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Heroine or Damsel in Distress: Traversing the Parallel Universes of Timeline's Kate Erickson

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Abstract: While Michael Crichton's novels have been criticized for their shallow characterizations, shifts in the depictions of female scientists made in the adaptation of his works to the big screen raise far more significant concerns. This essay focuses on one such character, Kate Erickson of *Timeline*, following her evolution from novel through intermediate screenplay to feature film. Comparisons are drawn to *Jurassic Park*'s Ellie Sattler, demonstrating a troubling trend of diminished scientific agency, decreasing confidence, and increased reliance on romantic attachment. Such a characterization plays into common negative stereotypes of female scientists in popular media, as noted by Roslynn Haynes, Eva Flicker, and Jocelyn Steinke, and can act as a contributing factor to the commercial and critical failure of the film.

Keywords: *Michael Crichton; Timeline; Kate Erickson, Jurassic Park, depictions of women in science fiction*

Timeline and the Problem of Female Characterization

On the surface, the Michael Crichton science fiction novel *Timeline* (1999) tells the story of archaeologist, Professor Edward Johnston, and his team's archaeological reconstruction of Castelgard, a French town that passed between English and French hands during the Hundred Years' War. Unbeknownst to the scientists, including language and medieval weapons expert Assistant Professor André Marek and graduate students Chris Hughes and Kate Erickson, their private financier, ITC (International Technology Corporation) has developed time travel into the past, and its president, Robert Doniger, intends to use this technology for financial gain. When the team excavates a lens from the professor's bifocals as well as a handwritten message asking for help, reliably dated to the 14th century, Doniger admits that the professor is trapped in the past. Marek, Hughes, and Erickson agree to travel back to the 14th century to rescue their mentor, and the adventure begins, but nearly turns tragic when the time machine is damaged.

The novel spent seventeen weeks in the top fifteen of the *New York Times* bestsellers list, peaking for four weeks at #4 behind three of the *Harry Potter* novels. As with Crichton's other novels, a tremendous amount of research was put into its writing, both in terms of the theoretical underpinnings of time travel and medieval history. The result, according to Linda Bingham (2006), is "a remarkably successful and thrilling page-turner." She summarizes the plot as a quest by graduate students "to rescue not a damsel in distress but rather their own beloved professor." While some critics found the science fiction aspects of the plotline flatly derivative, others, like Bingham, lauded Crichton's relative faithfulness to the appropriate medieval social conventions and traditions.

Although the novel was a commercial success, the opposite was true of its 2003 film adaptation. According to IMDB.com, which displays a dismal 5.7/10 rating for the film, while it had an estimated $80,000,000 budget, the film only grossed $19.5 million in the US between November 28th, 2003 and February 13th, 2004. *Rotten Tomatoes* gives it an 11% fresh rating. For example, Roger Ebert (2003) laments that the film "consisted of groups of characters I didn't care about, running down passageways and fighting off enemies and trying to get back to the present." There are significant changes in the two main female characters in the transition from the written page to the screen, especially in terms of their romantic relationships and personal agency. In particular, the Kate Erickson of the book and film reflect two very different realities, and, as in the case of the time travelers themselves, the jump from one world to the other involves not only significant pain, but the actual disintegration and reassembly of the character from one setting to the other.

It should be noted that weak characterization was also a general problem in the novel. For example, Tom De Haven (1999) from *Entertainment Weekly* praised the novel for its "high adventure" and was willing to

overlook the fact "that none of the characters, whether hailing from the 14th or 20th century, display much personality." On the other hand, Daniel Mendelsohn of the *New York Times* generally criticized Crichton's novels as having characters that have little more than "a name, a one-line physical description and a salient trait that will come in handy after the... [bad guys] start attacking." For example in *Timeline*, "'Katherine Erickson—ash blond, blue-eyed, and darkly tanned... was an avid climber' is about as complex as a Crichton character gets—or needs to get. Can it be a coincidence that Kate... will find herself dangling from the roof of a medieval banquet hall?" (Mendelsohn, 1999). Such issues led Bob Hoover (1999) of the *Pittsburgh Post-Gazette* to refer to the novel as "Another script disguised as a novel." Andy Taylor of *Andy's Anachronisms* complains that characters in the novel "fall in and out of love with little more than a one-line sentence describing their feelings and motivation" (2005). Crichton acknowledges the plot-heavy nature of his works, explaining that "my stories are not character driven. Usually I have the story first, and make the characters follow the story I have prepared for them" (Michael Crichton: A Chat About '*Timeline*', 1999). Some of these characterization issues in the novel carry over into the film adaptation. Kevin Carr (2003) of *Fat Guys at the Movies* gives the film 0.5 out of 5 stars, adding that "As with many Michael Crichton stories, '*Timeline*' is filled with incredibly weak characters. They are constantly making bonehead decisions and doing stupid things." The two romances that develop over the course of the film, between Chris and Kate, and Marek and 14th century Lady Claire, are singled out for particular scorn by Andrea Chase (2003) of *Killer Movie Reviews*, who gives the film 1 out of 5 stars), calling the romances in the film "preposterous."

In the specific case of *Timeline*, there is the further issue of characterization and gender inequality. If the audience digs further into the film adaptation, they will discover that not only are two female characters missing entirely, but a third is switched from female to male in the translation to the big screen—ITC aide Gomez. The two remaining female characters of the film, medieval noblewoman Claire and graduate student Kate, share their names and little else with the strong, independent characters of the novel. The novel version of Claire is the consummate Trickster, fluidly manipulating both the men around her and the situation at hand as she plays to win the complex political game of her era. Claire is therefore a reasonable representation of the standard heroine of the Middle English romance; as Jane Tolmie (2006, p. 146) explains the trope, she is "forceful and decisive; they act with aplomb and shape their own lives in impressive ways." The novel's Kate is intelligent as well as athletic, loyal, independent, and infinitely resourceful. She is not only able to extricate herself from deadly situations but plays an active and pivotal role in rescuing her friends. In sharp contrast, in the film both women are fairy tale damsels in distress, with Claire relegated to the secondary role of sister of one of the noblemen and painted as merely a political pawn to be constantly threatened and rescued. As a specialist in architectural archaeology, the Kate of the novel plays a pivotal role in the team's safe passage through the 14th century version of structures that the team previously only knew as ruins. However, she is demoted in both agency and importance in the film, and the importance of her journey back in time is not in discovering her own strength but rather in relenting to the romantic advances of one of her colleagues.

While Lady Claire is clearly not a scientific character, the large-scale changes in her character in the film adaptation are indicative of shifts seen in Kate as well. In the novel, Lady Claire is a young 14th century widow seeking to inherit her late husband's estate. In public, she protests being forced to marry Sir Guy de Malegant by her guardian, the English lord Sir Oliver, while in private, she manipulates Malegant for her own purposes in an elaborate sexual chess game while simultaneously playing several other characters against Oliver. Claire is central among the "gray" characters in the novel; while her central concern is clearly only herself, and her loyalties shift as quickly as her bed partners, she is not outwardly cruel and uses her influence to save the archaeologists as often as they rescue her. In the novel, Claire, disguised as a boy, saves Chris from being found out by soldiers soon after he arrives into the past, while in the film, it is Marek who is saved,

setting up their eventual romance. Entranced by the beautiful Claire and her freely offered caresses, the novel version of Chris bumbles his way through the English court, ignorant of the customs of the day, and finds himself challenged to a joust by Malegant. Marek, the expert in chivalric customs and medieval weapons, comes to Chris's aid, and Marek finds himself on Claire's radar as someone who can potentially be manipulated by "What persuasion is in my command"—her sexuality (Crichton, 2003, p. 344). After the battle between the forces of Oliver and the French noble, Arnault, in which Claire is safely behind the French lines and does not need rescuing by anyone, Marek escorts her home to England, and they marry. His decision is motivated by a personal desire to live within the age that he had dedicated his life to understanding, not specifically because of Lady Claire.

The novel's version of Claire codes well with the heroine of the Middle English romance, as well as the medievalist tropes common in modern fantasy novels. Jane Tolmie describes the heroine of the former as having the ability to wed and/or bed the man she desires and "inherit what is rightfully theirs" while the latter is "at their best when rising above external conditions that are against them in gender-based ways. They dress up as men to escape restraints on their freedom" (2006, pp. 146-8). It should be noted that Claire's cross-dressing not only aligns with modern Medievalism, but also echoes characters in Scandinavian sagas (Tolmie 2006, p. 147).

In the film, Claire loses much of her agency as well as her moral ambivalence, becoming simply the sister of the French noble Arnault. While she still exudes bravado, she lacks the actions to back it up, as she is captured by the English and continuously rescued by Marek, who is clearly taken with the damsel in distress from the start. Claire predictably falls in love with Marek, but their relationship appears star-crossed; according to the historical record, it was her death at Oliver's hands that turned the battle of La Roque and rallied the French troops to defeat the English. Marek ultimately saves Claire when she is captured yet again by Oliver's forces and aids the French in defeating the English. He makes the decision to remain in the past specifically because of Claire, his fairy tale princess. Kevin Carr (2003) protests that Marek's and Claire's romance is "totally predictable yet poorly constructed" and "feels like it came out of a Silhouette romance novel rather that a of science fiction best seller." Josh Vasquez of *Slant Magazine* likewise criticizes Marek's relationship with Claire as "a barely sketched and dishonestly sentimental love story" (2003). All of the nuances of the Middle English romance and its modern Medievalist adaptation have been lost.

While the changes in the background and character of Claire and the gender shift in the ITC aide Gomez, as well as the omission of lawyer Diane Kramer and linguist Elsie Kastner in the film adaptation, are worthy of note, it is the depiction of the main female scientist, Kate Erickson, that will be the main focus of this analysis.

Stereotypical Depictions of Female Scientists: *Jurassic Park*'s Ellie Sattler as a Crichton Case Study

Michael Crichton has argued that

> All professions look bad in the movies. And there's a good reason for this. Movies don't portray career paths, they conscript interesting life-styles to serve a plot. So, lawyers are all unscrupulous and doctors are all uncaring. Psychiatrists are all crazy, and politicians are all corrupt. All cops are psychopaths, and all businessmen are crooks. (1999, p. 1461)

However, the scientist has arguably suffered the greatest transformation from reality to media depiction. Roslynn Haynes identifies seven common stereotypes of the scientist, many of them negative. These are the Faustian "evil alchemist," the heroic "noble scientist," the absent-minded "foolish scientist," the Frankensteinian "inhuman researcher," the Indiana Jones-like "scientist as adventurer," the "mad, bad, dangerous scientist," and the "helpless scientist" whose work cannot be controlled (2003, p. 244). Eva Flicker similarly summarizes the typical male scientist in media as emanating:

> ...an aura of absent-mindedness, extreme confusion, or even madness. He is more of an outsider in terms of social contacts. He is inattentive to the people

> around him and is uninterested in social trends and fads. He seems socially displaced. He is not a particularly attractive hero with glasses, a work apron, ruffled hair, etc. His enthusiasm for his work could almost be called an obsession. (2003, p. 309)

Interestingly, this trope seems a good fit with Dr. Johnston, especially as depicted in the film, including how his eyeglasses play a central role in the film.

Depictions of female scientists are even more fraught with difficulties. Flicker explains that in media representations, women scientists are "rare, and when they do appear, their roles differ greatly from those of their male colleagues" (2003, p. 308). She describes six stereotypes of women scientists found in feature films (Ibid, pp. 310-15): the old maid who is married to her work until she abandons her science and reclaims her femininity through her love for a man; the male woman—a middling, asexual scientist who relies on her assertiveness to survive in an all-male environment; the naïve expert—ethical, good-looking, but ineffective; the evil plotter—an attractive, self-absorbed vixen with questionable morals who wields her sexuality as a weapon; the daughter/assistant, whose character is defined only through her relationship with a male scientist; and the lonely heroine—a strong, competent, ethical scientist and who can simultaneously be feminine but who still requires a male mentor to be successful.

Given Crichton's notoriously scant characterization, one might be tempted to simply assume that his female scientists cannot be thoroughly analyzed. However, a stereotype does not require much meat on the bones in order to become apparent. Another female scientist of Crichton's is more widely known and can serve as evidence that his female scientists do, indeed, stand up to such scrutiny—*Jurassic Park*'s paleobotanist Ellie Sattler. A comparison between the two lead female scientists of these novels is also proper, for as Daniel Mendelsohn of the *New York Times* notes, "'*Timeline*' is '*Jurassic Park*,' in medieval, rather than Cretaceous, drag" (1999). At its heart, both novels are adventure stories as well as cautionary tales against the secret use of cutting-edge technology for financial gain. There are also similarities between the scientific fields of paleontology and archaeology, especially in their use of painstaking field work to reconstruct history, and Crichton's novels serve as a critique of using the shortcut of extreme technology—cloning in *Jurassic Park*, time travel in *Timeline*—to accomplish both fields. It is also instructional to see how a Crichton female scientist translates from the written page to the big screen.

Ellie Sattler is first introduced to the readers of the novel when she is gawked at by EPA official Bob Morris, much to her thesis advisor Alan Grant's amusement. She is described as "wearing cut-off jeans and a workshirt tied at her midriff. She was twenty-four and darkly tanned. Her blonde hair was pulled back" (Crichton, 2015, p. 36). While she is Grant's junior in both age and academic standing, he treats her as an equal and values her opinion. In fact, the reader is led to believe that she is indeed his peer until well into the novel, as she is erroneously referred to as Dr. Sattler by several characters. But while Grant treats her with respect, her gender becomes an issue worthy of note, in a largely negative way, as her introduction suggests above. For example, when Gennaro, the lawyer for the project, first meets Ellie, he notes with surprise "You're a woman," to which Ellie offers "These things happen" (Ibid, p. 69). Mathematician Ian Malcolm is open and unapologetic in his sexual harassment of her. For example, when they first meet, Ellie comments that Ian's black clothes appear to be a surprising choice for warm, humid weather. Ian replies with a condescending observation—"You're extremely pretty, Dr. Sattler.... I could look at your legs all day"—before lecturing on the physics of blackbody radiation (Ibid, p. 80).

As previously noted of Crichton's characters, while descriptions of Ellie and insights into her psyche are certainly perfunctory, her scientific knowledge of paleobotany plays at least a secondary role in the plot. As in the film version, she notes that ingestion of poisonous plants is behind a cyclical sickness of herbivore dinosaurs. Additionally, she is the one who deduces where the raptors may be nesting, an element left out of the film. However, as Ray Scherrer (2015) argues, the novel version of Sattler "doesn't really do all that much, spending most of the time in the main compound lis-

tening to Malcolm's philosophizing against Hammond. It's not until the raptors attack that she starts getting involved." Interestingly, this involvement centers on her being used as bait to distract the velociraptors while Alan Grant tries to restore the power. In comparison, the Ellie of the film is the one to make the perilous journey to the power shed to restart the power grid. Scherrer also points out that in the film, Ellie "is much closer to Alan Grant in age, making her more of an equal in knowledge of prehistoric life and also adding some romantic tension" (Ibid).

One of the most interesting changes in Ellie's character in the leap from the novel to the big screen is precisely her relationship with her mentor, Alan Grant. In the novel, there is no romantic tension between the two. In fact, when the child Tim asks the widower Grant if he is "with Dr. Sattler," Grant responds "No. She's my student," demonstrating a clear ethical line between the professor/student bond and a sexual relationship. Tim does not understand this and further presses if Grant plans on marrying Sattler. Grant explains, "No, she's marrying some nice doctor in Chicago sometime next year" (Crichton, 2015, p. 262). Given Crichton's famed lack of character development, it is interesting that he felt the need to include this exchange in the novel. In the 1992 screenplay rewrite by Maria Scotch Marmo, Ellie Sattler is in her late 20s, has her Ph.D., and discomforts Grant with sexual innuendo and unwanted physical contact, such as grabbing his hand when scared and sleeping with her head on his shoulder. By the end of the screenplay, he is willing to give her a needed hug, but there is no evidence that their relationship is destined to grow further. Interestingly, in the screenplay, her scientific background is also given more importance, as she independently discovers a fatal weakness in the genetically engineered dinosaurs that Hammond and his scientists are trying to hide: all of the dinosaurs die within a year or so of age, so they are fed growth hormones in order to give them the appearance of adults. However, it is Alan Grant who correctly surmises that this is caused by the contamination of mosquito DNA in the sequencing.

In the final draft, written by David Koepp (1992), a consensual romantic relationship is established between the two paleontologists from the early scenes; for example, after a discussion about children, an exasperated Ellie says, "It frustrates me so much that I love you, that I need to strangle you right now," before she playfully removes his iconic hat, and they embrace and kiss. The status of their relationship is downplayed in the film; the most unambiguous acknowledgement being an exchange in which the womanizer Malcolm asks, "Dr. Sattler, she's not like, available, is she?" to which Alan asks, "Why?" Malcolm senses Grant's defensiveness of her, and apologizes: "Yeah, I'm sorry, you two are—" to which Grant firmly offers, "Yeah." Nothing more needs to be said between the two men, and Malcolm respects Grant's verbal marking of his territory (Kennedy, Molen & Spielberg, 1993). This receding of her romantic relationship with Grant into the background paints Ellie as a scientist in her own right, albeit a far less important scientist to the plot than her male colleagues.

The novel's Ellie is perhaps best described as a combination of Flicker's naïve expert and daughter/assistant. She is clearly the junior scientist, and it is her professional relationship with Grant that gives her some authority since she lacks the credential of PhD. Although she is in a romantic relationship with Grant in the film, the fact that this relationship does not take center stage—it does not define her as a character—and that she is not only closer in age to Grant, but apparently has an academic reputation of her own as an expert in her field, elevates her to the lonely heroine trope, a stereotype that is perhaps even better personified by *Contact*'s Ellie Arroway (Flicker, 2003, p. 315). Flicker describes such a character as:

> possibly the most competent scientist in her special area. She is a modern, emancipated woman. She finds it natural to move within a male environment, and accordingly she has also appropriated some male traits. Her greatest (or only) interest is in her scientific research.... A likeable, good-looking and unrealistically young woman fits this role as well. (Ibid, p. 315)

This type of character also has a "matter of factness of her sexual experience and self-determination. Sexual

relations and scientific work are not mutually exclusive—as long as she keeps her priorities straight" (Ibid, p. 315). However, as in all female scientist tropes, the "lonely heroine is also lacking the power of the male scientist"; the audience sees this in the film version of Sattler, where she obviously takes a back seat professionally to Grant (Ibid, p. 315). It is his dig site, and he claims the responsibility of explaining their technique to visitors. Alan Grant is clearly the center of attention in the film while Ellie Sattler is relegated to the role of secondary scientist—perhaps even tertiary, if one considers Ian Malcom. In the case of *Timeline*'s Kate Erickson (Ericson in the film), the marginalization of the female scientist is even starker, as not only is she relegated to a secondary role, but her scientific knowledge and rational mindset are eventually sacrificed in the name of romance.

From Archaeologist to Damsel in Distress: The Diminution of Kate Erickson

Kevin McGeough notes that there has been a "gradual transformation of the popular cinematic conception of the archaeologist from the older, weak victim to the younger, strong heroic figure. With this transformation has come a sexualization of cinematic archaeologists," the primary example being Indiana Jones (2006, p. 180). He further argues that female archaeologists tend to be portrayed in film as either "privileged women with a love of adventure, who happen to be extraordinarily beautiful, yet are unaware of or unwilling to acknowledge the male gaze," or "junior level scholars (perhaps graduate students or librarians), who, when they take off their glasses and let down their hair, become remarkably beautiful" (Ibid, pp. 181-2). But what happens when the female archaeologist is neither myopic nor classically beautiful? Such is the case with *Timeline*'s Katherine "Kate" Erickson. In order to carefully analyze the (de)evolution of her character, it is necessary to consider three significant differences between the Kate of the novel, an intermediate script, and the film: how she and Chris become romantically involved, Kate's reaction to death and killing, and her agency as an archaeologist.

"Avid climber" Kate is first introduced in the novel suspended from the ceiling of Castelgard's chapel, taking careful notes on the structure (Crichton, 2003, pp. 67-8). Initially described as "ash-blond, blue-eyed, and darkly tanned," Crichton adds that she "was not a pretty girl—as her mother, a homecoming queen at UC, had so often told her—but she had a fresh, all-American quality that men found attractive" (Ibid, p. 68). The men did find her attractive in the novel, as it is revealed that several members of the team, including Marek, had "made a pass early on" (Ibid, p. 88). After being unceremoniously dumped by his British girlfriend, noted womanizer and fellow graduate student Chris Hughes turns his sights on Kate, who instantly rebuffs his advances. However, as several reviewers have criticized, a romance nonetheless develops between the couple over the course of the novel. Film reviewers also panned the relationship as not well motivated. For example, Kevin Carr (2003) refers to Chris and Kate's relationship as "a rickety romance… that has no chemistry or reason" while Guylaine Cadorette of *Hollywood.com* complains that their relationship "feels as platonic as the one he has with his father" (2003). In the film, Chris "Johnston" is indeed the professor's son, has no interest in archaeology, and normally only visits his father for a few weeks each year. The professor correctly surmises that his son remains at the dig due to an infatuation with Kate. When Chris brings Kate a beer at the site one night, Kate politely makes small talk, and, when Chris offers that he is "not really all that interested in the past," there is an uncomfortable moment when he stares at her like a lovesick puppy dog and she responds by uneasily looking away (Donner, Van Wyck & Donner, 2003).

In an intermediate version of the screenplay written by George Nolfi, based on a previous screenplay penned by Jeff Maguire, the relationship between Chris and Kate is quite different from that in the novel and the film. The audience first meets the characters in bed, after a night of passion. Kate is a graduate student completing her PhD under the supervision of the professor, here Chris's stepfather. Chris is an undergraduate on the dig, making Kate his supervisor, and introducing a relationship that is stressed not only by the difference in age but also several shades of conflict of interest. While Chris is comfortable with their relationship, Kate breaks it off. She is mortified when her

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friend and colleague Marek not only knows about the relationship but is also convinced that the Professor will discover it before long (Nolfi, 2000, pp. 3-6).

In the novel, Chris is a notorious womanizer who makes a less than stellar first impression on ITC's vice president Gordon. Understanding well what the team will be up against in 14th century France, Gordon swiftly sizes up Johnston's colleagues, noting that Marek "Looked strong. And the woman [Kate] wasn't bad, either. Good muscle tone in her arms, calluses on her hands. Competent manner. So she might hold up under pressure" (Crichton, 2003, p. 123). However, when it comes to Chris, "the good-looking kid would be useless" (Ibid, p. 123). In Nolfi's screenplay, the archaeologists confer amongst themselves as to who should travel into the past. Kate is wary but agrees to go out of loyalty to the professor, but her former lover, Chris, is overly protective and does not want her to go. Marek counters that Kate's participation is critical, due to her expertise in architecture. In his words, "She's the only one of us who will be able to find her way around if we go into Castelgard or the monastery. We need what she knows" (Nolfi, 2000, p. 33). ITC president Doniger initially does not want Chris to go, correctly surmising that he "has no particular skills… and, frankly, he seems a little immature" (Ibid, p. 35). In the film, ITC security head Gordon explains that he does not need Chris or "Miss Erickson," but Marek is vital because he knows the layout of the site. Kate protests, informing Gordon that "Nobody knows the layout like I do. I'm going" (Donner, Van Wyck & Donner, 2003).

In the intermediate screenplay and the film, the group's transition into the past unmistakably marks a change in Chris and Kate's relationship, and simultaneously signifies her regression from an independent modern woman into a damsel in distress. In the 2000 screenplay, as the machine's countdown progresses, Chris professes his forbidden love for his former girlfriend Kate, who tears up and returns his affection, signaling that she has succumbed to his pressure to maintain their relationship. In the film, the once rebuked Chris clasps Kate's hand as the machine powers up, giving her comfort during the vividly painful process, foreshadowing that Kate needs Chris in order to survive in the past.

In Crichton's novel, Chris is initially as weak as Kate is strong and independent; not only is he easily manipulated by his British girlfriend, but, upon arriving in the 14th century, he panics and is only saved from capture by the clever thinking of Lady Claire. Indeed, Kate only begins to view Chris as anything other than a liability—a guy "who threw fits if he was served dried cépe mushrooms instead of fresh ones in his morning omelette"—more than two-thirds of the way through the novel, when he does not complain about the pain after being hit by an arrow (Crichton, 2003, p. 332). Subsequently, after Chris saves Kate from a bandit, she realizes that she had never noticed before "that he was quite an attractive man," but dismisses the thought as mere gratitude (Ibid, p. 403). However, after this revelation, she begins to follow Chris, quite literally, rather than being independent, when, for example, asking him which way they should travel at a crossroads. Finally, after saving her from a crazed knight at the entrance to the forest chapel, she literally calls him "My hero," a statement only half made in jest (Ibid, p. 324). Their descent into a dark cavern and tunnel and emergence into the fortress La Roque signifies the death of both Kate the independent woman and Chris the court jester, and the birth, from the belly of the beast, in Joseph Campbell terms, of Chris as the stereotypical medieval knight and hero and Kate as a damsel in distress. As previously noted, this latter fairy tale trope stands in stark contrast with the active and forceful heroine of the Middle English romance.

Chris's evolution from a self-centered womanizer in the novel or simply the boss's young son in the film into a man worthy of being a romantic interest for Kate is a necessary fulfillment of an important romantic trope. Because Kate is what Lorna Jowett describes as a "good girl," being "on the side of 'right' in the fight against 'evil,'" she, like Ellie Sattler before her, "must have a good man, participating in compulsory heterosexuality and romance" (2005, pp. 44-5). In the case of *Jurassic Park*, Alan Grant is basically a "good man" from the beginning—intelligent, protective, selfless, and heroic. His only obvious flaw in the film is his initial dislike for children, something that is conveniently ad-

dressed as the film progresses; by the end of the film, he has not only saved the two children, Lex and Tim, but has also come to feel genuine affection for them. In *Timeline*, Chris begins both the novel and film lacking in heroic traits, and his character arc is concerned with his growth as a hero. As his agency waxes, Kate's wanes in nearly equal proportion.

As an example, the novel contains a clear signifier of how the journey into the past becomes a line of demarcation for Kate and presages her fall from power into relative helplessness. It is explained to Kate that not only do women have to wear period-appropriate long dresses on the mission—something that not only feminizes them but can also become a life-threatening impediment in times of fleeing or fighting—they have to don long wigs as well, because "Short hair on a woman is a sign of disgrace, or heresy." Kate muses that the wig makes her look like "a stranger. She looked younger, softer. Weaker" (Crichton, 2003, p. 165). This transition parallels the standard narrative of the tomboy, which Barbara Creed (1995, p. 94) describes as the change from engaging in "active sports" to a willingness to "don feminine clothes," grow out her hair, and embrace "passive, feminine conformity." In the novel, after escaping from Castelgard with Marek and Chris, Kate not only sheds her hated wig but also shears her hair shorter with a knife, binds her chest, and passes for a man, a ruse meant to throw off the soldiers who have been commanded to search for two men and a woman. This cross-dressing parallels common themes in both Medieval texts and modern Medievalisms. However, this deception on Kate's part nearly leads to a sexual assault, when Arnault notes that "this fair boy touches my heart. I will entertain him in my tent tonight" (Ibid, p. 387). It is only the intercession of Claire that saves her. In the film, Kate already has long, brown hair, a formulaic feminizing trait in sharp contrast to her more masculine haircut in the novel, and does not cut it, as the gender-bending ruse is omitted.

The status of Kate and Chris's relationship in the end is also depicted differently in the three versions. The novel concludes some months after the rescue of the professor, and Kate is seven months pregnant with Chris's baby, signifying her adoption of a stereotypical woman's role. The professor's team is in England, on a pilgrimage to see Marek and Claire's final resting place in the castle she inherited from her first husband. The novel ends with the characters simply expressing how much they miss their friend. In the screenplay, the group looks at a stone marker for Marek and Claire in a church a half a mile from their French dig site, and there is an abbreviated discussion about the couple before attention is turned to Kate and Chris, who nervously try to explain their illicit liaison to an amused professor. In the film, Kate and Chris join the professor and team physicist David Stern at the fully excavated and cleaned sarcophagus and realize it is Marek and Claire depicted on the lid. As the professor reads the sentimental inscription, Kate and Chris snuggle, and Kate kisses Chris's shoulder as they lovingly look into each other's eyes. The camera focuses on their clasped hands before fading to the credits with a view of the landscape and sky. Linda Bingham (2006) argues that the quest to rescue the professor leads to the maturation of both Chris and Marek in the same way that the knight develops into a hero in a traditional chivalric romance. For example, she draws parallels between Chris's personal and martial growth in the novel and Kate's increasing openness to considering Chris as a potential object of affection as similar to the basic plotline of a medieval romance. She notes that Chris's initially "'unknightly' behavior" in the medieval era mirrors his "immature behavior at the archaeological site in the present" and traces his growth as a character as paralleling that of Gawain. Thus, she argues, the marriages of the two "knights" (Chris and Marek) at the end of the novel are fitting. However, it comes at the expense of two strong female characters, who are softened, feminized, and "tamed" in the process.

A second point of deviation from the novel to the intermediate script and the film is Kate's reaction to death and killing. The grisly beheading of ITC aide Gomez upon their arrival to the 14th century affects Chris and Kate differently. In the novel, Chris is unnerved and runs away while Kate, although repulsed by the corpse, has the presence to remove Gomez's wig to find the spare time travel marker that might be their

only way home. In the screenplay, Kate is horrified but composes herself quickly. In contrast, in the film, Kate is traumatized when Gomez is killed and turns away in horror when she sees his dead body. She is disturbed when the others rifle through the dead man's clothes looking for his marker. Another major difference is her reaction to killing in self-defense. In the film, she is visibly traumatized by having to kill a soldier guarding her friends, stabbing him with an arrow. She freezes at the sight of his corpse, and Chris has to lead her to safety. As they hide in a small building, Kate sits on the floor against a wall, staring at the blood on her hand while Chris spoons up behind her, his arms protectively enveloping her. He kisses her hand and then her forehead. It is interesting that, in the 2000 screenplay, she does not kill anyone in this escape nor does she in the novel, but, in the novel, she kills attacking soldiers on other occasions without hesitation in order to save her life and the lives of her friends. This significant difference is consistent with Kate's greater agency and self-reliance in the novel as compared to the film.

This alteration in Kate's emotional reaction to death and danger (a feminine trope), as well as a general shift from masculine activity to feminine passivity, signify Kate's intentional transformation from a tough *woman* to a good *girl*, to use Jowett's term. Indeed, according to Sherrie Inness, "the tight emotional and physical control that has been traditionally associated with men" is one of the hallmarks of a tough woman (1998, p. 13). This emphasis on "emotional elements, love affairs, and feelings" is also central to the common stereotypes of the female scientist, signifying that the female scientist does "not represent the rational scientific system of their male colleagues. They are therefore taken less seriously as 'scientists'" (Flicker, 2003, p. 316). It is important to note that this change in Kate's control over her emotions is concomitant with the overall shift in the character as a love interest for the increasingly heroic Chris. This reinforces the standard stereotype of the good girl as the embodiment of the message that "conformity to weakness, passivity, and self-sacrifice will encourage male love/approval" (Coppock, Haydon & Richter, 1995, p. 110).

Kate's literal physical ability is also decreased in the film as compared to the novel, another example of reducing or downplaying typically masculine traits, although it is not completely eliminated. One particularly important moment of action, which speaks directly to her climbing skills, centers on her escape from an upper floor room in which Oliver's men have the group jailed. In the novel and screenplay, they are in a stone tower six stories up, and Kate has to use her rock-climbing skills to escape out one window, climb in through another, and open the door to their temporary prison. In the novel, she tells herself it is "just a free solo" and has little difficulty with the task (Crichton, 2003, p. 292). In the screenplay, her skills have only been previously tested "On a gym wall, with a safety line" (Nolfi, 2000, p. 55). Chris is a nervous wreck as she prepares to work her way around the tower and climb through another window, and she stops him from speaking, afraid that he will "say something that'll make me lose my nerve" (Ibid, p. 56). She completes this maneuver without any help. However, several scenes later, Johnston, Gordon, Kate, and Chris are cornered by soldiers as Marek has gone off alone to rescue Claire. They are on a portcullis that is buckling under their weight, and Kate has to decide whether a staircase or one of two hallways leads to the library where their supplies have been stored. She is paralyzed with fear and indecision until Chris calmly urges her on: "You know this place. You do. What does your gut tell you to do?" (Ibid, p. 63). Fortunately for them all, she makes the right choice.

In the film, she climbs out through a thatched roof and maneuvers across the roofline in moves that rely on her rock-climbing skills, which she simply mentions are better than the others. It is also noted that the roof will not hold the weight of any of her colleagues. As she prepares to push through the thatch, she stops and gives Chris an enthusiastic kiss, not only signaling her final submission to his advances, but also noting the necessity of drawing strength from Chris rather than simply from within herself. As she climbs over the peak of the roof, she begins to slide and is only stopped from falling off the roof when Chris sticks his hand out through the thatch and grabs her by the wrist, saving her. Kate's climbing ability is notably important in the

novel in two further scenes that have no counterparts in the film. In both, she tries to escape from Oliver's forces by climbing through the ceiling's scaffolding, attempting to move from support beam to support beam, gauging which will support her weight but not that of her larger male attackers. She is clearly applying her scientific knowledge of the laws of physics and their application to architecture as well as her specific archaeological experience at the site.

Finally, Kate's role in discovering the all-important secret passage into the stronghold La Roque has an interesting evolution from novel to intermediate screenplay to film. The discovery of the tunnel is a convoluted affair in the novel, requiring input from both the professor and Kate, as well as a great deal of luck. As previously noted, Chris has to rescue Kate from a crazed knight who guards the entrance in the forest chapel, thus acting as Gawain to the Green Knight. It is now Kate's turn to succumb to panic when she and Chris become separated in a dark cavern, a reversal of their roles when they first arrived in the 14th century, and, in the end, it is Chris who realizes that the tunnel exits behind a fireplace in La Roque. In the 2000 screenplay, Kate is lauded by the professor in the present for her discovery of the remains of the tunnel. However, in the past, she has great difficulty translating her discovery in the ruins into locating the extant secret passage in the actual monastery, and only finds the courage and apparent intellectual clarity to analyze diagrams and drawings provided by the monks after squeezing Chris's hand.

In the film, she is confident that the stairs she is excavating will lead her to the tunnel, but she is wrong. She accidentally finds the walled-up entrance to the tunnel in the present beneath where she was working when there is a cave-in at the site but does not recognize it as such until she encounters it again. In fact, in the 14th century, she convinces a reluctant Chris to follow her to the monastery to look for the tunnel that she is sure exists—"You've got to trust me"—but of which he is skeptical (Donner, Van Wyck & Donner, 2003). While she is able to recognize the place where she had been digging in the present, it takes her a while to put the pieces together and break through the stone relief to find the tunnel. In what later appears to be an act of hubris, she demands that the monks go tell Arnault that the tunnel has been found before she and Chris check it out, and they discover it is a dead end just as Arnault arrives. Kate is devastated, claiming that she has "let everybody down" as she cries into Chris's embrace (Ibid). It is only the action of a man—Marek—that saves the day, as an explosion he causes above their heads opens the blocked exit to the tunnel, and Arnault is able to enter the fortress to fight Oliver.

What should the audience to make of the character of Kate in the end? Her journey in the novel appears to align well with Flicker's stereotype of the old maid:

> There is no doubt about her professional competence, but as a woman she is lacking something... The stereotypical old maid does not have to be all that old—it is much more her style that is old fashioned. In keeping with a successful character development, over the course of the film her deficit will be balanced out. Her femininity will be (re)instated. A man will appear who sets her off in a spin and shows her the ways of love despite her routine rationality. (2003, p. 311)

Flicker goes on to note that such a character "pays the following price: during her transformation into the perfect, attractive, and desirable woman, she loses her professional competence and slips up, making mistakes. According to this model, femininity and intelligence are mutually exclusive characteristics in a woman's film role" (Ibid, p. 311). The audience sees this in the film when Kate appears to have led them to a dead end in the secret tunnel. It is only with the violent explosion caused by Marek—a strong, male character—that the exit is blown clear. Kate also has characteristics in common with the lonely heroine. In particular, Flicker notes that such a character links "rationality with female intuition" and as previously explained "Sexual relations and scientific work are not mutually exclusive—as long as she keeps her priorities straight" (Ibid, p. 315). However, as in all female scientist tropes, the lonely heroine also lack the agency of her male counterparts and must rely

on male colleagues for support, safety, and/or professional recognition. This is most evident in *Timeline* in Kate's search for the tunnel, as noted above. While she follows both her archaeological knowledge of the site and her intuition, she is in constant need of male support, both physically and emotionally. As demonstrated through the examples in this essay, it is true that Kate does retain a higher degree of agency within the novel as compared to the film, but, over the course of the novel, her agency still decreases and is, to a large measure, transferred to the men around her, especially Chris, her love interest.

Gender, Science, and Messages from the Past to the Present

Kevin McGeough claims that film archaeologists are "never interested in preserving an archaeological site. On the contrary, the site presents a significant barrier to the archaeologist's attempt to gain the object of his quest.... Sites are exciting, dangerous, and remote in film, but not themselves the subject of scholarly enquiry" (2006, p. 178). *Timeline* is the exception that proves the rule. The site itself is, indeed, very much a "subject of scholarly enquiry" in the novel and film. However, it becomes far more than an academic exercise, thanks to the intrusion of modern technology and the adventure of time travel. It is also ironic that, in the end, the archaeologists who had so painstakingly and carefully excavated the French site are, in large part, responsible for its partial destruction in the 14th century, as it is the professor's manufacture of explosives under duress for Oliver that causes much of the damage to La Roque. It is also the people, not the site itself, that ultimately play the central role in this work. As Mark Hall notes of the film version of *Timeline*, "Although it portrays archaeology as very much the handmaiden of history it nevertheless recognizes that the driving motivation for many archaeologists is to understand people—who they were, what they did and how both influence who we are and what we do" (2004, p. 171).

However, as the audience has seen, these characters—in particular, the female ones—succumb, like many Crichton characters, to the ills of simple stereotypes. This includes Professor Johnstone as the somewhat bumbling absent-minded professor and ITC mogul Robert Doniger as the evil mad scientist willing to sacrifice human lives in the name of technological advances. Negative depictions of science and scientists are important, as they can both color and reinforce our views of the scientific endeavor overall, from distrusting vaccination recommendations and genetically modified organisms to dissuading young people, especially women, from entering scientific majors and careers (Weingart, Mulh, & Pansegrau, 2003, p. 281; Chimba & Kitzinger, 2010, p. 609; Steinke, 2013, p. 2).

As Jon Turney warns, "fictional representations [of science] matter" (1998, p. 13), but I would argue that fictional depictions of female scientists matter more, as they speak to both stereotypes of scientists and women. Eva Flicker argues that depictions of women scientists are important because the common "portrayal of women scientists that is oriented on their deficiency—either not a 'real' woman or not a 'proper' scientist—contributes to the formation of myths about women scientists' lack of competence and therefore also women's experience of social discrimination" (Ibid, pp. 316-7). Jocelyn Steinke adds that

> Images of female scientists and engineers presented in popular films are symbolic models that serve as sources of information about women, gender roles, and female scientists and engineers. As symbolic models, these images have the potential to shape adolescent girls' perception of scientists and engineers and their interest in scientific and engineering careers. (2005, p. 52)

In response, generating "positive portrayals of female scientists has [sic] been identified as a critical strategy for increasing the participation of women" (Steinke, 2013, p. 2). However, audiences should not consider this a case of sacrificing entertainment value for the sake of providing positive role models for the next generation of scientists. As the positive depictions of female scientists in such blockbusters as *Hidden Figures* (2016), *Contact* (1997), and *Black Panther* (2018) prove, audiences are certainly receptive to the inclu-

sion of positive depictions of women in science.

In the case of *Timeline*, the Kate Erickson's descent from self-reliant, self-assured scientist and heroine to damsel in distress is therefore not only significant but also troubling and sends a decidedly negative message to viewers: she is only complete as a woman once she succumbs to Chris's advances, with the sacrifice of her scientific prowess and power. That is, one might pessimistically reflect, if the audience was meant to believe that she truly had any such power in the first place. Perhaps the widespread negative reception of the film reflects, in part, a rejection of such doubly off-putting tropes.

Heroine or Damsel in Distress, continued

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