

Germans and Genes on Screen: Marvel's *X-Men* Films

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Introduction

"Since when did we become a disease?" X-Men team member Storm poses this question to her colleagues Dr. Charles Xavier, Wolverine, and Beast in *X-Men: The Last Stand* (Ratner, 2006). Storm raises this question in response to hearing news that a scientific breakthrough capable of suppressing mutants' powers is being called a "cure." As word of the news circulates across the school's grounds, Rogue enters the scene asking if it is true that she could be rid of her abilities – if she can be "cured" of her powers. In response, Storm's stance is firm: "[t]hey can't cure us. You want to know why? Because there's nothin' to cure. Nothing's wrong with you. Or any of us, for that matter" (Ratner, 2006).

Rogue's question of whether the mutant population can be "cured" is reminiscent of discussions around the *Judenfrage*, or Jewish Question, taken up by the Nazi Regime in the 1930s. The Nazis devised and executed their plans to gather and exterminate millions of European Jews in what was called "The Final Solution." Drawing on this comparison, the *X-Men* franchise places mutants in a position comparable to the Jews and other targeted groups during the Holocaust. As a population, the mutants of *X-Men* are Othered, rejected, and deemed dangerous – unable to go about their lives peacefully without being viewed by humans as an impending threat. In turn, mutants are treated as sub-human to the point where their privacy and freedom to live peacefully get stripped from them as scientists and government officials work to police, restrict, and exterminate the mutant population. Scholars such as Marc DiPaolo illuminate the historical undertones featured in the franchise, writing, "the humans' efforts to 'cure' mutants are fundamentally offensive and Nazi-like" (235). I build upon DiPaolo's observation by scrutinizing how German culture and history are featured in the first three *X-Men* films and how these depictions, while coded overtly in the characters of Magneto and Nightcrawler, also relate to current discussions around genetic privacy. Guiding this endeavour, I pose the following questions: How is genetic privacy featured in the *X-Men* films? How do these representations relate to historical atrocities in Germany's past? How is Germany's history with eugenics reflected in the *X-Men* narratives? How are these concerns and questions raised in contemporary discussions around genetic testing and racial-extremist ideologies? The answers to these questions reveal interlacing themes of German stereotypes, eugenics, and genetic privacy in the *X-Men* franchise.

Scholarly discourse has examined some of the German representations found in the *X-Men* universe, including the comics and their sometimes-ambiguous coding of Magneto as Jewish (Thompson Smith) and the more transparent tagging of Nightcrawler as German through his use of the German language (Lund). This is complemented by scholars articulating how *X-Men* communicates Americanness in relationship to technology and power (Trushell), Othering and the pursuit of identity (Lund), identity and struggle (Zingsheim), and homosexuality and coming-out (Muir). In this article, my analysis of *X-Men* (Singer, 2000), *X2: X-Men United* (Singer, 2003), and *X-Men: The Last Stand* (Ratner, 2006) isolates thematic details in the plotlines of the films as they further code the subjects of genetic experimentation and race wars in

a manner that is reminiscent of historical German conflicts. My analysis connects the messages of the films with contemporary discussions on the topic of genetic privacy in an American context. I have selected the first three installments of the franchise for this investigation as a sampling of the consistent threat/warning that is picked up in the subsequent *X-Men* films: the ostracized, Othered community of mutants are in danger of extermination by their human counterparts. The threat of genocide, while it is often presented in the franchise as a potentially swift answer to an evolutionary problem, is only one piece of the puzzle. While mutants are in danger of being expunged from the earth due to their genetic difference, the additional theme of medical experimentation without informed consent invests the films with a resonance with contemporary discussions around genetic privacy. The *X-Men* films show how an ostracized and oppressed group can become susceptible to additional abuse through forced medical experimentation. Further, the films show mutants undergoing experimental procedures designed to transform them into potential weapons for the benefit of the government. As a whole, the franchise explores the theme of weaponizing victims of oppression ranging from military service to personal security details. An element that links the *X-Men* films with contemporary conversations around genetic privacy is the emotional, psychological, and physical manipulation of mutants presented in the films and how these ethical breaches relate to informed consent.

***X-Men* on Film**

The *X-Men* film franchise consists of adaptations from the original *X-Men* comics, a series co-written by Jack Kirby and Stan Lee that began in 1963. The first twelve installments of the film franchise earned over \$2 billion in gross revenue domestically since *X-Men* hit theaters in 2000 (Box Office Mojo, "X-Men Movies"). The successful reception of the *X-Men* series calls us to consider what thematic nuances have resonated with audiences for the past twenty years. The subject of genetics has been a prominent subtext from the beginning of the *X-Men* series. In science fiction, stories about mutants were common throughout the first half of the twentieth century, prompted in the early decades by fantasies about the eugenic transformation of the human species, and after Hiroshima and Nagasaki, by concerns about the consequence of radioactive fallout (Clayton, "Ridicule of Time"). Stories about monstrous mutations were a staple of Golden Age horror comics as well. But in the 1960s, *X-Men* popularized stories about gifted mutants.

The release of *X-Men* in 2000 was the first installment of the X-Men storyline brought to theaters. Setting the tone, the opening scene takes place in 1944; as a child, Magneto is seen forcibly separated from his parents in the Auschwitz concentration camp, resulting in a clear demonstration of his power to manipulate metal. As the narrative progresses, the audience is introduced to Charles Xavier, Wolverine, Rogue, Storm, Cyclops, Jean Grey, Iceman, and Mystique. The plot of *X-Men* follows what is referred to as the "Mutant Problem" presented at the United Nations World Summit. An anti-mutant representative, Senator Kelly, poses fear-mongering questions pertaining to the safety of the general public who may fall victim to those with mutant abilities, calling for the need for mutant registration. *X-Men* and the subsequent films *X2: X-Men United* and *X-Men: The Last Stand* follow similar plotlines. All three feature social tensions rising as government officials attempt to pass legislation for mutant registration with additional, ominous threats of genocide lurking in the background. Military scientist Colonel William Stryker is presented in *X-Men United*, as he experiments on mutants like Magneto and Wolverine to assist in his own agenda to neutralize the mutant threat.

The Last Stand continues to feature the human-mutant divide but now with a potential method of eradicating the world of its mutant population by the means of gene manipulation. Boiling the conversation down to the level of genetics, revealing both fear of a natural (read: random) progression and attempts to either control or eradicate the source of that fear, the *X-Men* films present social hierarchies built upon the foundation of social unrest rooted in anxiety around the unknown.

The Germanness of Magneto and Nightcrawler

The stereotypes of Germanness featured in the *X-Men* films range from the level of the characters and their performance of German heritage, culture, language, accent, and history, to the level of thematic coding of events in German history. The entire mutant population, including the leader of the X-Men, Charles Xavier, and his chief opponent, Magneto, are portrayed as Others. However, Magneto and Nightcrawler are presented as special cases. They are outsiders even among their fellow mutants. I connect the two characters based on their links to Germany, the German language, and German history. Other characters have earned comparable attention for reasons specific to their cultural background. Storm, for example, has attracted scholarly attention due to her representation of Blackness within the *X-Men* franchise in addition to the evolution of her character from being an immigrant to an African American (Dalbeto and Oliveira; Claverie). By placing Magneto and Nightcrawler in conversation with one another, I examine how Marvel engages with tropes of Germanness at the level of character profile.

The character development of Magneto has been through many renditions. In a special edition dedicated to his backstory, *X-Men: Magneto Testament* (Pak), long-time fans of the character learn of Magneto's beginnings as he presents the first signs of supernatural powers in addition to information never-before shared with Marvel enthusiasts. These include Magneto's birth name, Max Eisenhardt, in addition to story-line decisions such as assigning his nationality as German rather than Polish. Transparent about the creative, yet calculated, liberties that were made in creation of *Magneto Testament*, author Greg Pak says: "sometimes, because the comics record is contradictory or conflicts with historical fact, we've had to choose one detail over another. But at every step, we've done our best to remain true to the key moments that have contributed so much towards making Magneto the deeply compelling character we know today" (Pak).¹ Details included in this semi-origin-story are the clear assignment of Magneto's German heritage using signage written in German with captioned translations in English. This provides another identifying opportunity of Magneto by revealing him as a German speaking Jew through the inclusion of signs encountered during a trip to Berlin, reading, "Juden sind hier unerwünscht" ("Jews not welcome here") (Pak). In juxtaposition with the cinematic adaptations of the X-Verse, the first three *X-Men* films primarily present Magneto as not only an elderly adult, but as being in full control of his power to create and weaponize magnetic fields and control metal – a power that he uses to justify his belief that all mutants are evolutionarily superior to their human counterparts.

One of the few scenes revealing Magneto's past shows him as a boy named Eric, at the moment of separation from his mother and father at the gates of Auschwitz. The scene serves generally to reference the Nazi rise to power, the establishment of the Third Reich, and its development and utilization of concentration and extermination camps. Abruptly jumping to the filmic present-day, Magneto references surviving the concentration camp as he meets Charles Xavier at the hearing where Senator Kelly first makes a case for mutant registration. After being confronted by Charles Xavier,

Magneto asks, "What would you have me do, Charles? I've heard these arguments before," to which Charles responds, "It was a long time ago. Mankind has evolved since then" (Singer, 2000). This comment calls the audience to remember the discussions and subsequent policies that led to the registration and encampment of millions of Nazi prisoners during the Holocaust: The 1935 Nuremberg Laws. Responding to Xavier's comment alluding to the evolution, Magneto responds with a flippant, "Yes, into us" (Singer, 2000). Further reference to the Holocaust is made through the tattoo on Magneto's forearm – a trope often associated with the genocide – and recalls the opening scene where a young Magneto witnesses other Holocaust prisoners with tattooed numbers on their forearms upon his arrival to Auschwitz (Fig. 1 and 2).



Fig. 1. Magneto's Holocaust tattoo. *X-Men*. Singer, 2000.



Fig. 2. Holocaust tattoo seen by Magneto as a child entering the Auschwitz concentration camp. *X-Men*. Singer, 2000.

Scholars have dissected the many layers of Jewish coding for Magneto since his first appearances in the *X-Men* comics (Baron; Lund; Zingsheim). Explorations into his turbulent approach to preventing another genocide comparable to the Holocaust is often referenced as being Magneto's own indoctrination into the same fascist ideologies linking the character with extremism. In "*X-Men* as J Men: The Jewish Subtext of a Comic Book Movie," Lawrence Baron argues that the films grant Magneto more depth than is common for a typical comic-book villain. Baron writes, "For those who might object to a Holocaust survivor being cast as a villain, it is important to keep in mind that Magneto is not only an innately evil man seeking world domination. Instead, he is a victim of a previous genocide who reasonably anticipates that paranoid humans will subject the mutants to the same fate European Jewry experienced during World War Two" (48). As one of the main antagonists of the *X-Men* franchise, Magneto's character is embedded with a complex series of social connotations, historical markers, and ethical questions unlike any other primary character.

Comparatively, Nightcrawler has received little attention from scholars. Coupled with his debut and inclusion in both the comics and the *X-Men* films as a secondary character, Kurt Wagner, commonly known by his nickname Nightcrawler, is typically discussed in superhero scholarship merely in terms of his biographical information. Depicted similarly in the comics as in the films, Nightcrawler is German with a blue exterior and three-toed hands and feet, a tail, and pointed teeth. However, instead of having fur as in the comics, Nightcrawler is featured in *X-Men United* as having self-inflicted scars across his blue-skinned body. Nightcrawler is tagged as German through his thick accent, use of the German language, and his name.

The culturally loaded surname "Wagner" connects Nightcrawler with the famous German composer Richard Wagner; Nightcrawler's connection to Wagner further ties him to the trope of Germanness through the composer's believed antisemitic views ("Music and the Holocaust: Richard Wagner"). Nightcrawler is also presented in *X-Men United* as devoutly religious – presumably Catholic (Century). He is found by Storm and Jean Grey hiding in an abandoned cathedral and recites scripture throughout the film. Catholicism, in addition to Lutheran-Protestantism and Calvinism, is among the most common religious denominations of Germany today with a past in German-speaking Europe that dates to its declaration as the official religion of the Holy Roman Empire ("Religion in Germany"). Nightcrawler is embedded with cultural tags of Otherness throughout the film through his animal-like appearance in addition to his German accent, language, and background. Just as with Magneto, Nightcrawler is never officially assigned German nationality nor German heritage, but these details guide the audience to assume he is German.

Opening *X-Men United* with an attempted assassination of the President of the United States, Nightcrawler's appearance, which objectively reveals him as a mutant and therefore Other in the narrative, is later coupled with the already stigmatized trope of Germans being perceived as both threatening and deadly. But, revealed later in the story, the X-Men learn that Nightcrawler was manipulated and weaponized by Colonel Stryker to carry out the attack. This shifts Nightcrawler from being on the side of the threatening German perpetrator to the side of the innocent and deceived victim used as a tool to further strengthen those in positions of power. Two sides of the same coin, conversations around victims and perpetrators reflect Germany's past and serve as a segue from the level of coded German traits in a sampling of characters in the *X-Men* films to the level of themes presented through them.

Like Nightcrawler, Magneto is firmly placed in the position of both victim and perpetrator. Twisted by his experiences in Auschwitz, however, Magneto's victimhood

leads him down a destructive and supremacist path that ironically mirrors the Third Reich through his attempts to exterminate the human race. In *X-Men United*, both Magneto and Nightcrawler are victimized by Colonel Stryker, who gives them a serum derived from his own mutant son, Jason. Stryker's motivation behind the attack on the President is to fuel mutant-human tensions, in the hope of inciting war between them. To the rest of the characters in the X-Verse, Nightcrawler is a violent extremist. The X-Men eventually discover the truth behind the façade, revealing Nightcrawler's ignorance of being used by Stryker and an inability to control his actions during the attack. Both scenarios illuminate the complexities of awareness and intention that lead to the tagging of one as inherently good or evil. The ability to make this distinction was constantly revisited as the Nuremberg Trials of 1945-1946 attempted to assign accountability for one of the most destructive atrocities against humanity. Providing another link between real historical events and the history presented in *X-Men United* is the detail of involuntary participation in Stryker's plans. Both Magneto and Nightcrawler are drugged against their will and in part without their knowledge. A clear breach of their autonomy and genetic privacy, the manipulation of Magneto and Nightcrawler's mutant powers raise ethical questions and, again, show strong similarities with Nazi ideologies and approaches towards exploiting their victims. Paul Weindling discusses the ethical flexibility the Nazi regime legitimized for themselves through legislation. Weindling explains, "[e]thics thus became nazified, as justifying a researcher's duty to undertake coercive research. The Nazi onslaught on civil law removed the legal basis for the inviolability of a citizen's body, so undermining protection against vicarious experimentation" (20). By rendering them subject to violation, Nazi victims were stripped from protections against medical experimentation, including genetic manipulation. The X-Men films reflect a comparable devaluation of the genetic privacy of mutants through the exploitative approaches practiced by Stryker and his teams. Marvel's curated references to Germany's history requires an inspection of how audiences were socially primed in preparation for the anti-genocide message embedded in the franchise.

The deployment of Holocaust imagery in popular culture is not restricted to the *X-Men* films, of course. Hilene Flanzbaum comments, "[m]ost Americans seem so well acquainted with at least some version of the Holocaust that they freely invoke it in metaphor, and often with an inflammatory casualness" (7). Historical and cultural nods to the Third Reich and the Holocaust are ubiquitous, ranging from the many adaptations of *The Diary of Anne Frank* to Spielberg's *Schindler's List* (1993). In the Marvel Universe, one needs to look no further than the releases of *Avengers: Infinity War* (Russo and Russo, 2018) and *Avengers: Endgame* (Russo and Russo, 2019) for further references to the Holocaust. The Red Skull, introduced in Marvel films as a villain in *Captain America: The First Avenger* (Johnson, 2011), guards one of the coveted infinity stones central to the plot that spans both films. The Red Skull's inclusion in the last two *Avengers* films reminds audiences of the villainous organization Hydra, a division of the Nazi regime, in *Captain America: Endgame's* record-breaking opening weekend grossed \$1.2 billion, making it the biggest worldwide opening weekend, coming second only to *Infinity War* (Box Office Mojo, "Avengers: Endgame"). The interest in Nazi and Holocaust topics therefore continue to engage American audiences.² Yet unlike the contemporary example of *The Man in the High Castle*, the *X-Men* franchise is geared toward a broader audience, its content rated as appropriate for teen and adult audiences alike. The Germanness of Magneto and Nightcrawler continues to engage audiences with tropes that remain relevant in contemporary American popular culture. Further,

the themes of the *X-Men* films remain relevant to social discussions pertaining to right-wing extremism and genetic privacy in American society today.

***X-Men*: Eugenics in German History**

Over the course of its lifespan in German history, eugenics has served a variety of functions. Some were rooted in scientific research and curiosity while others evolved out of racism and xenophobia. More recently, conversations around genetics have shed their more problematic beginnings and have instead turned into scientific approaches to genetic queries and manufacturing mutations for desired outcomes. However, the conversations around genetic mutation, which is presented in the original *X-Men* comic book series as occurring both randomly within the genome as well as manufactured by scientists, reflect conversations that have led to some detrimental ends in German history. The history of eugenics in Germany extends back to the nineteenth century, when traveling shows of human anomalies fascinated scientists eager to explore genetic possibilities (Rothfels 158-172). What would be considered racist in today's context was viewed as scientific achievement and spectacle during the nineteenth century. Yet, it must also be noted that the interest in the genetic makeup of what were considered by scientists as human oddities was rooted in trying to gain understanding of random genetic evolution, which is seen in the X-Verse as mutants evolve out of the human species. Like the examples of travelling shows of human exhibition that toured Europe and particularly drew German interest, the *X-Men* franchise includes reference to this chapter in history through Nightcrawler in *X-Men United*. The poster of Nightcrawler presents him as a member of a travelling circus from Berlin, in the same social space as was taken up by travelling circuses and live shows. Placing these attractions into the context of the 21st century, the so-called freaks of the X-Verse are mutants, especially those who have physical manifestations of their mutation, like Nightcrawler (Fig. 3). The historical references presented through Nightcrawler translate a history of fringe social groups, how they were expelled from society, and how they have fostered attention in the past. These references also connect ostracized groups with the history of eugenics and how public, scholarly, and bureaucratic interest in Orientalism, by means of othering whole communities, was prevalent leading up to and through the Nazi period.



Fig. 3. Poster of Nightcrawler as a performer in a traveling circus in Berlin. *X-Men: The Last Stand*. Ratner, 2003.

In the twentieth-century, Germany's eugenic history took a rapid turn as the Nazi Regime rose to power in the 1930s and began medical experimentation on their victims. Instead of observing and exhibiting examples of genetic mutations, Nazi scientists worked to demonize and dehumanize the Jewish community on the basis of genetic inferiority. Racial hygienists developed arguments based on perceptions of genetic strength, stating that genetic weakness was the determining factor in the identification and condemnation of targeted communities. The experiments carried out in the *X-Men* films present correlations with those conducted by doctors stationed in Nazi concentration camps. A collection of articles titled *Nazi Medicine: Doctors, Victims, and Medicine in Auschwitz* reports on the Nazi experimentation at the Auschwitz and Auschwitz-Birkenau camps during the Holocaust (International Auschwitz Committee). Organized through the sessions of the Cracow Medical Society, authors contributed with a unified motto in mind: "may those whom fate permitted to survive the concentration camp or to avoid it, hand over to the young generation information about the inhuman period. The time to forget has not yet come" (International Auschwitz Committee iii). The experiments on prisoners of Nazi camps ranged from pharmacological interventions to radiation. Detailing just a fraction of the violations that took place in the camps, Dr. Stanisław Kłodziński stresses that "the people who were used for such experiments had not agreed to it voluntarily. The experiment was enforced upon the prisoners, with the use of pressure [and] stratagems" ("Criminal Pharmacological Experiments" 41). Kłodziński also addresses how the Nazi regime worked to eradicate the future progression of so-called inferior races. He explains, "[t]he wish to destroy the Jews and subjugated peoples during the course of the war, making at the same time use of them as labour for the war industry gave the national socialist ideology an occasion to try to work out the easiest possible method for 'sterilization' on a mass scale" ("Sterilization' and Castration" 49). These examples are just a small representation of the experiments forced on Holocaust victims. Heinous and dehumanizing, the experiments featured in the first three *X-Men* films encourage viewers to remember the Nazi crimes against humanity, particularly pertaining to the issues of genetic privacy and bioethics. All three films depict scientific experimentation which is often forced by the hand of the government and against the will of their victims.

Medical Experimentation and Genetics in the *X-Men* Films

The use of medical experiments to manipulate or exterminate the Other is a common theme across the initial trilogy of *X-Men* films. In the first installment, Magneto uses radiation on Senator Kelly, forcing his body to undergo genetic mutations to become a member of the *homo superior* race and exhibit supernormal abilities. The relationship between Magneto and Senator Kelly is unique in their mutual assignment of Otherness to one another – both deeming the O/other as inferior and therefore feeling justified in engaging in forced experimentation. Comparable to Nazi experiments with radiation, which often proved to be fatal ("Sterilization' and Castration" 67), Senator Kelly's forced exposure to Magneto's machine also proves lethal. But Kelly's forced gene mutation served as a preliminary experiment for Magneto's radiation machine; the master plan is to subject the leaders of the United Nations summit to the same treatment. Further examples of Nazi-like experimentation in the *X-Men* franchise are displayed through Colonel Stryker's experiments on key characters like Wolverine, Charles Xavier, and other mutants, including procedures with the X-Verse precious metal Adamantium.

X-Men United dives deeper into the coding of Stryker as a Nazi scientist through his experiments rooted in militarizing and weaponizing mutants. Eventually revealed

as a military scientist, Stryker serves as the mastermind behind acts of violence at the hands of mutants against their human counterparts. As *X-Men United* progresses, the audience learns that the initial attack by Nightcrawler was just one stage in a long-term plan to fuel a war between mutants and humans. This plan was orchestrated by Stryker as he weaponizes vulnerable and isolated mutants like Nightcrawler, his own mutant son (Jason), Magneto, and his mutant right-hand, Lady Deathstrike. Stryker uses the vulnerability and isolation of each character to his advantage. Most of Stryker's interactions with mutants result from kidnapping and the abuse of positions of power – including the prison system – to get what the Colonel wants: the absolute destruction of mutants. Stryker evokes Nazi ideologies through his use of forced experimentation, disregard for informed consent, and by isolating and extracting so-deemed desirable traits of his victims before discarding the individual. Though Stryker fails to carry out his plan of eradicating the world of mutants, his genocidal scheme is hijacked by Magneto, who attempts to use Charles Xavier to locate and exterminate the humans of the world. This literally and physically places Magneto in the same position as Stryker on screen, framing him as equal to the Nazi-like villain. The mirroring of Magneto and Stryker exemplifies why scholars and fans often reduce Magneto to being a right-wing extremist who is as villainous as those who had placed him and his family in the Auschwitz concentration camp. But the label of extremism continues to be passed back and forth between Stryker, Magneto, the Brotherhood of Mutants, and humanity's scientists throughout the first three films. Coupled with the threat of government-funded experimentation to weaponize mutants, they are also under threat of a so-called "cure" for their abilities. The proposed "cures" of the X-Verse are another example of scientific advancements directed toward the eradication of the mutant Other.

The Last Stand introduces a solution for the "mutant problem" in the form of a gene suppressant: a "cure" through gene editing. The option to be rid of one's powers is presented as attractive for mutants whose abilities prevent them from seamlessly integrating into society. This is exemplified in the film by Rogue, who cannot touch others without fear of accidentally killing them. As Storm questions the comparison of being a mutant to that of having a disease (Ratner, 2006), there is a parallel presented with the history of equating genetic mutations with diseases. Moyra Smith's *Seeking Cures* identifies the scientific progress since the 2003 completion of the Human Genome Project as enhancing the ability "to accurately diagnose many diseases due to gene mutations and alternations in gene structure" (1). Smith discusses the increased interest in "genetically determined diseases" (1), reminding us of Storm's comment defending the mutant population from being diagnosed by scientists as a disease simply because of a shared genetic mutation leading to symptoms in the form of superhuman abilities. The *X-Men* franchise embeds some of the slippage around genetic mutations deemed positive or negative in the films' narratives; a character's stance on the matter of whether the X-gene mutation is embraced or despised often depends on where the character falls on the human-mutant divide.

To borrow from Smith, the form of therapy offered in *The Last Stand* comes first in the form of a vaccine available for mutants to voluntarily opt-into. However, when Dr. Worthington II, the director of Worthington Labs, goes to administer the cure to his son, Warren/Angel, the audience sees emotional manipulation at work. The preparation for the procedure results in an exchange between father and son, where Angel emphatically and repeatedly expresses that he "can't do this," to his father's simple, pressuring message cloaked in consolation: "You can" (Ratner, 2006). The lack of consent is made clear as Worthington states, "Warren, it's a better life. It's what we all want," to his son's pointed response, "No, it's what you want" (Ratner, 2006). The

transition of the cure being framed as voluntary to one of force is reflected in its shift from being administered through a specialized medical device to its militarization when placed in a firearm. Beast, working as the Secretary of Mutant Affairs, details the treatment as "a mutant antibody - a way to suppress the mutant 'X' gene" (Ratner, 2006). The suppression of the X-gene therefore alleviates the symptoms of the gene mutation: mutant abilities. The cure is to ease the burdens of mutants that do not want their powers – Smith comments on how the "[u]ltimate goals in patient care include counteracting or mitigating the effects of gene defects. Approaches to achieve this goal include provision of the normal gene product, and replacement or repair of the abnormal gene" (207). In *The Last Stand*, Worthington and his team of scientists present their intention to support and offer care to the mutant community in what they choose to call a "cure." The troubling sides of Worthington Labs' radical approach to what Smith would call "patient care" is its aggressive and forceful weaponization against mutants considered potentially threatening.

In a press conference, Worthington sets a tone of empathy to foster a sense of community between humans and mutants, stating,

These so-called mutants are people just like us. Their affliction is nothing more than a disease . . . a corruption of healthy cellular activity. But I stand here today to tell you there's hope. And this site, once the world's most famous prison, will now be the source of freedom for all mutants who choose it. Ladies and gentlemen, I proudly present the answer to mutation. Finally, we have a cure. (Ratner, 2006)

In this call for community, the director of the facility confirms the scientists' interpretation of the X-gene to be a disease. The pharmaceutical company, Worthington Labs, houses the source of the cure in a repurposed Alcatraz facility; the choice of location is justified in the film as being "the safest place" that could be found to house the source of the cure: Leech (Ratner, 2006). The doctors of Worthington Labs explain that, despite their ability to replicate Leech's DNA, they cannot generate it, thus making his protection paramount. As a mutant whose ability suppresses those of others in his vicinity, Leech presents a paradox: while the scientists of Worthington Labs and their supporters work to provide an option to permanently suppress the X-gene in mutants, they require Leech's mutant abilities to create a cure that could wipe out the genetically coded quality found in the *homo superior* species. It remains ambiguous what would happen to Leech if the scientists were successfully able to map and generate his genetic code without him, thereby deeming him unnecessary to their plans. The initial administration of the cure is comparable to a general inoculation, hinting at the ability to easily solve a perceived problem without deadly ends. The question of informed consent remains heavily at play in this film, as it remains unclear if Leech is voluntarily being held under lock and key deep within this science-oriented, repurposed prison. Magneto's plan, however, to locate and kill Leech – eliminating the threat to the mutant population – again places the antagonist on the side of extremism and of racial hygiene. In the treatment of Leech and in Stryker's efforts to round up and experiment on mutants without their consent, the films evoke another practice from the history of Nazi eugenics – a systematic program to collect, confine, and exterminate targeted groups during the Holocaust.

In *X-Men*, the viewer is first exposed to the trope of collecting and detaining Othered bodies through the opening scene of Magneto and his Jewish community in a concentration camp.³ *X-Men United* shows the imprisonment of Magneto with his

additional subduing through forced experimentation and manipulation, as Stryker uses him as a pawn in his villainous plot. And, in a symbolized form of imprisonment, *The Last Stand* places Leech in the infamous Alcatraz prison. Early in the film, Beast arrives at Alcatraz Island and is led through the lab by Dr. Kavita Rao. When they arrive at Leech's holding room, the audience sees it is secured with a keypad to gain access. Inside, we see that Leech resides in a secure and surveilled adjoining room to the lab – complete with a bed, window, toys, and a gaming system. Complicating the counter-purpose of using a prison as a place of safety and security is Dr. Rao's dehumanizing comment referring to Leech as simply "the source of the cure" (Ratner, 2006). Despite Dr. Rao confirming that Leech's confinement is compliant with the specifications designated by the Department of Mutant Affairs, when Beast asks when Leech will be allowed to leave, the doctor vaguely responds that it would be after they can successfully map his DNA – leaving the answer uncertain (Ratner, 2006). Problematizing the situation further is that Leech appears to be a teenage boy without parental accompaniment or apparent agency in his confinement. The obscurities around consent in the *X-Men* films make it challenging to determine what procedures are holistically voluntary. However, Leech's consent scenario parallels questions around the participation of Holocaust prisoners in Nazi medical experimentation.

In an article published honoring the 70th anniversary of the Nuremberg Code in 2017, George J. Annas argues for the need for updated regulations around informed consent. Annas calls for "the requirement of the voluntary, competent, informed, and understanding consent of the human subject" (42). In his analysis of the Nuremberg Codes' ten principles for "basic legal and ethical rules for research with human subjects," Annas summarizes the judges' ruling, defining the line between informed and uninformed/non-consent by designating that "the ability to refuse was crucial" (43). Detailing the confines of voluntary participation, the principle pertaining to consent emphasizes the individual's ability to "exercise free power of choice, without any intervention of any element of force, fraud, deceit, duress, over-reaching, or other ulterior form of constrain or coercion" (*Nuremberg Code*). In the *X-Men* films, the experiments conducted by Stryker and at Worthington Labs do not provide proof of informed consent and therefore exemplify approaches to eugenic and genetic experimentation reminiscent of the Nazi Period. This historical example is being employed in the *X-Men* films as a warning amid what Honor Sachs calls an "expansive national fetish for roots, homelands and heritage" ("The Dark Side of Our Genealogy Craze"): ancestral DNA testing. The Marvel fan favorites therefore serve to remind audiences of the history of exploitative, unethical modes of experimental testing whilst genealogy testing kits are gaining momentum in the late 1990s and early 2000s. This time period coincides with the *X-Men* narratives being adapted to the big screen.

Conclusion: *X-Men*, Germany's Past, and Contemporary Contemplations of Genetic Privacy

Starting in the first installment of the trilogy, *X-Men* introduces government officials stressing a perceived need for federal legislation requiring mutant registration. The registration of mutants is presented as a precaution in hopes of preventing potentially dangerous mutants from posing a threat to the average, defenseless human. Alluding to the topic of genetic privacy, the idea of regulating members of society based on their genes should elicit pointed glances back in history. Specific to the Germanness tied to Nightcrawler and Magneto, the backstory of the latter included his first-hand experiences with the Nazi Regime's rise to power and their creation of regulations that restricted Jewish participation in civilian life. This was done within both small, local

government as well as at the federal level (United States Holocaust Memorial Museum, "Anti-Jewish Legislation in Prewar Germany"). And, as Magneto says after Senator Kelly presents his rationale for passing regulations that would impact the privacy of mutants, he has "heard [these] arguments before" (Singer, 2000). By embedding historical events within the X-Verse timeline, the franchise creates a mixed-reality narrative that connects contemporary discussions around informed consent pertaining to one's genetic privacy with the genetic experimentation found in the films.

The plotlines of the *X-Men* films remain constant regarding the fictionalized X-gene mutation giving rise to the mutant community. However, the franchise merges creative invention with warnings packaged in actual historical events. By preparing a mixed-reality narrative that is timestamped in the "not too distant future" (Singer, 2000), audiences are invited to contemplate other potential messages and parallels depicted on the big screen. A growing public interest in direct-to-consumer genetic testing (DTC-GT) has correlated with evolving policies and public discussions around mass engagement in genetic science. As the popularity of heritage testing increased, so too rose the potential for wide-spread social ramifications oriented in the normalizing and potential trivializing of one's genetic privacy (Edge and Coop; McDermott; Clayton et al.). Again, the *X-Men* franchise merges fictional and real events in a unified timeline on the big screen – investing and defining humans as full of untapped potential, resulting in superhuman abilities, yet still plagued by self-destructive tendencies. Audiences are encouraged to scrutinize where fact and fiction merge to unlock potential warnings for the future. The coding of "Germanness" in the first three *X-Men* films ranges from the surface level of character demographics (accent; language; naming) to the deeply embedded thematic tropes (Nazi experimentation; racial hygiene; violation of human rights and privacy; genocide), thereby reflecting the growing public opinion on the subjects of genetic testing and manipulation.

Marginalized, Othered, and used as lab rats, the *X-Men* franchise regularly shows mutants as dehumanized—stripped of basic human rights. Mutants are emotionally manipulated, experimented on, and in perpetual danger of violence orchestrated by the government. The franchise takes the targeted groups of Nazi extremism like the Jews and translates them into contemporary contexts by thematizing some of these same communities. Serving as an example, extensive scholarly work has been published looking specifically at the role of homosexuality and the topic of coming out as presented in the *X-Men* films – a group that was also targeted by the Nazis (DiPaolo; Loadenthal). 2020 was a year that saw over 35 million DNA testing kits sold, celebrated the 20th anniversary of the first American company initializing DNA heritage testing (Copeland), and the 20th anniversary of seeing X-Men favourites on the big screen. Through references to historical moments in Germany's past, X-Men audiences are faced with questions pertaining to their own stances around their genetic privacy and bioethics. The continued interest of audiences in X-Men narratives can be interpreted as showing anxieties lurking behind the scenes in an age of test tube babies and increased casualness around sending one's genetic material to for-profit companies. Further probing of these social concerns may contribute to a broader understanding of just how similar discussions and considerations of genetic superiority have survived and are translated on screen, proving to grant additional legitimacy to Magneto's fear of watching history repeat itself.

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Notes

1. Although none of the films discussed here overtly label Magneto as German, I follow Pak in concluding that the evidence points toward a German rather than Polish background.

2. A reading of *Infinity War* and *Endgame* can be seen through the lens of genocidal thought, though there is no motivation to eliminate half of the universe's population beyond the presumed equilibrium it would bring.

3. We must not forget other groups that were targeted by Nazi rule. While *X-Men* remains consistent in its presentation and iconography of Jewish heritage through the Star of David on the clothing of prisoners, other renditions of this chapter in Magneto's life include a broader scope.

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