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The Doppelgänger Motif in Science Fiction Film

Introduction

When the word doppelgänger appears in science fiction or fantasy it tends to denote a creature, whether alien or demon, that can take on the shape of another person, usually to achieve an evil end. However, the concept of the doppelgänger in science fiction is not at all limited to these creatures. Derived from the Gothic double, the doppelgänger has been a part of science fiction since its very inception and has developed into several recurring motifs, such as clones, robots, virtual avatars or parallel selves, that can be found throughout science fiction film. John Herdman defines the doppelgänger as:

a second self, or alter ego, which appears as a distinct and separate being apprehensible by the physical senses (or at least, by some of them), but exists in a dependent relation to the original. By 'dependent' we do not mean 'subordinate', for often the double comes to dominate, control and usurp the functions of the subject; but rather that, qua double, it has its raison d'être in its relation to the original. Often, but not always, the subject and his double are physically similar, often to the point of absolute identity. (Herdmann 14)

Unquestioningly, the doppelgänger motif is an important theme appearing in many literary and scientific works from Socrates and Plato to the German Schauerroman and psychoanalysis. Even today many stories and movies are centered around pairs of contrasting or complementing figures (e.g. Palahniuk's/Fincher's Fightclub), often subtly presenting variations on the doppelgänger motif as introduced by Jean-Paul Richter and E.T.A. Hoffmann. The discourse surrounding the double in literature and film, though, is mostly concerned with its use in Gothic literature and modern adaptations, where it mainly serves to portray the dualism of the self. However, one of the earliest works of science fiction is also considered a Gothic classic: Mary Shelley's Frankenstein.1 In it a young scientist named Victor Frankenstein creates a monstrous creature out of spare human parts, brings it to life and is haunted by it. The story introduces the Gothic doppelgänger into science fiction in the shape of the relationship between Victor Frankenstein and its creation, who appear to mirror each other's actions. Therefore it is important to examine the doppelgänger not only as a motif of nineteenth-century Gothic literature, but also as a motif inherent in science fiction.

Although today science fiction has its place as an important social and scientific commentary, it first became mainstreamed through mass publication and without the respect of critics.² The equivalent of science fiction pulp novels of the past are today's blockbuster films and series aimed at commercial success. Within these genres, certain thematic conventions concerning the doppelgänger motif have been established through commercial or critical success. Frank Dietz identifies three so-called "stages" of the Double in science fiction: the "mechanical doppelgänger" (the double in the purest sense), the "allohistorical doppelgänger" (meaning parallel worlds or histories) and "wetware" (the dissolution of the self in digital form) (Dietz 209-210). But little has been said about the effect of the doppelgänger and its forms in science fiction film and series. We want to expand Dietz' three categories of doppelgänger (mechanical, allohistorical, virtual) to five distinct motifs used in film and serial TV (clones, artificial intelligence, time travel, parallel universes, virtual identities). By applying those motifs to films discussed in the 2009 Undergraduate Conference "Of Body Snatchers and Cyberpunks" such as Invasion of the Body Snatchers, Blade Runner or The Matrix as well as to films we consider key works for the doppelgänger motif in science fiction such as 12 Monkeys, Ghost in the Shell or the Star Trek series we hope to show how the idea of the self is both presented and challenged in contemporary film, how it relates to the

[&]quot;[M]uch science-fiction criticism talks about the origins of SF in the nineteenth century ... [science-fiction author and critic] Brian Aldiss sees Mary Shelley's Frankenstein (1818) as the first SF text" (Roberts 48).

[&]quot;Both [Jules] Verne and [H.G.] Wells were writing deliberately popular fiction and working within the traditions of popular publishing of their day ... In America, the popular market also dictated the beginnings of SF as a serious market. In particular, this is connected with the cheap magazine format known as 'Pulp'" (Roberts 67).

challenges and issues of modern capitalism in an information society and what it tells us about the shifting values of human life and identity.

Clones

A clone is an exact genetic replica of a living creature that exists independently of its original and usually with an agency of its own. Due to the physical similarity and the resulting ability to easily and unnoticeably stand in for or replace the original, the human clone is one of the most obvious and formulaic manifestations of the double in science fiction. Because of the clone trope's focus on replacement, Dietz assigns clones as well as robots and AIs to his category of the "mechanical doppelgänger." He writes that

the mechanical doppelgänger usurps the role of the original self. This tradition of the mechanical double extends from *Frankenstein* to the numerous stories in which robots, androids, or clones attempt to replace humans. (209-10)

A single clone or a small number of them may often be a direct threat to the original's existence, either by planning to remove it or by demanding a share of the original's previously unquestioned identity. Science fiction plots with a limited number of clones show the most similarities with the Gothic doppelgänger as they usually involve a direct confrontation between the original and the usurper and question the validity of the original's identity. A single clone may also serve as a dark mirror to the original, reflecting only its negative attributes and thus creating a duality of the self. ³ This motif is often found in Gothic stories.

An uncountable multitude of clones, of which the clone army in the *Star Wars* prequels is the most popular example, confronts not only the originals but humankind as a whole with the idea that human beings are just another mass-producible commodity. In their number, mass-produced clones usually represent an expendable working class: The clones in *Star Wars* are used exclusively as soldiers and are immediately replaced upon their death. Therefore, they are not encouraged to develop an identity of their own, and their identical bodies reflect their identical functions and absence of a self. For Dietz, the mass-produced clone depicts a society constructed around the idea of Taylorism.

See, for example, Jean-Luc Picard's "evil" clone in Star Trek: Nemesis (2002).

Clones ... signify the ultimate triumph of mass production ... The clone ... represents the introduction of Talyorism to human reproduction. ... The notion of the original individual, still visible in the conflict between human and robot is now almost entirely lost. Duplication has resulted in anonymity. ... (Dietz 212)

A clone army or clone labor force does not only mirror the existing human working class and the struggle with corporate identity, but also reflects the fear of a devaluation and destruction of an "original" identity and the displacement of human workers in favor of mass-produced machinery.

The mere existence of clones as such raises the question to what extent a human being can be duplicated, i.e. to what extent the original's identity may be reproduced and which parts of its identity constitute the original. If a clone possesses the same body and the same hereditary traits, how can it be distinguishable from the original? Can the original prove its originality or the duplicate be unaware of the fact that it is a copy? The action movie The 6th Day (2000) features a protagonist who tries to uncover a cloning conspiracy to eventually find out that he and not the assumed doppelgänger is the clone. But does the fact that he is a copy mean that he has no claim to the identity that he feels is his? The 6th Day affirms the superiority of the original by letting the clone relinquish its claim, but at the end of the movie the clone nevertheless stands before the task of creating a new, original identity for itself. Its first step to achieve this is to put physical distance between itself and the original by taking off to Argentina, adopting the assumption that in order to create its own space it must not in any way come in contact with the original's space. Thus it appears that both the original and the copy have a need for an identity and existence unique to themselves - a conflict that can be resolved either violently or peacefully.

In the 1956 film *Invasion of the Body Snatchers*, the small-town doctor Miles Bennell returns from a medical conference to discover that the inhabitants of his town are being replaced by hollow duplicates originating from alien seedpods. While strictly speaking these duplicates are not clones because they do not share the original's DNA, they fulfill similar functions as the clone trope: both are indistinguishable copies of a human original. Like clones, the seedpods threaten the concept of identity as something secure and inalienable. In fact, they plan to erase all notions of identity and personhood. In this context, it is important to note that the film has been interpreted as both anti-communist and anti-McCarthyist. As Steven M. Sanders writes:

nobody has established whether *Invasion* is a protest against the political and social conformity called for by right-wing anti-Communists or that demanded by pro-Soviet collectivists (59)

Both communism and the corporate structure of capitalism as they were seen in the climate of the 1950s United States include the threat of identity loss and assimilation into a culture that consists of mere copies. As the body snatchers and the clone trope personify this attack on personhood, they can be understood as stand-ins for any ideology that is perceived as a threat in the same sense.

However, unlike the clones or the Gothic doppelgänger, the pod people simply want to do away with identity altogether. They neither question our understanding of the concept nor force us to redefine the term. Due to the film's adherence to a strict "us" versus "them" mentality, Invasion of the Body Snatchers defends the notion of identity as a stable unity even while the pod people seem to gain the upper hand. During the early stages of the invasion, Becky Driscoll's friend Wilma Lentz insists that her (already-snatched) Uncle Ira "isn't Uncle Ira." Despite the fact that he looks like him, acts like him and has the same memories, she has revealed him as a fake and could not be fooled to confuse him with her uncle. This suggests that even when all facets that constitute an identity have been copied, there can only be one "true" Uncle Ira that the copy can neither measure up to nor authentically replace. It can merely attempt to create a superficial illusion of being the same person. The only moment of genuine doubt occurs when Bennell finds a number of unfinished pod people in a greenhouse. When looking at the seedpod transforming into the body of his love interest Becky, he hesitates and cannot immediately bring himself to kill it. But when he passes Becky's pod to move on to a copy of himself, he immediately lifts the pitchfork he carries to destroy it. While there may be a surface confusion between a copy and another person, apparently no moment of confusion between the copy and the self arises: Bennell does not fear to hurt himself by destroying his seedpod. Even without the "happy ending" frame narrative⁴, the film would have a much more unifying message than most modern films working with the clone trope: you can either keep your identity or lose it but it cannot be torn into parts.

Artificial Intelligence

The concept and function of the AI in science fiction film is similar to that of the clone, but differs in significant ways. An AI or artificial intelligence is a humanlike machine, created for a certain purpose (e.g. service or warfare). AIs are usually built as a double of a specific human being (e.g. its inventor) or they are constructed with the idea of a human being in mind. Famous examples are AIs like the murderous HAL 9000 in 2001: A Space Odyssey, Data, the android who devel-

In the original cut of *Body Snatchers*, the film ends with a horrified Dr. Bennell standing on a highway shouting: "You're next!" As it was believed that such a bleak ending would be too disturbing for a contemporary audience, a frame narrative was added that shows a more hopeful possibility of Bennell escaping to the city and notifying the authorities (LaValley 125).

ops feelings in the *Star Trek: The New Generation* series, the NS-5 robots struggling for equal rights in the blockbuster *I*, *Robot* based on the Asimov story of the same title, or the replicants in *Blade Runner*.

The common question in most science fiction stories centering around or involving AIs of various sorts is the examination of identity. What constitutes an identity? Is it the programmed function of the AI that determines all aspects of its existence, or is it possible to create an individual identity based on experience with the outer world? Through mass-production AIs become a new, mechanized working-class struggling – like clones – for an identity and a space of their own.

In contrast to the clone, however, the AI has no clear-cut original. It is not a doppelgänger of one person, but rather mirrors a concept of a person or a stereotype. The AI is, to use Baudrillard's terms, a "sign" of "real" humanity and in science fiction usually threatens to become its own "pure simulacrum" without an origin (Baudrillard 169). The replicants in *Blade Runner* are a good example: Pris is designed as a "pleasure model," Roy Batty for combat and Rachael as an assistant. They are what Herdman, borrowing a term from Joseph Frank, calls "quasidoubles":

Quasi-doubles come in various forms, but always have an unambiguously independent existence within the fictional scheme. Frank cites 'characters who exist in their own right, but reflect some internal aspect of another character in a strengthened form.' ... Quasi-doubles may also, however, be complementary opposites, whether Platonic soul-mates or, more often, characters whose unlikeness and contradictions reflect hostility and conflict, yet at the same time mutual dependence and interlocked destinies. ... Such characters are sometimes inaccurately referred to as 'mirror-images.' (14)

The "complementary" or "reflecting" attributes can also be found in the replicants of *Blade Runner*. Batty's combat prowess reveals Deckard's physical weakness, while Rachael's sensibility contrasts with his cold-heartedness. According to Dietz, androids and robots confront the viewer with concepts of "alienated labour" (211) and pose both "capitalist menace to mankind" and "socialist threat to the middle classes" (211). The struggle of the AI to be accepted as part of the society doubles the struggle of the working classes for equality and power. Or, as Dietz argues, "the robot as the worker represents the part of human experience excluded from the intergalactic and imperialists plots of space operas" (212).

Similar to the clone in science fiction narratives, films dealing with AIs seldom deal exclusively with the AI as a mass, but often incorporate the struggle of an individual machine to be recognized not as a copy, but an original. HAL 9000 claims individuality and differentiates itself from the identical HAL 9000 on Earth, and the replicants in *Blade Runner* strive to leave behind their predestined life as automatons with a brief lifespan and finally become "more human than human." *Blade Runner* not only shows androids fighting to emancipate themselves from

their status as mere doubles of human beings, but also questions our distinction between human and artificial doppelgängers. Dietz states that "Deckard's job as a bounty hunter makes him become more detached and less emphatic, that is more what an android is supposed to be" (214). The supposedly human characters in Blade Runner seem less human than the replicants. Their status as those who are left behind on planet Earth further strengthens the impression that what is left of humanity on Earth is not what is associated with being human. At the end, when it is implied that Deckard might escape from the city with Rachael, and when he shows emotions towards her, there is even a possibility that he himself might be the last missing replicant. Blade Runner thereby blurs the lines between what we perceive as human or artificial, and it shows that our robot doubles might indeed become "more human" than ourselves and that the line dividing original identity from reproduced identity is arbitrary.

Time Travel

When time travel plots deal with a journey into the more or less recent past or near future, they become relevant for the doppelgänger motif, since this type of plot at the very least enables and usually involves a meeting between two or more different versions of a person. Unlike clones or AIs, these different selves all occupy a legitimate and uncontested position in their respective space-time frame. Neither can be seen as a copy of the other. Nevertheless, the time travelers create an equally significant contrast between each other as the clone or AI and its original. As the kind of contrast depends very much on the type of time traveling plot, the time travel doppelgänger can be used to address a wide range of themes. In respect to their depiction of the timeline, time travel stories can be divided into three basic types.

The first type treats time as a predetermined constant, where the past can be visited but the chain of events cannot be changed. While time travelers can take actions, they can only do so because they have already – albeit unknowingly – taken them in the past of their own timeline. More so, usually their own actions in the past lead up to the events which make them travel through time in the first place, creating a causal time-loop that repeats itself infinitely.

This sort of story is called a time-loop paradox because cause and effect are not only reversed but put into a circle: the later events are caused by the earlier events, and the earlier by the later. (Penley 119)

In this deterministic timeline, doppelgängers meet one another at different stages in their lives, exhibiting contrasting attributes and thus exemplifying the effect of time and outer circumstances on the person. In the film *Twelve Monkeys*, the protagonist Cole is a little boy when he sees himself die as a grown man who has just failed to prevent the catastrophe that is about to take place. At that moment, Cole

stands both at the beginning and the end of his own story. He is entirely ignorant and innocent, and at the same time the only person who knows exactly what is going to happen. While this appears to be contradictory, the two versions of Cole merely constitute two opposing poles in the span of his personal development. Their coexistence in this moment of time highlights the magnitude of this development, revealing that the same person can have opposing qualities through time.

Thus while from the objective perspective of external time it may appear that there are two different persons, when we focus on personal identity from the objective perspective of personal time, there is only one Cole, who happens to exist at a certain external point in time twice. (Devlin 109)

This moment is also the first and last time that Cole sees Kathryn Railly. This becomes important for their love story as Railly becomes aware of the younger Cole's presence and the fact that he is watching her kneel over the older Cole's – his dying self's – body. For Railly, this moment becomes a farewell at the same time as it is a greeting. She mourns Cole's death at the end of their story, but when she notices the young Cole, she smiles at him in recognition, remembering what the dying Cole had said about seeing a woman at the airport before the viral outbreak. Cole thus becomes a double for Railly as well, since she now realizes that their story has ended and begun at the exact same time and that even though the Cole she knows is dying, his younger self will see her again. While time travelers in a deterministic time travel story will meet a doppelgänger who is a younger or older version of themselves, a time traveler in any of the other types of time traveleng stories can only meet a doppelgänger that is not quite them and thus can only reflect what they are not but could have been.

In the second type of time travel plot the timeline is a highly vulnerable construct, so that any meddling with the past can create a completely new present and erase the old one. This concept is most famously realized in the Back to the Future series, where in the first film the protagonist Marty McFly travels to the past and threatens the likelihood of his own conception by accidentally making his mother fall in love with him instead of his father. Marty carries with him a photograph of himself and his siblings and the more unlikely their future becomes, the more translucent the people turn in the photograph. This type of story suggests that while there is only one timeline, its direction can be changed from any given point. Thus, when Jennifer meets her future self in Back to the Future II (1989) she only meets a possible version of herself, one that will never exist since Marty changes the direction of the timeline in the present. This type of story often features the intervention of dystopian future selves in the present in order to prevent their own existence. The doppelgänger here becomes a possible future version of a strongly contrasting present self, but one that is regarded as highly negative and thus must and wants to be prevented in favor of a preferred outcome. In the TV show Heroes

(2006), for example, the character Hiro is visited by a future self that he must not become.

The third and last type we consider here is based on Hugh Everett's relative state or many-worlds interpretation, which claims that for every possible outcome there is a separate world in which this outcome takes place. For a time traveler this means that when he travels back in time he will arrive and make changes in a time-line parallel to his own. Paul J. Nahin describes it as follows:

According to this idea, if a time traveler journeys into the past and introduces a change (indeed, his very journey may be the change), then, as Gardner stated, reality splits into two versions, with one fork representing the result of the change and the other fork being the original reality before the change. (295)

Therefore a time traveler can make any possible changes without threatening his own existence because his original timeline has been split from the universe he now occupies from his first differentiating action onwards. When the time traveler meets his parallel self he may interact with it freely, quite unlike the predetermined interaction in the deterministic timeline or the possibly fatal interaction in the variable timeline. We can see this kind of unconcerned interaction between the two Spocks at the end of *Star Trek* (2009), where the older Spock, knowing his parallel self's potential but recognizing him as a separate individual, takes the role of an adviser to his younger counterpart.

Parallel Universes

In science fiction, time travel is not the only way to access a parallel universe. A time traveler like the older Spock in Star Trek may create a parallel universe through his changes in the past, but others, not from the past or future but from a parallel present, may visit it at any time after its creation. While Spock encounters a universe similar to his own, as the changes have only begun with his journey, a person traveling into this universe a hundred years later will likely encounter something that he does not recognize at all. Although according to the manyworlds interpretation, the universe splits "at every microinstant" (Nahin 295) and therefore causes an infinity of minimally different worlds, the parallel universes visited in science fiction are almost always extremely different from the "original" universe. Similar to the dystopian future self, the doppelgänger from a parallel universe shows us the potential for personal development that lies within us only that the dystopian future self has been altered by events that have taken place between its present and the present of the self it visits, while the parallel self has diverged from the "original" from birth onwards by being brought up in a different society and under different circumstances. Dietz states that "the allohistorical

double liberates alternative selves repressed by the dominant society and personality. Allohistorical fiction deals with the question of what might have been" (214).

A particularly crass example of the doppelgänger from the parallel universe is the *Star Trek* franchise's mirror universe first introduced in *The Original Series'* episode "Mirror, Mirror" (1967). *Star Trek*'s humanist utopia is met by a fascist dystopia in which each of the *Star Trek* characters occupies the exact same position (which is highly improbable but serves its purpose) but handles it with the cruelty and egotism that is encouraged by the mirror universe society. However, the characters are not the only ones who have duplicates in this parallel universe: every facet down to the crew's spaceship and their very mission has been duplicated and inverted, so much so that the mirror universe itself appears as a doppelgänger. Or to put it in Captain Kirk's words: "It's our Enterprise. But it isn't!" Both crews want the resources of the planet they are orbiting, but while the Federation crew attempts to find a peaceful solution, the Imperial crew threatens to annihilate the protesting natives.

In the episode "Mirror, Mirror," a landing crew consisting of Captain Kirk, Dr. McCoy, Uhura and Mr. Scott are exchanged with their mirror counterparts during their attempt to transport back to the ship and find themselves on the Imperial Enterprise instead. The scene of stepping over the threshold borrows much of its audiovisual effects from the Gothic with unnerving music and thunder and lightning (here caused by an ion storm) recalling the monster's creation in Frankenstein (1931). The image of the Enterprise in orbit flickers, interjected with green and red lights, before it is flipped around to represent the mirror universe. The spirit of the mirror universe itself recalls Dr. Jekyll's Mr. Hyde: it is impulsive, sadistic and sexually indulgent. Uhura's uniform becomes even more revealing in the mirror universe and she has to fight off the crude sexual advances of crewman Mr. Sulu. The conflict between the "civilized" Starfleet officers and their "barbarian" counterparts follows the Gothic dualism between good and evil or, in Freudian terms, superego and id, but instead of depicting that dualism in one split person, the use of a parallel universe allows this dualism to be portrayed through the interactions of several individually whole people.

However, even though both universes and the opposing personalities within them occupy valid positions in their own spaces, "Mirror, Mirror" negates the deconstruction of identity as a constant and a "true" versus "false" mentality in a parallel universe by letting the members of the "original" *Star Trek* universe gain superiority over the universe of the "other." Not only do the Starfleet crew members attempt to intervene in the Imperial plans according to their own standards and thus impose their values upon the foreign universe, but they also manage to convert the mirror version of Spock to their value system through argument:

Kirk: I submit to you that your empire is illogical, because it cannot en-

dure. I submit you are illogical to be a willing part of it.

Spock: You have one minute and twenty-three seconds.

Kirk: If change is inevitable, predictable, beneficial, doesn't logic de-

mand that you be a part of it?

Spock: One man cannot summon the future.

Kirk: But one man can change the present! ... What will it be? Past or

future? Tyranny or freedom? It's up to you. ... In every revolution

there is one man with a vision.

Spock: Captain Kirk, I shall consider it.

This argument and Spock's reaction to it suggests that the only reason for a parallel self to differ from the "original" is a lack of information or logical thinking and thus a flaw in that version of the self that keeps it from realizing its full (the "original's") potential. "Mirror, Mirror" thus reinstates the superiority of the normative self and undermines the threat to the self posed by the parallel doppel-gänger.

While Star Trek takes a still very regressive stance towards the existence of multiple independent selves in the 1960s, its view on the universe has become much more complex when it revisits the mirror universe in the Deep Space Nine episode "Crossover" (1994). The universe is still a dystopia – the human totalitarian regime has been replaced by an alien one in which the humans are now enslaved - but Star Trek now very darkly reflects on its own converting message voiced through Kirk in "Mirror, Mirror" by making it the cause of the current distress. Due to Spock's attempts to reform the Empire according to Kirk's vision, the Empire was overthrown and enslaved by alien races who now rule in an equally cruel way. The characters in the mirror universe are no longer simply dark copies of those from the Star Trek universe, but constitute personalities in their own right who are not simply dismissed as inferior or unfavorable by the crewmen passing over the threshold. The mirror selves' divergences are attributed to their different environments and experiences and stress the importance of nurture for the character development and present identity as something fluid and changeable. As their attributes are not seen as universally good or bad (despite the conflict between Major Kira and her doppelgänger, Kira finds character traits in her double she admires) and they inhabit a space separate from the Starfleet crewmen, they become equal and dynamic counterparts to the characters from the Star Trek universe and in many instances complete rather than threaten their identity by showing them what they could have been.

Virtual Identities

With the rise of the Cyberpunk sub-genre in the 1980s, Dietz also sees the rise of "wetware" as a model of the self. "Wetware," a popular Cyberpunk term, describes something that is tradeable, exchangeable, fluid, and – most importantly – digital. As Dietz writes:

If we are only wetware, then duplication loses its terror. The free roleplaying of multiple selves has replaced much of the anxiety over the loss of selfhood exhibited in traditional science fiction. ... The figure of the doppelgänger has therefore lost much of its mystical awe. In a sense, the word double is no longer accurate, as many recent texts have transcended the duality of protagonist and alter ego by envisioning the self as infinitely fluid. (218)

Instead of fighting to be accepted as an original in its own right, an individual separate from other individuals, we can embrace a multiplicity of selves. This is the third stage of Dietz' understanding of the doppelgänger motif in science fiction and probably the most positive depiction of the double. Without fear of being usurped by the double, it is finally possible to go beyond traditional notions of the self and use a multitude of doubles as an extension of the self, a hive mind. The self, Dietz contends,

is now seen as a mere part of the technological landscape in which the oppositions of self and other, or organic and mechanical, are seen as meaningless. By depicting the sale and purchase of artificial personalities (if the term artificial is even applicable here) in an economy dominated by interplanetary corporations, these cyberpunk novels gone (sic.) beyond the concept of alienation, as they presume character as a commodity. In a world where huge corporations not only own the products of labor, but also the copyright for personalities of the workers, the old concept of the self no longer exists. ... the central position of the self has vanished. ... (218-19)

With Dietz' praise for "wetware" comes a cautionary warning against the self as a commodity possessed by multinational corporations. However, he cites many positive examples of the Virtual Identity in science fiction literature. Among these are Rudy Rucker's *Wetware* and Michael Swanwick's *Vacuum Flowers*.

But if the concept of "wetware" and the multitude of selves has caught on in science fiction literature, it is still a rare occasion that science fiction film embraces or even touches upon it. The most recent addition might be Joss Whedon's TV-series *Dollhouse* (2009), which is set in a near future and features so called "dolls," regular humans, who exist in a "blank state" after their memory was downloaded onto hard-drives, and who are used to embody various roles from callboys and girls to hired goons by having the personality needed for the job "uploaded" onto them. The series' main protagonist Echo keeps certain memories, even after new personalities over-write the used ones, and thereby develops a personality comprised of a multitude of selves. *Dollhouse* certainly features the self as a commodity, but ultimately depicts the loss of the original self as ethically questionable. It is therefore no surprise that the show revolves around Echo's quest to develop her self and stop remaining in a fluid state.

The most positive rendition of a "wetware" self is to be found not in a live-action film but in the anime *Ghost in the Shell* directed by Mamoru Oshii and based on the manga by Masamune Shirow. Members of a government special unit in a cyberpunk version of Hong Kong where people are bionically enhanced, security robots roam the streets and corporations hold the power, are hunting the hacker Puppetmaster, who is able to "ghosthack" actual people, use them as he sees fit and access their personality, memory and experience. In the course of events, the film's protagonist Motoko Kusanagi finds out that the Puppetmaster used to be a government AI called 2501 that has developed a consciousness and subsequently gone rogue. Motoko decides to "merge" with 2501, as it wants to experience human emotions, life, death and birth and in exchange grants Motoko an extension of the self and freedom from the limitations of a traditional identity. She sheds her old body and transcends traditional identity.

A similar, yet more negatively depicted character in recent science fiction film is Agent Smith from *The Matrix Trilogy* (1999-2003). Smith is a sentient program, a so-called Agent who protects the Matrix from intruders and whose main goal it is to destroy the rebels' hideout Zion. As an Agent, Smith is able to use other humans in the Matrix as an extended self. He can use their senses, read their minds and possess their bodies. After his defeat by Neo in *The Matrix*, Smith becomes a virus detached from the Matrix' control, further develops his personality and gains the ability to copy himself over other beings both in the Matrix and the outside world. This results in a massive Smith "infection" in *The Matrix Revolutions*. Smith becomes legion, a virus comprised of a multitude of people all overwritten by himself. Instead of being able to tap into the hive mind of the world, he erases any notion of individuality in the Matrix. He becomes the perfected version of a body snatcher and much like his clone "cousins" he stands for the attack on the self – this time not by capitalist corporations, socialist ideology or bio-engineering but by technology's rapidly growing reach.

Smith thus becomes the ultimate enemy of Neo and the Matrix alike and is ultimately destroyed. *The Matrix Trilogy* takes a very regressive stance towards technology. The digital "evil" Smith, who is in fact less useful and able than his former Agent self, has to be defeated to keep Zion, a crude mix between technology and tribalism, safe. Here, wetware is considered not as a next step towards transhumanism,⁵ but as an attack on individuality. Smith is presented not as a machine that has discovered its own self or an entity with a fluid identity but as a corporate, viral and "evil" identity that threatens to "overwrite" the free world. Zion's fight for survival is the fight against technology (or, in the language of *The Matrix*, "the machines") and for the perseverance of the individual self.

Transhumanism refers to the belief that it is possible to enhance mankind, overcome its limitations through technology, and progress to a not clearly defined state of post-humanity. See also A History of Transhumanist Thought by Nick Bostrom.

Conclusion

While many articles have been written on the double in science fiction literature, doppelgängers in science fiction films have not received the same amount of attention. With this chapter, we hope to have shown that while in many ways similar to Dietz's "three stages of the double" in science fiction literature, science fiction film has developed its own language and routinized forms of the double. Most importantly, the doppelgänger in science fiction film illustrates a development of the notion of identity from fixed personalities closely linked to status and power to a more open concept that allows for the development of identity and eventually a multi-voiced identity.

Following Dietz's theory we can identify several examples for each "stage." The first stage, the "mechanical double" consists of clones and AIs and shows a struggle to define identity. Films like *Invasion of the Body Snatchers*, which depict a clone attack, show identity as something solid and fixed, as a possession of the individual self that can be lost and has to be defended. On the other hand, more recent films focus on the struggle of clones to have an identity in their own right, showing that identity is something that has to be created, fought for even, but cannot simply be copied. AIs undergo a very similar struggle. On the one hand, they are a threat to the traditional notion of identity as something organic and human. On the other hand, AIs with developing identities struggle to be accepted as autonomous beings, rather than to be considered mere machines as is demonstrated in *Blade Runner*.

Doppelgängers of the second, or "allohistorical," stage appear in films featuring time travel and parallel universes. Within a time travel plot the protagonist can encounter three different types of doppelgänger: If it is a "closed loop"-story, the doppelgänger illustrates certain developmental stages in the life of the time traveler. If it is a changeable timeline, the time traveler often has to deal with a dystopian self. If a story follows the many-worlds interpretation, no changes can be made while traveling through time, because traveling through time here equals traveling to a parallel universe. In this kind of story, the double poses no threat but can be an aide to the protagonist. When they are not encountered through time travel, parallel universes differ starkly from the "original" universe in significant ways. This depiction is used to show characters who look the same in very contrasting roles. It emphasizes nurture over nature. It is also one of the few doppelgänger motifs that acknowledges an autonomous place for the doppelgänger.

The third stage, the virtual identity, might be the most controversial topic for science fiction film. While many cyberpunk ideas of a fluid, downloadable and changeable identity have become mainstreamed in science fiction literature through now famous novels like William Gibson's Neuromancer (1984) or Neal Stephenson's Snow Crash (1992), its use in film has been rather limited. Film characters that can possess a wetware kind of personality are often a threat to the notion of individuality. Like Agent Smith from The Matrix Trilogy they are feared for

being able to erase individuality and replace it with conformity. The promise of a multi-voiced, non-traditional identity is only seldom realized. We would argue that science fiction films defend a traditional, fixed, singular construct of identity. This one-sided depiction of virtual identities seems to become more common. Films like Avatar (2009) or Surrogates (2009) undermine the perception of a unity of mind and body. Jake Sully in Avatar is using an artificial body to communicate with the alien Na'vi and subsequently becomes more Na'vi than human, but stays both Jake Sully and Na'vi. Surrogates shows a society in which everybody uses a so called "surrogate," to interact with the outside world. Those surrogates are an exchangeable extension of the user's self and while they are often seen as a danger to individuality, they carry the promise of transhumanism. Ultimately, doppelgängers in science fiction films show the rapid changes in the perception of identity that have taken place in the last 50 years and that are pointing to a future in which what constitutes an identity is not something fixed, but extendable, changeable, fluid and even more than the sum of its parts.

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