culture?
- What position does the narrative take on class, race, and the history of colonialism?

Additionally, I attended to considerations of characterization and casting to further understand the cultural production of engineers through casting (Warner, 2015) by reflecting on the following questions:

- How are the engineers portrayed as characters? What are key elements of their characterization?
- How did casting choice impact the characterization of each engineer?
- What is the affective and emotional impacts of the characterization of each engineer?

Once the detailed analytic memos were complete, I iteratively condensed them through further analysis to determine the main ideas for each category of analysis as presented in the following sections. I also compared the memos for each series and each depiction of an engineer to identify any common themes or counternarratives presented.

Researcher Positionality

Researcher positionality impacts all research projects and is a fundamental aspect of the research topic, epistemology, ontology, methodology and communication (Secules et al., 2021). As such, I want to make clear my positionality and reflect upon how my positionality motivates this project and how I situate myself within the project (Jones et al., 2013). I identify as a white cisgender woman who is a researcher, an educator, and an engineer. My motivation to study media depictions of engineers comes from my own love of television and my frustration with the lack of meaningful and comprehensive depictions of engineers in popular media. Additionally, I felt as though I had an incomplete and false sense of engineering based on the depictions of engineers that I was exposed to at a young age. During my Ph.D. experience, I took several courses through my university's Women's, Gender, and Sexuality Studies Department, including a course on feminist media studies. Through that experience, I was challenged to think more deeply about the power of representations in media as well as provided with tools to analyze media from a feminist perspective. This work has challenged me to consider how my positionality as a white cisgender woman influences the way I consume and interpret media and has pushed me to consider the ideologies that are being reproduced in media.

Presentation of Narrative Analysis

MacGyver: Genre, plots, and narrative world

In MacGyver, the plot centers around the adventures of the titular character as an agent for a fictional government agency. The series can best be described as a procedural action series. A procedural in television refers to a specific formulaic structure in which the plot of the episode consists of the introduction of a problem, an investigation, and a solution all within the span of a

single episode. This structure works well for MacGyver's characterization because each week we get to see him solve a problem and save the day. As an action series, there are usually high stakes plot lines involving bioweapons, secret agents, high speed chases, etc. which provide plenty of narrative space for MacGyver to show off his technical and problem-solving skills. Additionally, MacGyver narrates portions of the episodes so that the audience can understand what he is doing when he is jerry-rigging some seemingly impossible fix. This is a useful way to provide information to the audience and to show the audience that MacGyver is smarter than everyone else.

Although the narrative centers around a fictional government agency, the world of MacGyver is very much rooted in our current reality, meaning it is centered within the dominant US culture. Although, race, gender, and class are not key themes explored in the series. the show lives within the current socially constructed realities of our world with the main character, the hero, as a heterosexual cisgender white Man.

MacGyver: Character and casting
MacGyver, is known for his "genius" level intellect and ability to simply solve complex problems using household items, such as paper clips, duct tape, or a Swiss army knife. MacGyver, above all else, is known for his ability to solve complex problems quickly and with simplicity. In the pilot episode alone, MacGyver stops a bioweapon from exploding using only a paper clip, creates a parachute out of truck top canopy, creates an electromagnet, and learns to speak Italian. It is made very clear to the audience that this is a man who can get out of any situation because of his seemingly innate problem-solving ability and his brilliance. MacGyver is constantly using his abilities to "save the day" and is depicted as the hero of the show. It is even stated by another character near the end of the pilot episode, "you were always the hero, Mac." There is a cast of characters who help MacGyver on his missions, but MacGyver is always the one who saves the day with his innate brilliance.

MacGyver is cast as a conventionally handsome, white, cisgender man played by Lucas Till. Challenging some of the stereotypical notions of engineers as being socially awkward or nerdy (e.g., Howard Walowitz in The Big Bang Theory), MacGyver's charisma and heterosexuality is made very clear. In the pilot episode, we learn of MacGyver's heterosexuality with a bit of intrigue as the villain of the pilot turns out to be a former lover who was presumed dead. Lucas Till's conventional good looks (e.g., blond hair, blue eyes, fit, strong jawline) and charisma paint MacGyver as a strong heterosexual white man.

The 100: Genre, plots, and narrative *world:*
The 100 is a science fiction television show set 97 years after a nuclear war destroyed most life on Earth and what is believed to be the rest of the human race is surviving on a space station orbiting Earth. As the space station begins to deteriorate beyond repair, the plot centers around a group of teenagers (i.e., The 100) sent to Earth to determine if the Earth is now viable for human life again. As the teenagers arrive on Earth, they learn that they are not alone and that there are others (i.e., The Grounders) who survived the nuclear war. The series then follows the survival of the 100 and their conflicts with The Grounders.

Notably, the sci-fi elements of the show and the futuristic setting provide space for the writers to create a social reality different than our own. For example, racism and sexism no longer appear to be social problems in this futuristic setting. The leader of the survivors living on the space station is a Black man and the main heroin of the show who becomes the leader of the 100 over the course of the first season is a white woman. In both instances, their leadership abilities are never in question because of their race or gender. In general, characters that hold minoritized identities (in our reality) do not face any additional barriers in the series because of their race and gender. Interestingly though, classism and tribalism are both social issues in the series and are central to the plot. Indeed, issues of class are very much present on the space station. Additionally, much of the plot of the first season revolves around an "us" versus "them" conflict between the 100 and the Grounders.

The 100: Character and casting

We are introduced to Raven Reyes in the second episode of the series. She is a young woman who is at first identified as a mechanic but in later episodes described as a mechanical engineer. She is first introduced while making repairs to the space station orbiting the Earth and is further tasked with repairing an out-of-commission dropship so that she herself can go to Earth to help the 100. Throughout the first season, she becomes indispensable to the 100 by creating weapons, repairing their communication system, and helping with decision-making. From the moment she is introduced to the audience, it is made very clear that she is brave and extremely resourceful. Similar to MacGyver, Reyes is known for her ability to solve complex technical problems quickly and is depicted as being exceptionally and seemingly innately brilliant. In contrast to MacGyver, she is not the main character of the series and instead is embedded within a larger ensemble cast. Reyes is heavily relied upon by the other characters to solve whatever problem they are facing, which of course, she always does. Additionally, at the end of the first season, Reyes is wounded and spends the remainder of the series needing a leg brace to walk making her not only an engineer of color but one with a disability.

Cast as Mexican-American Actress, Lindsey Morgan, Raven Reyes is conventionally beautiful (e.g., slender, fit, pronounced cheekbones, dark eyes). Although her romantic life is never the sole focus of her character arcs, she does engage in romantic heterosexual relationships. Notably, the reason she is so motivated to go to the Earth when her character is introduced is because her boyfriend is among the 100. Her abilities as an engineer are rarely questioned, and her gender and race do not seem to impact how the other characters view her engineering abilities. Although race and gender do not seem to matter for Reyes in terms of her characterization as an engineer, her class background is certainly explored. Reyes is from an economically disadvantaged background. Her mother was an alcoholic and from the "worker" group of people on the space station where she grew up. This is important to note because Reyes is depicted as being able to rise above her station because of her innate intelligence, hard work, and engineering skills.

The Expanse: Genre, plots, and narrative *world:*

The Expanse is another futuristic science fiction television show. The show is set hundreds of years in the future when humans have colonized the solar system. The main plot of the first season centers on rising tensions between those living on Earth, Mars, and regions of the resource-rich asteroid belt. Throughout the season, the show explores the political tensions

between Earth and Mars, as well as the struggles of the Belters, who live and work in the harsh conditions of the asteroid belt. The plot centers on the larger conflict between the different groups of people as well as a mystery that unfolds over the course of the season.

Similar to The 100, the sci-fi elements of the show and futuristic setting provide narrative space for the writers to depict a narrative world in which racism and sexism are seemingly less significant social problems than they are in our own reality. For example, the character that arguably garners the most respect and holds the most power throughout the entire series is played by Iranian-American actress, Shohreh Ashdashloo, who portrays a leader within the United Nations of Earth. Although themes of racism and gender are not explored throughout the narrative, themes of colonialism and class conflict are central to the plot. Throughout the series, much of the plot revolves around an uprising in the asteroid belt as the Belters attempt to gain their independence from the oppressive and colonizing elites who live on Earth.

The Expanse: Character and casting

The Expanse features a large cast of characters, including, Naomi Nagata, a nuclear engineer with a mysterious past. When we meet Nagata, she is the chief engineer on a large ice-hauling spaceship and holds a position of authority within the ship's crew. Throughout the pilot episode, Nagata demonstrates her technical expertise and resourcefulness as she works to maintain the spaceship. She also is a key decision-maker in exploring a distress signal that ultimately sets up the plot of the first season. Throughout the season, her technical skills are on display as she continually saves the members of her crew using her technical and problem-solving abilities. Significantly, the other characters on the show never question or doubt her technical abilities. Nagata is often involved with major decision-making and is portrayed as a moral compass for other characters.

Cast as Black-British actress, Dominique Tipper, Naomi Nagata is conventionally beautiful. Although her sexuality is not immediately defined, the potential of a heterosexual relationship with the male lead of the series is developed throughout the first season. Additionally, she is often dressed in a very tight and form-fitting jumpsuit whereas the same jumpsuit hangs loose on the male characters, which seems to highlight her femininity and sexuality. Most central to her story is her experience and background as someone from the Belt (i.e., someone from an oppressed, lower-class group of people). Nagata's mysterious past and her ties to a radical faction group from the Belt are explored throughout the first season. Although other characters are cautious about her background, Nagata gains the trust of others through her intelligence and technical skills.

Discussion and Interpretation

MacGyver: The problems with the lone, innately brilliant problem solver narrative

MacGyver has undoubtedly made an impact on pop culture and our cultural understanding of what an engineer is or should be. In my own experiences, I have had students refer to themselves as having MacGyver-like skills and have proudly shared stories about how they have been able to MacGyver things around their house. These students identify with MacGyver, which is important. However, the depiction of an engineer as a straight, white, heterosexual man with innate intelligence is extremely limiting. To start, the intellectual traits that are valued in this

depiction (e.g., analytical ability, objectivity. rationalism) have a colonial legacy rooted in White, Eurocentric values and thus reproduce those values (Gutiérrez y Muhs et al., 2012). Additionally, this depiction of engineering ignores the equally important traits that are required by engineers such as empathy and creativity (Daly et al., 2014; Hess & Fila, 2016). Another limitation of the depiction of an engineer as an innately brilliant man is that innate brilliance is already problematically associated with whiteness and maleness. For example, fields that are believed to require innate ability have the lowest participation from non-white and non-male individuals (Leslie et al., 2015). Additionally, inaccurate stereotypes about innate brilliance that exist in US culture have been shown to result in non-white and non-male individuals being presumed to be less competent than their majority counterparts despite their achievements (Gutiérrez y Muhs et al., 2012). Ultimately, the depiction of an engineer as an innately brilliant, analytically-minded man reinforces the oppressive way that intelligence and smartness have been constructed in engineering (Carroll et al., 2019; Dringenberg et al., 2022) and implicitly reinforces false stereotypes about white male intellectual supremacy.

Additionally, MacGyver acting as the *lone* hero reinforces the "great man" narrative in Western epistemologies of science that promotes the idea of working in isolation (Kant & Kerr, 2019). This, again, furthers notions that innate brilliance is something that only "great men" possess to solve engineering problems in isolation when in reality engineering is always a collaborative endeavor. Additionally, this notion ignores (or deems less important) the many problems that engineers are not qualified to solve, such as complex social problems. Ultimately, MacGyver's depiction as a lone, innately brilliant white man only reinforces these very problematic notions that engineering is a field that requires innate analytical ability, which is oppressive for those who do not fit the stereotypes associated with it (i.e., white, male, and upper/middle class).

The 100 and The Expanse: The importance of positive representative but the perpetuation of meritocratic ideology

In the television series, The 100 and The Expense, audiences are given two complex and interesting characters – both women of color and both engineers. As made clear by reports discussed earlier in this paper (Gena Davis Institute on Gender in Media, 2018; The Office of Science and Technology, 2016), media representations of women of color in engineering roles are needed and important. Additionally, in line with the call to "change the conversation" (National Academy of Engineering, 2008) about engineering and making it more inclusive, we need to see more positive media representations of exceptional women of color with unquestioned engineering skills. Thus, Reyes and Nagata provide much-needed positive representation and can act as role models for young women of color who are interested in engineering.

However, The 100 and The Expanse still perpetuate problematic meritocratic ideologies about engineering. Meritocracy, or the system where advancement is based solely on individual merit and ability, often fails to acknowledge inherent biases, privilege, and unequal starting points, perpetuating systemic inequalities and hindering social mobility (Vallier, 2021). Notably, both characters (Reyes and Nagata) come from economically disadvantaged backgrounds but are able to pull themselves out of their oppressed conditions and achieve various levels of success (and influence) through what is depicted as their natural abilities and intelligence. Thus, these

narratives reproduce meritocratic ideology that is already pervasive in engineering culture (Cech, 2013; Stevens et al., 2007). In other words, it reinforces the belief that success can be achieved solely through individual talent, ability, and hard work. Therefore, the inequality that exists for other folks from their background is the individual's failings. This narrative is often alluded to in engineering education with faculty (and students) claiming or positioning certain students (often those from underrepresented groups) as not cut out for engineering or not a right fit for engineering (e.g., Rohde et al., 2020; Secules et al., 2018). This narrative distracts from the very real structural inequities that have and continue to cause non-white and non-male individuals to remain underrepresented in engineering and from social justice and social welfare concerns in engineering (Cech, 2013; Riley, 2007). Unfortunately, these depictions may implicitly reinforce the belief that if women or people of color had the natural talent and intelligence for engineering (like Reyes and Nagata), they too could be successful in engineering rather than acknowledging the systemic barriers in engineering for women of color.

Concluding Remarks and Future Work

In order to continue to change the conversation about engineering, we must first explicitly explore the cultural narratives surrounding *who* and *what* an engineer can be as told by popular media. Using methods from feminist narratology and feminist media studies, I explored how several depictions of engineers from popular television series contribute to a problematic understanding of engineering. Through an analysis of the series MacGyver, I argue that the narrative of an engineer as a lone, innately brilliant white man perpetuates the oppressive way that intelligence and smartness have been constructed in engineering. Through an analysis of characters in the series The 100 and The Expanse, I argue that both these series provide much-needed representation and role models through the characterization of an engineer as a complex and exceptional woman of color. Yet, both these series still perpetuate problematic meritocratic ideology that is pervasive in engineering. Television depictions of engineers matter and awareness of the cultural narratives of engineering enable engineering educators to better understand the perceptions of students as they enter our classrooms.

In future research, it will be imperative to dive deeper into the interplay between network platforms and viewership demographics. For instance, investigating shows like The 100, which aired on the CW and primarily targets a young adult audience, could provide insights into its potential influence on individuals considering careers in engineering (e.g., high school students). Additionally, expanding the scope of analysis to encompass a broader range of depictions and incorporating diverse perspectives from multiple authors could provide further insight into understanding media portrayals of engineering. Furthermore, conducting interviews with both students and faculty members to explore their interpretations of these depictions and their observations regarding the perpetuation of such representations in engineering classrooms and workplaces could provide valuable qualitative data for future studies.

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