

The background of the top half of the page features a stylized American flag. The stars are white and arranged in a curved pattern, while the stripes are red and white, also curving across the page.

GOOD MORNING, WINNER: SUBVERTING GIRL NERD STEREOTYPES IN *BOOKSMART* (2019)

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ABSTRACT

Nerds have been a staple of teenage films for decades. Although these characters possess great intellectual abilities, their lack of social skills, sense of style, and romantic and sexual experience places them at the bottom of the high school's social scale. Despite the prevalence of this character type, girl nerds are scarce. Even though this lack of girl nerds can be attributed to the pressure for women—both real and fictional—to conform to beauty standards, it also reflects stereotypes regarding women's scientific and technical inclinations. Considering the fact that nerds are almost always interested in computers, the lack of girl nerds mirrors the STEM gender gap while contributing to its perpetuation by failing to provide role models for spectators. This article analyses how *Booksmart* (Olivia Wilde, 2019), a recent teen film in which the protagonists are two nerd girls, subverts nerd stereotypes by eschewing the makeover trope and placing an emphasis on internal transformation, sorority, and a rejection of stereotypes.

Keywords: teen film, film genre, nerds, coming of age.

Teen films have long been populated by stock characters who are defined in terms of their position within the high school hierarchy. While most of these categories are not gendered—and those that are usually have a counterpart, like jocks and cheerleaders—gender is not distributed equally between them. In the case of nerds, the socially awkward but intellectually brilliant kids that occupy the bottom of the hierarchy, there is a strong gender disparity that can be said to reflect society's longstanding prejudice regarding women's intellectual abilities and, more specifically, their technical and scientific skills. If we consider that nerds are usually interested in computers and technology, the lack of nerd girls in the teen film genre mirrors—and shapes—the STEM gender gap. Olivia Wilde's *Booksmart* (2019) provides a rare example of a teen film with nerd girls as protagonists. This article traces the history of the figure of the

nerd and the representation of nerd girls in teenage films in order to explore to which extent *Booksmart* subverts the stereotypes that have accompanied onscreen depictions of nerd girls through the decades.

I. FROM ZERO TO HERO: TRACING THE RISE OF THE NERD

The figure of the nerd has been ubiquitous in US popular culture for decades, predating the rise of the term itself. Benjamin Nugent dates it back to *Scribbly*, a comic strip created by Sheldon Mayer in 1936 (56). The Oxford English Dictionary shows that the press began to report the emergence of the term “nerd” in the 1950s, when it replaced “square” as an epithet ascribed to those who were considered unhip. By the mid-1970s, comedy writers had realised the comedic potential of these underdogs. In 1975, *National Lampoon* magazine published a poster that defined nerds as “an adolescent male possessing ... socially objectionable characteristics” like poor fashion sense, lack of athleticism and sexual inexperience (Arky and Barrett). As Jessica M. Stanley explains, this definition of nerds not only codes them as male, but also as the antithesis of traditional masculinity, which is characterised by “activity, extroversion, sexual prowess and interest in athletics” (3–4).

Despite this association of nerds with subaltern forms of masculinity, the figure of the female nerd is part of the *Saturday Night Live* sketch series that contributed to the mainstreaming of the word nerd as well as to the crystallisation of the nerd stereotype (Lane 8). The sketch series “The Nerds,” which ran from 1978 to 1980, introduced the figure of the female nerd in the character of Lisa “Four Eyes” Loopner (Gilda Radner), who carried the same narrative weight as her friend Todd “Pizza Face” DeLaMuca (Bill Murray). As Lane argues, the relevance of Lisa lies not merely in her existence, but also in the fact that she is given a voice from her very first onscreen appearance, when she states “we’re an idea whose time has come. We’re young. We’re brilliant. We’re nerds. It’s our turn to be popular” (5–8). Anne Beatts, one of the writers behind “The Nerds,” went on to create *Square Pegs* (1982–1983), a television comedy series about two teenage nerd girls and their struggles to fit in. The series predates both John Hughes’s humanised depictions of nerds in films like *The Breakfast Club* (1985) and *Weird Science* (1985) and the *Revenge of the Nerds* film franchise (1984–1994), which brought nerds to the forefront and initiated a triumphant narrative from which female nerds, like the characters created by Beatts, have been markedly absent despite Four Eyes Lisa’s claim that her time had come.

The rise of narratives about (male) nerds as triumphant underdogs who challenge and subvert the social status quo of high school and university campuses coincides with the emergence and spread of the personal computer, which initiated what David Brooks calls “the great empowerment phase” of nerds, a period of rapid growth in the computing industry during which those who worked in it accumulated wealth and social prestige. The

simultaneous rise of the tech billionaire¹ and of the revenge of the nerds narrative showed teenage nerds that their current social ostracism need not last forever and that they hold the capacity to subvert the social order and find the sort of success that popularity and good looks cannot buy. In film and television, like in real life, nerd girls were relegated to the background. Nerd masculinities, on the other hand, became more visible than ever, a trend which continued growing into the twenty-first century and reached its peak with the success of *The Big Bang Theory*² (2007–2019) (Banet-Weiser 153).

The erasure of the girl nerd in popular culture echoes that of the women coders and programmers who populated the tech industry for decades before the boom of the personal computer (Thompson). The year Thompson identifies as the moment in which men took over programming is also the year that saw the birth of the Macintosh computer, whose famous advertisement aired during that year's Super Bowl and was directed by Ridley Scott. Seven months later, the first *Revenge of the Nerds* (1984) film premiered. Although differing in tone and intention, both the film and the ad share several elements that mark a shift in cultural representations of nerds and their power. Apple's 1984 ad shows an Orwellian dystopia in which masses of workers march in unison into an auditorium where a large screen projects an image of a Big Brother figure. The monochrome images of the workers are crosscut with the luminous figure of a blonde woman running towards the screen bearing a sledgehammer while chased by the riot police. In contrast with the workers' uniforms and the police officers' riot gear, which cover their entire body, the athlete is clad in a white tank top and red running shorts that leave most of her body uncovered, displaying her athletic physique and tanned skin. With a sledgehammer hit, the athlete liberates the workers from the shackles of Big Brother as they stare aghast.

The workers in Apple's ad are coded as male and shown as obedient rule-followers. Their clothes are oversized and unstylish, just like those of nerds, and they are set in opposition with athleticism, which is represented both by the riot police – agents of the status quo – and the woman, whose slim and athletic body and blonde hair align her with hegemonic beauty ideals. The riot police, who monitor and punish the workers' and the woman's behaviour, find their equivalent in high school and college jocks, whose athletic abilities place them above nerds in the social hierarchy and who often exhibit cruel behaviour towards nerds. The advertisement, like *Revenge of the Nerds*, can be read as a story about a group of nerds breaking free from social conventions, which in both texts are dictated by those who are stronger than them. In both cases, women's bodies are used as a tool through which the male subjects

¹ Bill Gates became the youngest self-made billionaire in 1987, when he was only 31 years old (Thibault).

² Although *The Big Bang Theory* features two female nerds, these characters, who were not introduced until the third season, play a secondary role. Additionally, as Willey and Subramaniam argue, their gendered representation, along with their association with areas of science considered more feminine and their lack of involvement in the nerdy pursuits enjoyed by the male characters can be argued to contribute to "the erasure of female nerds" (21).

achieve freedom. In the ad, they are liberated from their drone-like existence thanks to the physical prowess of the runner, whereas in the film their final victory comes partly from Lewis's (Robert Carradine) seduction of Betty (Julia Montgomery). Like the ad's runner, Betty embodies the feminine beauty ideal: she is slim, pretty and blonde. Through a cruel deceit, the film denies Betty sexual agency and presents her body as an object to be possessed. Lewis is, by definition, a rapist, and his rape is not only excused but also portrayed as an avenue to love, showing a complete disregard for women's bodies and agency that, as Kendall argues, aligns nerds with hegemonic masculinity (261–69). The woman in Apple's ad is also objectified. Even though the workers do not even glance at the athlete, her body is presented as a spectacle for the spectator to enjoy. The runner's breasts bounce with every step as she runs towards the camera, apparently not wearing a bra, and the spectator's gaze is fixed on her curves as she gyrates in slow motion. The message in both texts seems to be the same: set yourselves free from convention and you can have this too.

Saturday Night Live's Four Eyes was right about something: the time had indeed come for nerds and geeks to rise through the ranks. Where she was wrong, though, was in believing that this power shift would include her. We now live in a tech-dominated world, where 7 out of the 10 richest people in the world made their fortune out of nerdy pursuits and none of them are women. Going down the Forbes list, one must scroll past the first 200 richest men in tech to find women like Wang Laichun and Judy Faulkner, who started their own tech companies and rose to success in a field dominated by men ("World's Billionaires List"). The perception of tech and, by extension, nerd identities as almost exclusively male that took hold in the 1980s has prevailed ever since, giving rise to the damaging myth of the stereotypical programmer as an antisocial male loner who prefers machines to social interaction, a stereotype that perpetuates the technological divide across genders and, by extension, women's access to one of the most lucrative industries (Miller). This association of tech and men is illustrated by *Triumph of the Nerds*, a 1996 documentary series that was a staple in high school classrooms at the time in which the narrator states "it is no coincidence that the only woman in the vicinity looks bored, because this is a boy thing." This apparently harmless statement effectively depicts tech as a boy's club where women are not welcome, which may affect young women's decision to pursue a career in tech. As we will see in the following section, a teenage girl with an interest in STEM will also struggle to find points of identification in teenage films, which reflects the gender gap in science and technology while reinforcing the stereotypes that are partly to blame for it.

II. UGLY DUCKLINGS AND WEIRDOS: LOOKING FOR THE TEENAGE NERD GIRL

Considering that popular culture mirrors the society that creates it, the fact that the lack of women in science and technology is reflected in films and television comes as no surprise. When it comes to teenage films, even though the nerd stereotype is a staple of the genre, nerd girls are largely absent from it and—when they appear—they are often relegated to the

background, ostracised or forced to give up their intellect and/or change their appearance in order to succeed (Shary, “The Nerdy Girl” 236; *Generation Multiplex*, 46). A considerable number of films, like Cameron Crowe’s *Say Anything* (1989) or Alexander Payne’s *Election* (1999) feature what Shary refers to as “smart girls” (“The Nerdy Girl” 236): academically successful female characters who are not coded as nerds. In other films, such as Gil Junger’s *10 Things I Hate About You* (1999), girls are depicted as intelligent and independent characters who inhabit the fringes of the high school hierarchy but whose academic performance is not alluded to. While it is true that teenage films—especially those about middle-class, suburban teenagers—tend to ignore academic pursuits to focus on popularity or on teenage romance and sexual initiations (Bulma 86; Wood 312), the genre’s reluctance to portray teenage girls as academically inclined is worthy of attention, as it replicates outmoded but unyielding stereotypes regarding women’s interest in intellectual pursuits.

When thinking about women’s education, it is important to remember that, until fairly recently, girls did not have equal access to it. By the mid-1930s, the majority of American teenagers were high school students, and institutions were mostly coeducational. However, for the most part the fates of teenage girls were sealed: they were to become wives and mothers. Those who did not, had very limited professional choices, mostly in caretaking roles such as teaching and nursing (Hine 215; Madigan 11–12; Palladino 15). The tide turned in 1972, when Title IX of the Education Amendments banned sex-based discrimination in education across federally-funded education programmes. Until then, most higher education institutions limited the maximum number of female students, which made the admission process considerably more competitive for women than for men (Rose 157-158). As it turns out, women were eager to learn. Less than a decade later, the percentage of women completing an undergraduate degree was equal to that of men, and women have graduated from college in larger numbers than men ever since (Bryant). Considering this, the lack of representation of academically ambitious girls in teen films not only fails to portray the reality of adolescent girls but, as Shary argues, it also underplays the role of their intellect and underscores the importance of beauty and popularity, promoting “appearance over intelligence” (*Generation Multiplex* 46).

The issue of popularity is one of the teen film’s greatest concerns. The genre is inhabited by character types who are defined by the place they occupy within the high school hierarchy, with popular students and jocks at the top and nerds and other misfits at the bottom. These types are easily recognisable through their behaviour, their hobbies, their clothes, and the spaces they occupy. As we saw in the previous section, nerds are not only characterised by their intellect and their interest in technology, but also by a lack of athleticism, inadequate social skills and unfashionable clothes. The stereotypical nerd is scrawny, has bad skin, wears braces and looks like he is dressed in hand-me-downs. When girls are nerdy, they are often portrayed as more attractive and less nerdy than their male counterparts. Harry Winer’s *Space-camp* (1986) provides a good example of a smart girl and a nerdy girl whose nerdishness is

attenuated. The film takes place during a NASA summer camp where five teenagers and a female astronaut are accidentally launched into space and must find their way back to earth. While other 1980s films that include nerdy girls relegate them to the background, *Spacecamp* features three top-billed female actors playing scientifically-inclined female characters. Tish (Kelly Preston), a fashionable girl who wants to be an interstellar disc jockey, contrasts with space-obsessed Kathryn (Lea Thompson), who aspires to become a shuttle commander. Although Kathryn is conventionally attractive, she is coded as a nerd through her unfashionable clothing, lack of make-up and limited social skills. Her clothes are mostly plain and utilitarian: she arrives at camp wearing a space-themed T-shirt and sleeps wearing an oversized top. In contrast, Tish has her hair permed, her make-up is bright and glittery and she wears fashionable clothes and quirky accessories that convey her playfulness and individuality. Although Tish is not coded as a nerd, she has photographic memory, and it is her knowledge of Morse code that allows the lost kids to contact NASA to plan their return to earth. In contrast, Kathryn, who is drowning under the weight of her own high expectations, panics under pressure. As a consequence, part of her journey consists in toning down her ambition and learning how to cede control to others and become a team player. While *Spacecamp* is one of the rare films that shows girls with a passion for science, it does so while privileging an agreeable and cheerful type of femininity over a more aggressively ambitious one.

Another aspect in which *Spacecamp* differs from other representations of nerd girls is in the film's refusal to give Kathryn the Cinderella treatment, eschewing superficial change and focusing on psychological change instead. Transformation tales in which a nerd girl goes from ugly duckling to swan are common in the genre. Where most nerd boys do not have to undergo a physical transformation in order to achieve social recognition, which is achieved through romantic conquest or through their computing skills, in the case of nerd girls their positive qualities are not enough, which suggests that girls may be intelligent or quirky, but only as long as they are pretty. That is the case in films like Robert Iscove's *She's All That* (1999) and Raja Gosnell's *Never Been Kissed* (1999). In both films, the protagonists are despised by their peers because of their status as outsiders: in the former, Laney (Rachael Leigh Cook) is the subject of a cruel bet to turn an unlikely candidate into prom queen, while in the latter, Josie (Drew Barrymore) is ostracised and mocked to such an extent that she carries the psychological consequences into adulthood. In both cases, a tale of transformation aligns the protagonists with an acceptable form of femininity that makes them liked by those who previously treated them with contempt. As Shary explains, *She's All That's* Laney wins acceptance not due to her artistic inclinations or her social conscience, but thanks to a makeover that consists in little more than her removing her glasses, suggesting that women's positive qualities are irrelevant unless they are accompanied by masculine validation (*Generation Multiplex* 47).

Never Been Kissed offers a different take on nerdy girls. To begin with, flashbacks into the protagonist's adolescence depict a much more stereotypical portrayal of a girl nerd, which is emphasised by garish 1980s fashions that add comedic effect. Now in her twenties, Josie is

a successful journalist no longer nicknamed “Josie Grossie” who has to pose as a high school student for a story, which forces her to revisit the traumatising events of her own adolescence. In order to come out triumphant—both professionally and personally—Josie needs to embrace her true self and be completely honest. Instead of writing a piece about the shocking behaviour of today’s teens, Josie writes about her story, confessing her romantic inexperience to the world and asking Sam (Michael Vartan), an English teacher with whom she had developed a close bond, to forgive her and to grant her her first ever kiss. *Never Been Kissed*, then, is a tale of transformation in which the protagonist’s positive qualities are not completely left aside. The process by which Josie leaves her teenage nerd self behind does not take place during a makeover montage that magically makes her desirable to the eyes of others, but through a long period of time during which the nerdy, insecure teenager grows into a woman, the culmination of which is shown in the film. Although Josie’s appearance has changed since she was a teenager, her romantic success does not stem from this physical change but, rather, from an appreciation of her honesty, warmth, and intelligence.

Both of the examples discussed above share another element: the absence of a STEM-related interest. Both girls’ passions lie in the arts, which is not uncommon in the depiction of academically-inclined girls. While boy nerds are usually associated with computers, girl nerds and clever girls rarely show interest in scientific subjects. Additionally, when they are interested in science, their passion gets in the way of their social success. Sometimes they may be encouraged to tone down their ambition like in *Spacecamp*. In other films, like *Real Genius* (1985), their behaviour comes across as odd and almost pathological, even more so than that of nerd boys. Technologically-inclined girls also face gender discrimination. Angelina Jolie’s character in *Hackers* (1995) is not coded as a nerd, but as an overly sexualised cyberpunk rebel. As the only female hacker in the group, she sees her abilities questioned by a newcomer because of her gender, and she is made to wear more feminine clothing after losing a bet. As was explained before, in their reluctance to give a voice to academically ambitious girls, teenage films perpetuate damaging notions regarding women’s role in society. Additionally, the lack of teenage girls with an interest in scientific subjects mirrors the gender gap in STEM fields while contributing to the lack of role models for scientifically-oriented girls, who will struggle to find an onscreen teen girl with interests similar to their own.

III. TOWARDS A NEW CONCEPTION OF NERD GIRLS: THE CASE OF *BOOKSMART*

In line with feminism’s “new luminosity in popular culture” (Gill 6), the past few years have witnessed a renewed interest in female coming-age-stories across film and television, among which we can find a sizeable number of films that, like Greta Gerwig’s *Lady Bird* (2017), “promote self-determination in matters of gender and sexuality that provide exceptions to heteronormativity and rigid gender roles” (Stone 91). Some recent teenage films and television series feature protagonists who show a nascent feminist consciousness despite their youth (*easy A* [2010], *Lady Bird*, *Moxie* [2021]), defy normative beauty standards (*Dumplin’* [2018], *Sierra*

Burgess is a Loser [2018]) and challenge heteronormativity (*The Miseducation of Cameron Post* [2018], *Blockers* [2018], *Euphoria* [2019–ongoing], *Yellowjackets* [2021–ongoing]). Some of them, like *Booksmart*, do all three. Although they are far from perfect, these girls are often strong, smart, and determined. However, as Bernárdez Rodal argues, the rise of new models of female heroines in popular culture does not necessarily mean that conventional depictions of gender have been erased (17). This can be seen in the fact that the twenty-first century has not been much kinder to nerdy girls. They have mostly appeared in secondary roles as the protagonist’s best friend (*Jennifer’s Body* [2009]) or as the nerd protagonist’s love interest (*Napoleon Dynamite* [2005]). Teen films continue to show a reluctance to code smart girl characters as nerds, positioning them as outcasts who either fulfil normative ideals of beauty (*High School Musical* [2006]) or rebellious types who refuse to conform to gendered ideals of appearance and conduct (*Juno* [2007]) (Clarke 261). With this in mind, the release of *Booksmart*, a film that places two nerdy girls at the centre of its narrative, marks a shift in the onscreen representation of academically-oriented girls, which is taken one step further by a plot that does not require them to change their appearance in order to succeed and does not base their worth on their ability to attract members of the opposite sex. Instead, the focus is placed on sorority, self-determination and the dismantling of stereotypes.

3.1 A DIFFERENT KIND OF (FEMINIST) NERDY GIRL

Booksmart offers an attenuated version of high school stereotypes: there are no athletes wearing varsity jackets, no cheerleaders in barely-there skirts and most of the students seem to share a casual look that would have placed them within the rebellious misfit group in 1980s teen films. Yet the social hierarchy that classifies students according to their popularity remains, and the two protagonists are coded as nerds, and thus positioned at the bottom of the pyramid, from the very beginning of the film. The film’s opening scene shows Molly (Beanie Feldstein) sitting on her bedroom floor while listening to a motivational audio before getting ready for her last ever day of high school. The voice-over narration begins playing over the opening credits, greeting Molly with “good morning, winner” and telling her that she is “ready to dominate” the day, that she has “worked harder than anyone” and that she is “a champion.” All of this is said before the film’s first shot, firmly establishing the protagonist as an overachiever who believes herself to be superior to the rest. Even though the audio is narrated by somebody else (Maya Rudolph), it sounds like the protagonist’s internal monologue and it introduces the spectator to Molly’s core beliefs both about herself and about those around her. Her intellectual excellence is confirmed by the first shots, which show us Molly’s room before we even get to see what she looks like. Molly is sitting on the floor with her back to the camera, facing a tidy desk that looks like it has been used regularly. On the wall, a Yale pennant provides clues regarding her academic ambitions, while the medals and diplomas that crowd her shelves confirm her as a first-class student. The detail shots that follow as the audio continues playing provide insight into the nature of her academic inclinations: the

camera moves through her shelves revealing academic excellence awards, feminist paraphernalia that includes photos of successful women like Michelle Obama and Gloria Steinem and, finally, a detail shot of her graduation gown with “valedictorian” embroidered on it, hung together with an outfit that looks ready to be worn. As the spectator sees this, the audio encourages Molly to look down on those who have doubted her. Then, the scene cuts to the protagonist’s face, whose eyes remain closed as the audio says “fuck those losers. Fuck them in their stupid fucking faces” before she opens her eyes and takes off her retainer while staring at the camera. The emphasis placed on the orthodontic retainer reminds us that Molly once wore braces, a staple of onscreen nerds. At the same time, the motivational audio’s unrealistic ending firmly positions it as an extension of Molly’s thoughts, while her aggression towards her classmates suggests resentment and hostility towards her peers—which nerds often feel as a consequence of the mismatch between their intellectual superiority and their lowly social status. Molly’s self-confidence is then built up only to be dismantled immediately afterwards, with her anger giving way to a vulnerability that anticipates one of the themes that run through the film: the deceitful nature of appearances.

The following scene introduces the film’s co-protagonist and Molly’s best friend Amy (Kaitlyn Dever). Eclecticism and social consciousness are to Amy what hard work and determination to succeed are to Molly. Amy’s clothes are a mishmash of styles, which is emphasised by the oddly placed patches on her denim jacket and the bumper stickers on her car. Both the bumper stickers and the patches represent aspects of her identity as well as her eagerness to define herself as an individual. They reveal that, like Molly, Amy is also a feminist. However, while Molly’s brand of feminism is characterised by a focus on individual success, Amy’s favours environmental and social issues: she is also a vegan, and cares about the rights of those living in less privileged regions of the world. Her informal and utilitarian style reflects her activist aspirations: she wears clothes that allow freedom of movement, which will be necessary when she travels to Botswana on a volunteering trip. Additionally, her adventurous spirit is highlighted by her eclectic taste and her bolo tie, an accessory associated with the Wild West that marks her as a pioneer who is willing to go beyond convention. The two protagonists possess a feminist consciousness that reflects the fact that they came of age during the fourth wave of feminism, a time when, as Rosalind Gill explains, feminism lost its stigma and became a “desirable, stylish and decidedly fashionable” identity (2). As many have argued, this resurgence of feminism is not without its problems, and the two protagonists embody the contradictions that underlie fourth wave feminism. Molly’s shrine to successful women, along with her inspirational tape, reveals her as a personification of a brand of feminism that focuses “on the individual empowered woman” (Banet-Weiser 17), emphasises “the neoliberal principles of agency, choice, and empowerment” (Rivers 57) and promotes the idea that one’s failures are due to a lack of self-confidence rather than a result of a patriarchal system that prevents and undermines women’s achievements (Banet-Weiser 96, Gill 8, Rivers 63). The arguments that Rob Stone makes in his analysis of *Lady Bird* resonate here (90). Molly’s

feminist consciousness, like *Lady Bird*'s, shows potential but, at the same time, she is self-centred and blissfully ignorant of other women's struggles. Much to Amy's dismay, Molly partakes in the double standards that discriminate against sexually active women. In her individualism, Molly struggles to find room to consider other women's desires—including Amy's—as valid. In contrast, Amy's desire to volunteer in Botswana making tampons suggests a deeper awareness of global systemic inequalities, as well as of her own privilege. However, she struggles to make herself heard despite the yearning to speak up that her patches and bumper stickers convey. The film emphasises the importance of sorority by making the two protagonists have to learn from one another in order to tone down the inconsistencies of their respective positions: Amy will never be a successful activist unless she makes her voice heard and her intentions clear like Molly does, while Molly needs to learn from Amy's selfless empathy towards other women.

3.2 DISMANTLING THE HIGH SCHOOL HIERARCHY

Costume not only sets the protagonists apart from each other, but also from their peers. Unlike in stereotypical depictions of nerds, it does so without making the protagonists look ridiculous or laughable. Molly's formal style reflects her professional ambitions. Even though she is still in high school her outfit—a blazer, a turtleneck, opaque tights, and dress shoes—marks her as ready for the workplace. In comparison with her classmates, Molly is overdressed. The film is set in Los Angeles at the end of the school year, when the temperatures are warm, but Molly's clothes are more suitable for a colder climate. This is underscored when she is framed in between her (more popular) classmates, who are dressed in what looks like beachwear. Costume, then, makes it obvious that Molly does not fit in with the popular crowd and, at the same time, the fact that the others are dressed so casually marks their disregard towards appropriateness in an academic setting. The contrast between the two protagonists and their peers becomes evident as soon as they drive into the high school grounds. In the school parking lot, a shot shows more modern cars parked in the foreground, while Amy's old Volvo is shown driving in the background. The position of the cars replicates the hierarchical structure of the high school and serves as a reminder that the protagonists are far from the top. At the same time, the difference between Amy's car and the others marks the protagonists as outliers. Their lowly position, along with other students' disregard for authority, is confirmed when they park the car. The sign that says the spot is reserved for the "class president" has been vandalised so that it reads "ass president." Their inability to fit in continues as they approach the high school building and a skateboarder's presence scares them. Once in the corridors, they are the only ones not partaking in the celebrations. In fact, Amy and Molly seem annoyed that the rest of the students are celebrating, with Molly joking that they should have shown that much energy at her inauguration assembly.

Costume, props and framing accentuate the protagonists' status as nerds. However, theirs is a subdued version of the stereotypical nerd: they are made fun of but not cruelly so

and, while they look different from their peers, their appearance is not meant to be a source of comedy. This is not the only way in which *Booksmart* challenges stereotypes. The entire film, like other teen films before, is keen on reminding us that one cannot judge people by their appearance alone. Molly, who finds comfort in the fact that she is the most academically successful out of her peers, is in for a rude awakening when she finds out that those she deems inferior to herself—and who *look* like they do not care about intellectual matters—are also going to Ivy League universities. This happens after she overhears her classmates criticising her personality and claps back at them, telling them that she does not regret her choices because she is going to Yale. During her comeback, she is framed in a close-up, which emphasises her emotion and promotes identification. Once she realises the others also have bright futures, she is framed from a longer distance, with her image reflected on the bathroom mirrors highlighting the moment in which she is made aware that things are not always that they seem and that one cannot judge others based on appearances alone. The mirror shot marks a moment of identity crisis. Up until this point, Molly had based her self-worth on her intelligence, but finding out that others can perform as well as she does while making time to devote to other hobbies forces her to question whether she is really who she thought she was. As the others leave the bathroom, we can hear a distorted version of the motivational speech from the opening scene, which reflects her crumbling worldview and self-esteem. As the sound gets louder, her distress is accentuated by the use of a dolly zoom. When she leaves the toilet, handheld camera movements follow her as she frantically asks her classmates where they are going to college, breaking a high school rule that bans them from revealing their destination. The instability of the camera movements combined with the distorted effect of a wide-angle lens and the use of rack focus make the scene feel like part of a horror film, which reflects Molly's growing anxiety. The use of sound further underscores the protagonist's distress. Molly's breathing gets louder and more laboured as a droning sound effect mirrors her agitation. When the bell rings, an upbeat song that includes a beat that sounds almost like a siren plays as the students celebrate the end of their high school years, with Molly and Amy being the only ones who are not having fun. The song's contrasting sounds mirror the situation: while everybody is joyful, Molly's despair and anger are evident, and the siren-like sounds emphasise the fact that she is going through a crisis. Her humiliation reaches its peak when a classmate throws a condom filled with water at her face. The fact that the student who does it belongs to the drama crowd, who are also set in contrast with the popular crowd, further positions her as an outsider.

It is this event that pushes Molly to make a change. Framed against an overcast sky while wearing a grey hoodie, which once again mirrors her current state of mind, Molly declares: "I am going to experience a seminal, fun anecdote and we are gonna change our stories forever." With this in mind, the two girls start a quest to find a party in which they can show that they are more than brains. Molly's choice of words suggests that, for her, a fun high school experience is another project in which to excel, her last assignment before graduation. The

utilitarian nature of the protagonists' quest is highlighted by their choice of outfit: matching navy boiler suits and oversized down coats. As we saw in the previous section, nerd girls often have to undergo a makeover and conform to the rules of hegemonic femininity in order to succeed, their layers of clothing peeled away to reveal a hidden beauty that finally makes them attractive to the eyes of others. *Booksmart* subverts this stereotype by doing the exact opposite: covering up the protagonists in more layers that deliberately hide their bodies. Both Molly and Amy hope to make romantic advances on someone at the party, but instead of marking themselves as sexually available, they do the opposite. Their reticence to enter the social landscape of the high school party is further emphasised by their watching self-defence videos and the use of hand sanitiser before going out. While most teenagers see a house party as a site of pleasure, Molly and Amy see it as a site full of potential danger. Even though there is a change of outfit before they reach their final destination, the two girls look like a glammed up version of themselves, rather than like a completely different person, as it is usually the case in makeovers. The other teenagers do not even notice anything different about Amy and Molly other than the fact that they are at the sort of event that they usually avoid. By disregarding the makeover trope that so often erases all traces of personality from onscreen misfit and nerd girls, *Booksmart* pushes against heteronormative beauty standards and places girls' worth on their internal qualities rather than on their beauty.

Several other stereotypes come undone at the party, highlighting the contrast between appearances and reality. Both Molly and Amy misread other people's behaviour, thinking that they are flirting when they are simply being friendly, which emphasises their lack of social skills and romantic experience. Amy is dismayed to find out that the fact that Ryan (Victoria Ruesga) is into skateboarding and dresses in a pretty masculine way does not necessarily mean that she is a lesbian, which reveals that, despite her feminist consciousness, Amy is not immune to gender stereotypes regarding the relationship between women's self-presentation and behaviour and their sexual orientation. The misalignment of appearances and reality is also emphasised by the fact that Miss Fine (Jessica Williams), their English teacher, is not the paragon of virtue that they believed her to be, while Jared is a virgin who loves musicals despite the rumours about his sexual experience and wannabe tough guy appearance. Last but not least, Molly finds out that she does not know every single thing about her best friend. Amy does not actually want to follow Molly's carefully crafted plan for their future. Instead, she wants to delay going to college and spend a gap year in Botswana making tampons. This change positions her humanitarian interests above her academic ones, separating her both from her nerdiness and from her best friend and marking independence and separation—both from one's peers and from stereotypes—as a stepping stone into maturity.

Finally, while in most teenage films nerds and other outcasts achieve success through dating somebody who is higher up the social scale than themselves, *Booksmart* rejects this display of upwards mobility. Instead, Molly kisses Jared, who is even more of an outcast than herself, but the most meaningful relationship in the film is the protagonists' friendship.

Booksmart falls within what Alison Winch calls a “womance,” its focus is placed on the bond between the two friends—which is depicted through the conventions of romantic comedy—rather than on their romantic achievement, and their eventual success as individuals lies in their “ability to shine for and with their girlfriends” (93). Eventually, the two girls manage to reach acceptance by accepting difference, both between themselves and between appearances and reality. The film allows them to keep hold of their identity, but it also forces them to change: Amy has learnt to assert her desires and to contradict Molly, while Molly has learnt to adopt a less judgemental outlook and see beyond the surface.

IV. CONCLUSION: WHAT ABOUT SCIENCE?

Booksmart signals a wind of change as far as onscreen representations of nerd girls are concerned, but there is a glaring absence: an interest in STEM. The fact that Molly and Amy are not interested in science and technology aligns them with previous representations of female nerds and smart girls and reflects the gender gap that exists in STEM fields worldwide. Although, as we have seen, the rate of women graduating from college in the United States is larger than that of men, they remain a minority in some STEM fields, particularly in computer science and engineering. This underrepresentation translates into the workplace, where women account for only 15% of engineers and architects. Although the rates vary in different fields, this gender gap remains a concerning issue (Fry et al.). The lack of women is more pronounced in those fields that pay better and offer better opportunities. The culprit behind this absence is not a lack of skills, but gender discrimination in the workplace and the perpetuation of gender stereotypes related to girls’ abilities and skills in educational and domestic settings (“Towards an Equal Future” 13–16).

The lack of role models is also considered instrumental in the perpetuation of the gender gap in STEM (“Towards an Equal Future” 17). Popular culture holds up a mirror to the culture that creates it, but it also shapes it. As Bernárdez Rodal argues, popular culture functions as a “sentimental and emotional guide” (17), and its power to shape the way we see the world is ever-increasing. Role models are not only found in real life, but also in the narratives that we consume. If we keep this in mind, teen film’s dismissal of scientifically-inclined nerd girls can be said to both reflect and perpetuate the gender gap in STEM. *Booksmart* breathes new life into the nerd girl stereotype by not making them the subject of ridicule, placing an emphasis on psychological rather than physical change, refusing to let them attain popularity through romance and emphasising the importance of sorority. However, it also upholds the stereotype that girls are not interested in science. In fact, the character pursuing a career in tech is the one who fulfils the nerd stereotype the least. Theo (Eduardo Franco), a slacker type who failed the seventh grade twice, has been recruited by tech giant Google. Professional success is therefore disconnected from academic achievement, which perpetuates the image of the tech whiz as a rebellious man who is too smart for college and undermines the protagonists’ academic achievements.

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