STEM IN US POPULAR CULTURE: ASSESSING GENDER DISCOURSE, STEREOTYPES AND MAINSTREAMING

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Gender representation in popular culture has been widely studied and discussed during the past decades. While women and girls have come to occupy a more varied set of roles and many contemporary popular texts are far from the traditional "male gaze" (Mulvey), quite a high percentage of the damaging stereotypes that have built many media tropes are far from behind us. Popular culture products have explored and shown alternative models to hegemonic ones. Sarah Connor, Ellen Ripley, or Leia Organa revealed distinct attitudes that seemed to defy the patriarchal order. Beyond these visible attitudes such as strength, determination or leadership, her figure also questioned her femininity through her physique (Ripley, Connor), or perpetuated traditional one through mothering reasons (Connor, Leia) (Tasker).

Current female character building poses its own particular challenges, as 21st-century heroines need to hold up to a set of standards that are not always complementary (Bernárdez Rodal). Over the last two decades, the presence of female protagonists in popular culture has been evident. In fact, the irruption of the fourth feminist wave during the 2010s and its denunciation of violence against women in all spheres of life (sexual, digital, labor) has been fundamental in the creation of female characters. Still, as Silvestre Cabrera, López Belloso, and Royo Prieto (2021) explore, this great advance in feminist issues also requires an analysis of what the advances and characteristics of the characters of our century really are.

The objective of this dossier is to offer an overview of different contemporary approaches in US popular culture to the inclusion of gender and sexual diversity in STEM-related narratives. The title of the dossier "STEM in US Popular Culture: Assessing Gender Discourse, Stereotypes and Mainstreaming" tries to open up the discussion to both positive and negative takes on contemporary narratives that feature female characters on STEM-related environments, such as students, workers, or even fans of genres that had traditionally been erroneously associated with male audiences (i.e., Science Fiction and superhero comic books). With all of this in mind, this number includes articles dealing with TV shows, literature, comics, and movies, speaking to the many mediums that conform popular culture in order to

illustrate all the areas in which women and young girls can potentially have an important role as STEM experts.

In "Good Morning, Winner: Subverting Girl Nerd Stereotypes in *Booksmart* (2019)," Andrea Sofía Regueira Martín (Universidad de Zaragoza) explores the history of the representation of nerd teenagers in 20th-century cinema, noting a clear absence of nerd girls and evidencing a gender gap and a clear gap in the pool of role models for spectators. Regueira Martín looks at how *Booksmart* (Olivia Wilde, 2019) subverts the stereotype of the nerd focusing on two female protagonists, sorority, and internal change.

In "With Great Power Comes Gender Diversity: Superpowers and STEM Stereotypes in Marvel Comics," Igor Juricevic (Indiana University South Bend) analyzes gender representation by looking at the portrayal of STEM-related skills in Marvel comics. The author shows how there is a clear gender bias for Marvel characters up to the 1990s, how it has changed after 2000, and explores possible future advances in education based on those changes in popular culture.

"Of Monsters and Women: Two Female Characters and Trans/Posthumanism in HBO's Lovecraft Country" by Alejandro Batista Tejada (Universidad de Sevilla) explores how the gender-swapping of two originally male characters evokes a new posthuman state in the 2020 screen adaptation of Lovecraft Country. The analysis centers on how their processes of "transhumanization" represent different trends as seen through the lenses of posthumanist theory.

Finally, in "Redefining Humanity: Posthumanism in the American Science Fiction Narratives of Octavia Butler's *Dawn* and Ann Leckie's *Ancillary Justice*," Tana-Julie Drewitz (University of Duisburg-Essen) examines how the protagonists of the two aforementioned novels approach power struggles in a way that is not found in traditionally white, capitalist, and patriarchal narratives. Drewitz shows how these characters' female identity and posthuman condition are key in how the novels move away from such conventions.

Ultimately, what these four studies bring to the fore is not only the current state of gender diversity and different kinds of representation of women in STEM-related narratives—the nerdgirl, the superheroine, and the cyborg—but also they speak to us about the possibility of better and varied forms of inclusion.

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