Prometheus by the Bay: Hollywood and tech capitalism in Silicon Valley

Silicon Valley is, broadly defined, a region in California to the south of the San Francisco Bay that houses the headquarters of many of the largest technology companies in the world, including Apple, Facebook, Google, Hewlett-Packard, Oracle, Cisco, PayPal, Adobe, Intel, and Yahoo. Apple is ranked by *Fortune* as the third largest company in the world in revenue terms; Alphabet (Google's parent corporation) the fourth, and Facebook fifth in terms of market value; with Intel and Cisco also in the top twenty according to market value (Fortune 500). Metonymically, Silicon Valley is not merely a location where such tech firms are located, but is also the local tech industry itself. As a group, its corporations spend millions of dollars each month lobbying Congress and the European Parliament (Cooper and Hirst). It is, therefore, no great stretch of the imagination to suggest that Silicon Valley technology companies exert a defining influence over the early twenty-first century world, economically, politically, and culturally. Informed by libertarianism, individualism, and a Hayekian faith in the free market, Silicon Valley's leaders such as Mark Zuckerberg, Steve Jobs, and Elon Musk tend towards the messianic, presenting their products as means through which the world will be changed, while hoarding cash reserves and aggressively pursuing or crushing rivals (Cohen, 157; Hunter and Balakrishnan; Rodriguez; Wong, Solon; Solon, Farivar; Shimal). As a consequence of the rapid rise of such corporations, Silicon Valley now ranks as an equal to Wall Street as an economic clearing house, desirable employment destination, and as a synecdoche for a particular manifestation of American capitalism.

Naturally, the rise of these tech-capitalist corporations to such a near-hegemonic position has prompted cultural responses. In 2018 Martin Eve and Joe Street identified a strain of recent literature that they dubbed the "Silicon Valley novel" (81-97). Concerned with both the geographical area and the periodising moment of the 2010s, they argue that such novels offer a dystopian vision of twenty-first century work and life in Silicon Valley,

where individuals are dominated by the major corporations (both fictional and real) that run their lives and work. Hollywood has also responded to Silicon Valley. In addition to a spate of documentary films, the 2010s witnessed biopics of Apple's co-founder Steve Jobs: *Steve Jobs* (Danny Boyle, 2015), *Jobs* (Joshua Michael Stern, 2013); a feature film depicting Facebook's early years: *The Social Network* (David Fincher, 2010); comedies set in Silicon Valley corporations: *The Internship* (Shawn Levy, 2013); and dystopian satires of Silicon Valley culture: *The Circle* (James Ponsoldt, 2017).

Most important, a sequence of Hollywood contemporary science-fiction movies identify Silicon Valley capitalists as a new type of villain. These films – *Terminator: Genisys* (Alan Taylor, 2015), *Ant-Man* (Peyton Reed, 2015), and *Venom* (Ruben Fleischer, 2018) – criticize the impact of Silicon Valley-based megacorporations: a critique that operates both diegetically and more broadly, in the grand tradition of cinematic science fiction touchstones such as the Cold War alien invasion films that allegorized fears of Communism in 1950s America. In a film's willingness to think the unthinkable about our shared present (or potential future), the science-fiction setting creates what the film scholar David Skal called a 'safe outlet' for our shared fears (18). As important, the films locate our shared cultural anxieties firmly within the geographical boundaries of the San Francisco Bay Area and the modus operandi of Silicon Valley corporations, culture, and ideology. Outlined in a series of plots that hinge on the hubristic use of tech and the resultant unleashing of an existential threat to humanity, these Hollywood films – all of which reaped over $440m at the box office – present Silicon Valley in thrall to a Promethean drive overwhelmed by capitalist imperatives.[1] The films examined here combine to interrogate the neoliberal faith that the free market and the profit motive will compel both individuals and corporations to strive to better both themselves and by extension the world. Instead, they express profound fears of Silicon

Valley's impact on both the market and the human body itself. Neoliberalism and tech-capitalism, they suggest, will create a dystopian posthuman future.

The specificity of this geographic location is crucial, not least because each film identifies the source of the threats within private corporations linked to Silicon Valley technological research: for *Terminator: Genisys*, humanity's downfall lies in the quest for domination of personal computing; and for *Venom* and *Ant-Man*, Silicon Valley's union of turbo-capitalism and technological solutionism combine to threaten humanity in its entirety. All make use of the San Francisco skyline in order to locate the action in a location that sits firmly in the spectator's sense of geographical reality. For example, whereas previous films in the Terminator franchise locate their core action in Los Angeles, *Genisys* relocates Cyberdyne's headquarters and the bulk of the action to the San Francisco peninsula, with the design of its buildings based on the headquarters of Oracle, a consequence of the relationship between the film's producers David and Megan Ellison and their father, Larry, Oracle's Chief Executive Officer (Broxmeyer, 15; Wegner, 115; Acuna). Coupled with the fact that the films' villainous corporations are located in the Bay Area both binds the films together and encourages an analysis that emphasizes their relationship with the dominant corporate force in the Bay Area, Silicon Valley. Paradoxically, this relationship is strengthened by the fact that the vast majority of their filming did not actually take place in the city, with other cities and computer-generated images acting as stand-ins. Notwithstanding the occasional location shoot in San Francisco, the films essentially offer a simulacrum of a San Francisco that both exists (geographically) and does not exist (diegetically), aided by CGI of new buildings that house some of the films' key entities, heightening the symbolic meaning of the Bay Area to the films (Movie Locations; Scott; del Rosario; Lang and Kroll; Rampton).

The films also draw on two distinct lineages in cinema history. The first encompasses critiques of western capitalism, embodied most notably by *Wall Street* (Oliver Stone, 1987),

in which the rise and decline of American firms are dictated by shadowy groups of stockbrokers who see no ethical problem in using illegal methods to enrich themselves, an issue that returned to the forefront of the cinematic imagination in the wake of the 2007-8 financial crisis. The second is a series of films from the 1990s that expressed fears about the then nascent internet, the anarchic and subversive potential of hackers, and the threat of cybernetics to the inviolability of the human body that included *The Lawnmower Man* (Brett Leonard, 1992) and *Johnny Mnemonic* (Robert Longo, 1995). The Silicon Valley films pick up on one particular theme germane to both of these film cycles – that of anxiety about human beings losing control, whether it be to shadowy bankers, hackers, or renegade capitalists. Specifically, they warn us of the instability of the new worlds Silicon Valley hopes to create, encouraging wariness of tech corporations' fidelity to a turbo-charged, hyper-individualist, and brutally acquisitive form of capitalism that emerged amid the clamor for deregulation in the period between the late 1970s and the 2000s (Springer, 203-218; Luttwak).

Set against this, a third, deeper tradition underpins such critiques: fears surrounding the potential of science – and by association technological progress – to wreak havoc on humanity. The clear linkages in these films between tech companies and various unfortunate events, running from the relatively mundane to the apocalyptic, indicates that contemporary Hollywood approaches Silicon Valley much as it might a movie monster and, relatedly, that it positions its tech-entrepreneurs as modern day "mad scientists." Identified as a particularly strong narrative trope in horror films in the period from 1931-1960, Tudor (1989) noted that after this period existential threats were more sexualized and psychotic in nature. Such accounts can popularly be traced, amongst others, to films such as *Frankenstein* (James Whale, 1931) and *Dr. Jekyll and Mr. Hyde* (Robert Mamoulian, 1931) – where for Tudor (29) 'good' characters 'are lent rather less narrative and emotional credibility than are the

notional [scientific] villains" - although the lineage of "the mad scientist" is, as Christopher Frayling notes, long and problematic (Frayling). However, whereas Victor Frankenstein was a lone figure attempting to discover new forms of knowledge for the "sake of science" (however misguided his actions were), the Silicon Valley films present the fate of humanity in the hands of private corporations driven by a relentless, catastrophic pursuit of profit. Scientific and technological experimentation is therefore not present as the obsessive and potentially dangerous action of an individual but plays out within the broader logic of modern capitalism. These films both build on earlier conceptions of the cinematic mad scientist, who tended to be scientific and technological innovators that went 'beyond the bounds of propriety…typically in an unrestrained quest for scientific knowledge, without proper regard for the potential consequences' (Booker, 270). Instead, the films present a dangerous mixture of avarice and the coveting of political power and influence as key motives.

Each film references the Prometheus myth and the inattention to the moral and ethical dimensions of technology-driven experimentation – in short, a nightmare combination of turbo capitalism with scientific experimentation – as a central cause of humanity's potential demise. But the key dimensions are here not merely ethical and moral; instead, emphasis needs also to be placed on the material impact the corporations have on both humanity and the ecosystem of which they are a part. Given this stress on the catastrophic impact on humanity and, more broadly, the planet, the films under consideration here necessitate a consideration of the *impact* of the actions of the Silicon Valley "monster" in broadly ecological terms. As Andrew Dobson has noted in relation to green thought and interventions to the environment:

> if we cannot know the outcome of an intervention in the environment but suspect it might be dangerous, then we are best advised to, from a green point of view not to intervene at all (78).

This conservative and cautious approach to any human-led interactions with nature and interventions in the ecosystem has been termed the "Precautionary Principle." In essence, the principle calls for the scrutinsation of scientific or technological developments and proposes a risk-averse path where the potential long-term outcomes might be unknowable or open to question. For Dobson the "implied impossibility of knowing enough" in relation to any given development is key to understanding a "hand-off approach to the environment" as espoused by much green thought (78). This echoes Günther Anders's stress on humanity's relational obsolescence to technological developments in *Die Antiquiertheit des Menschen Volume 1*, where he explored, as Elke Schwarz noted, humankind's 'scope for producing outstrips our ability to imagine the impact and take responsibility' (96). In her analysis of his work in relation to contemporary developments within AI and the human capacity for appropriate moral responsibility, Schwarz (104) sees Anders's work as a helpful framework through which he 'identifies a discrepancy between the products we make and our ability to imagine their impact on and within the body politic and, in turn, an inability to take responsibility for the consequences we produce through our artefacts'. Key to the analysis presented here is how the failure of the Silicon Valley corporations in *Terminator: Genisys*, *Venom*, and *Ant-Man* to adopt such an approach potentially leads the world to the precipice of environmental and human destruction. For example, *Genisys* offers viewers opportunity to consider Anders's theses concerning the technological obsolescence of humanity in the face of increasingly intelligent computers (Schwarz, 96-7). As such, the film warns that humans will become subject to AI logic unless we destroy our ill-begotten creations.

In fact, these examples demonstrate that rejection of the precautionary principle reflects a Silicon Valley ideological trope, embodied in Facebook's early mantra of "Move Fast and Break Things" and Silicon Valley's frequently cited aphorism, "it's better to beg for forgiveness than to ask for permission" (Murphy; Kelvey; Lemann). This links to the profit motive that drives the corporations at these films' heart. When presented with an innovation, the prime movers in these corporations think not of moral or ethical concerns – and crucially not of the material impact of what they are doing – but only of the innovation's potential for financial gain. Finally, each film expresses profound fears about the posthuman future, not least of the alienating impact of the melding of the human body with technology. In some senses the augmented humans of these science fictions are the evil stepsons of Steve Austin, the Six-Million Dollar Man, who experienced alienation from his fellow man thanks to the imposition of technology on his formerly broken body (Orpana, 100). All of the films muse about the weaponization of the posthuman being, referencing Donna Haraway's observation that, among other things, "the cyborg is intimately involved in specific histories of militarization" (Haraway b, 128-9).[2] Like Haraway, the films develop this relationship further, suggesting that its posthuman characters also sit on the intersections between patriarchy, capitalism, psychological and medical research, and cutting-edge technology. From *Genisys*'s suggestion that the posthuman Earth might involve the demise of the human race to *Venom* and *Ant-Man*'s warnings about human augmentation, each urge humans not to tamper with their natural state. As such, this article argues that these films, in their warnings about the perilous outcomes of experiments with the human body, suggest that Silicon Valley corporations willfully ignore the precautionary principle and in doing so accelerate humanity's trajectory towards its demise.

Prometheus the Capitalist

These films express their warnings about Silicon Valley through a series of cinematic villains, all of whom reference the Prometheus myth and the ubermenschen heroes of Ayn Rand's fiction, the latter a major influence on many Silicon Valley technology entrepreneurs. Their possession of specialized knowledge, developed through their mastery of either the internet or other computer wizardry, renders them the cinematic heirs of Victor Frankenstein. The psychologist Stuart Vyse argues that cinematic mad scientists tend not necessarily to be psychopaths; more that:

> their goals are wrong according to the moral structure of the story. They are too driven by curiosity to know—almost in a Garden of Eden sort of way—certain knowledge that shouldn't be theirs, and yet they want it…. They're almost infatuated or intoxicated by motivations that get us all in trouble (Romm).

Their willingness to toy with humanity and ignore the precautionary principle in service of their technological goals inevitably end in disaster. Another long-term staple of the science-fiction movie genre, the scientist is a figure whose rationality and reliance on science often leads to peril or destruction because of their willful flouting of the precautionary principle (Sontag, 45-6, 48). Applied to scientific and technological experimentation, this principle warns us to be mindful of the unexpected and perhaps unintended consequences of new scientific discoveries: thus, a cure for one virus might cause a mutation and the organic development of a more resilient and dangerous strain. Such outcomes are central to the plot of particular strands in zombie films, where scientific and/or military experimentation produces viral infections that lead to infections that spread exponentially and rip the social, cultural and physical structure of society apart (Hunter a, 114-128).

These films add an extra dimension to a recurrent theme in horror film, namely the disastrous consequences of reckless scientific experimentation (Hunter b, 296-7) These Silicon Valley villains do not ignore the precautionary principle simply because they are too

enamored with the scientific potential of their experiments; they are also driven by capitalism's profit motive. *Genisys* thus offers a terrifying vision of what will happen should humans fail to question why they are building such powerful AI and think only of the potential profits: rather than 'Promethean shame' at our fallibility in the face of this superior intelligence, we will experience only extinction at its hands (Schwarz, 101). Like the tech entrepreneur Elon Musk, *Venom*'s villain, Cameron Drake, meanwhile channels profits from his company into space exploration.[3] Some of his extraterrestrial explorers discover alien "symbiotes" who appear to be shapeshifting, sentient slime molds. These malevolent symbiotes need a human host in order to survive Earth's atmosphere. Drake hopes to use them to enable humans to live without earthly gases. He cares little for ethics, insisting that the symbiotes be tested on (often unwilling) humans, and knowing that the process often kills the human subjects, using such tests as a punishment for whistleblowers. Exhibiting a Nietzschean belief that God has abandoned humans, he promises one of his human test subjects – knowingly named Isaac, whom Drake misinterprets as a Biblical hero for willingly laying down his life – that "this time, *I* will not abandon us". Predictably, he cannot comprehend the symbiotes' greater cunning, and his hubris almost leads to the destruction of the human race.

Here, *Venom* interrogates the relationship between scientific experimentation and capitalist accumulation: Drake's thirst for profit simply overrides any fidelity to scientific ethics. He reigns supreme, Prometheus unbound, representing science's subordination to capitalism. Here *Venom* turns to another Silicon Valley touchstone: Ayn Rand. Rand's Silicon Valley acolytes include Travis Kalanick, Uber's driving force, and Peter Thiel, one of Silicon Valley's most influential investors (Carr; Bilton; Cohen, 142, 158, 170-1, 176). More broadly, Silicon Valley is driven by Randian selfishness (Martínez, 232). Rand sketched out a philosophy in a number of novels, most notably (and lengthily) *The Fountainhead* (1943) and

Atlas Shrugged (1957). In essence, "objectivism" as she called it, appealed to the self-interest of the individual for the efficient running of society. To her, the rich and powerful existed because of their own genius, rather than any structural advantages that came to them courtesy of birthright (such as familial wealth) or the networks they inhabited (such as through family ties or education). Government, meanwhile, stole its taxes from these geniuses in order to redistribute goods and services inefficiently to the workshy poor. Her two signature heroes, *The Fountainhead*'s Howard Roark and *Atlas Shrugged*'s John Galt, are individualists par excellence, classically masculine characters with lantern jaws and similarly immovable principles. They despair of lesser humans' emotional feelings towards other human beings. Galt turns his back on society, compelling other business leaders to follow suit, with the aim of replacing collective endeavor with Rand's objectivism.

Like Drake, *Ant-Man*'s chief antagonist, Darren Cross, believes that he has transcended the laws of man and even the laws of nature. He seeks to weaponize Hank Pym's shrinking technology for use in surveillance, industrial sabotage, and eventually an army. Pym is aghast, not least because as a consequence of a boardroom coup – another symbolic feature of late capitalist enterprise – he cannot prevent Cross actualizing his plan. Cross's ubermenschen activities include meditating each morning (like Steve Jobs), freely experimenting on animals, and insisting like the CEO of the failed Silicon Valley medical corporation Theranos, Elizabeth Holmes, that his underlings work around the clock to reach his goals while taking a paranoid interest in security (Isaacson, 50; Schlender and Tetzeli, 33; Carreyrou, 21-2, 85, 102, 135-6, 151, 179-80, 209, 263, 281, 296-7). Naturally, this fascistic tech-bro sells his technology to the highest bidder, which happens to be the MCU's villainous Hydra organization – reinforcing the message that moral or ethical questions cannot override the profit motive in Silicon Valley.

Like Eddie Brock, *Ant-Man*'s divorcé hero Scott Lang, represents the Bay Area's forgotten working class. At the film's start, he emerges from San Quentin prison after serving time for breaking into a multinational bank's HQ in revenge being fired for whistleblowing. His crime was to hack the bank's security software in order to return money it stole from its customers: a tech-enabled Robin Hood-style redistribution for which the bank crushes him. He teams up with Pym, who instinctively mistrusts not only Cross but also Tony Stark and the Avengers, whom he considers to be playing games with their technology without regard for human life. In so doing, Pym confirms himself as representative of a more humane, less rapacious capitalism, one that is skeptical of both unfettered power and government intrusion. The film also plays on the early screen persona of Pym's actor, Michael Douglas, which was defined by classic liberal roles such as the doomed Vietnam War-era university dropout Jerry in *Summertree* (Anthony Newley, 1971), the cameraman who attempts to inform the public about the real dangers of nuclear power in *The China Syndrome* (James Bridges, 1979), and the likeable San Francisco homicide detective Steven Keller in the long-running television show *The Streets of San Francisco* (ABC, 1972-76). Pym also appears to riff ironically on Douglas's signature role from the 1980s: *Wall Street*'s rapacious, amoral stockbroker, Gordon Gekko.

The perils of turbo-capitalism similarly drive *Genisys*. Reflecting transformations in geopolitics since the end of the Cold War, Cyberdyne, its evil megacorporation that unleashes a robot-led apocalypse, is no longer simply yoked to the military-industrial complex but is primarily a consumer corporation, dedicated both to protecting the United States from nuclear weapons and to enabling Americans to unify their data storage siloes. Cyberdyne's titular operating system promises to bring its one billion users individual, singular online identities, always available, always online, and always accessible by the military-industrial complex, not to mention Homeland Security (Wegner, 121-2). Once this operating system goes online,

the path towards "Judgment Day" – the beginning of the end of the human race in the film series' diegetic world – is set. Here *Genisys* reflects 2010s concerns about Silicon Valley's blasé attitude towards government contracts and willingness to overlook moral and ethical concerns in service of greater profits, such as Peter Thiel's Palantir company enabling the Trump administration to pursue an aggressive anti-immigration policy through use of its data analysis software (Biddle and Devereaux).

In *Genisys*'s convoluted timeline, Genisys's transformation was facilitated by a future Skynet transforming the human resistance fighter John Connor into a cyborg who travels back in time to become a tech entrepreneur. More reminiscent of Schwarzenegger's Reaganite hard body of the 1980s than the lithe Terminators of *Terminator 2: Judgment Day* (James Cameron, 1991) and *Terminator 3: Rise of the Machines* (Jonathan Mostow, 2003), Jason Clarke's pumped-up athleticism represents a reminder of the unnaturalness of the Terminator's human phenotype and another reminder of male patriarchal dominance, both in Silicon Valley and society in general (Mizejewski, 152-7; Jeffords, 156). Connor 2.0 uses Cyberdyne's money to develop the polyalloy that forms the physical framework for a generation of robots that has limitless potential for the megacorporation and that will eventually destroy the human race. This allows him to begin work on the time machine that becomes the film's deus ex machina, suggesting that capitalism sows the seeds of its own – and indeed, the world's – destruction. He hoodwinks his employers to ignore any precautionary principles about AI's potential to replace rather than enhance humans (Schwarz, 99).

Connor claims that the company's technology will change the world. Naturally, of course, this 'changing the world' involves sinister outcomes that chimes with his employer's lust for profit to ensure that they think not of the potential for disaster inherent in their creation (Schwarz, 104). This notion is a frequent trope of Silicon Valley startups, linked to

two early Silicon Valley icons. Venture capitalist Marc Andreesson holds the sincere belief that such promises lie at the core of a successful business. Investment from Andreesson is often considered a sign of a company's vast potential, so it behooves entrepreneurs to emphasize aspects of their business that would appeal to him: hence their frequent insistence that their projects will change the world (Harrison; Cohen, 82-3; Andreesson Horowitz; Cision; Pein, 105-6, 193, 281). Similarly, Steve Jobs insisted that Apple's products were for people who "want to use computers to help them change the world" (Isaacson, 303). PayPal's founder Peter Thiel conceived his company as a 'conspiracy to change the world' and Mark Zuckerberg, whose company received funding from Andreesson and included Thiel on its board of directors, presented Facebook in comparable terms. So did Google founders, Sergey Brin and Larry Page (Pein, 226; Losse, 199-200; Cohen, 74, 122-3, 158-9). So entrenched is this in Silicon Valley that the television satire *Silicon Valley* (HBO, 2014-19) renders it a running joke, in which every startup founder insists that, no matter how mundane, his product (and they are invariably men) will make the world a better place.[4]

Genisys plays on both the Prometheus myth and the public's reliance on gadgetry that is so complex that they can only understand its suggested function and not its underlying technology. As John Connor (Jason Clarke) observes: "this is the world now. Plugged in, logged on all the time. They can't live without it." The film's heroine Sarah Connor realizes: "Genisys is a Trojan horse, Skynet's way into everything," prompting her son (who we only later learn is a cyborg) to reply: "These people are inviting their own extinction." Cyberdyne's chief technical officer, Danny Dyson, even calls Genisys "the ultimate killer app". Thanks to Connor's coding skills, this app is so complex that even the best software engineers cannot decipher it. Connor 2.0's confidence in his technology is so complete that it leads him to taunt Sarah Connor and Kyle Reese hubristically: "you can't kill what you don't understand".

The Posthuman Condition

These films also express profound anxieties concerning the posthuman condition, where cybernetic augmentation, gene therapy, or other alterations to the human body create a new and dangerous hybrid, leaving humans for the first time in recorded history at the mercy of an apex predator: the augmented Silicon Valley villain. All the films warn of the lethal combination of Silicon Valley turbo capitalism and Prometheanism from this bastard cyborg offspring that, in David Bell's words, "does not play by its father's rules," and constitutes an existential threat to humanity (Bell, 100). In this, the films add an extra dimension to the anxieties about the cyborg body identified by Simon Bacon in movie blockbusters that emerged around 2010 (267-76).

The nanotech John Connor plays a central role in this critique of posthumanism. After aligning with the military-industrial complex, Cyberdyne sets in motion a Möbius twist in the fabric of space-time, where nanotech Connor returns from the future in order to initiate a sequence of events that will enable the nanotech to be injected into the human Connor, placing him in an endless time loop and ensuring the destruction of humanity at the hands of Cyberdyne's cyborg army. As the political scientist Jeffrey Broxmeyer argues, the original Terminator "is an agent of neoliberal violence within a context of naked class warfare… Schwarzenegger's Terminator is the quintessential neoliberal Frankenstein" (4). Connor's transformation into a human-nanotech hybrid continues this critique of neoliberalism – albeit rather more literally – while adding a satirical comment on the human failings of tech entrepreneurs. Steve Jobs's human shortcomings were famously manifold (Isaacson, 5, 88-90, 120-1, 142, 157, 195, 223, 273-4, 365-6). Similarly, Facebook founder Mark Zuckerberg might be a superlative hacker and programmer, but he has multiple social failings. Indeed, the real-life Zuckerberg is frequently lampooned for his failure to measure up as a human being,

from his verbal slips (Brown) to his waxwork-like complexion (Allergic to my own Swag), to suspicions that he is, in fact, a lizard (Guarino), a robot (Sung; World News Media) (sometimes specifically Data from *Star Trek: The Next Generation* [Paramount, 1987-94; KEEM]) or plain simply not human (Solon). As such, tech capitalists like Zuckerberg already appear to possess certain posthuman traits. Connor 2.0 – like the symbiote-enhanced Drake – is so posthuman, however, that he cannot comprehend humanity itself. Like Facebook and Google, cyber-Connor "absolutely will not stop ever until Skynet rules this world". His operating system is even more hubristic, informing the humans, Bond villain-style, of the inevitability of their defeat only moments before it is destroyed.

Darren Cross harbors similar ambitions, using Hank Pym's shrinking technology to transform himself into Yellowjacket, a highly militarized soldier with the ability to shrink to insect size. Cross's vision is of an army of shrinking soldiers, all using his technology, which sadly affects its user's brain chemistry unless they wear protective headgear. Naturally, Cross eschews such precautions. Already unstable, he becomes increasingly messianic and hubristic, leading Pym's daughter to plead with him, "this is not who you are!" thus confirming his post-human status. His identity, like the human Connor, has been absorbed and destroyed by the new technology. The union of the "alienating powers of technology" with the human body ultimately result in his destruction when Lang manages to shrink to a subatomic level and destroy the technology that powers his suit, and him in the process (Napier, 207). Connor and Cross, then, ultimately discover and experience the final stage in the post-human existence: death. Notably, while the machines help to destroy them, the co*up de grace* comes from human beings: Lang, shielded from the posthuman condition by Pym's protective helmet, and Sarah Connor and Kyle Reese.

Drake, meanwhile, becomes posthuman after a symbiote absorbs him, rendering him even more single-minded in pursuit of his space exploration goal. Again, his hyper-capitalist

ego leads him to claim possession of this process. Like the Randian John Galt, he turns his back on humanity; like Peter Thiel he looks towards eternal life; yet beyond them, he extends the Randian vision beyond the Earth's confines (Cohen, 205). The alien, he asserts, has not absorbed him; *he* has created a new species. It leads him to move beyond even Rand's famously cruel attitude towards ordinary people to conclude that human beings are parasitical on the Earth, and work with the symbiote to destroy them all. In a denunciation that might have come direct from Rand herself, he lambasts *Venom*'s hero for taking "potshots at a great man trying to get something done".

Drake embodies the nexus between scientific experimentation, turbo-capitalism, and the post-human condition. Wealthy enough to own a private army, he claims ownership of the alien creature in a reflection of capitalist conceptions of property. Like Steve Jobs, he laments poor design, albeit of the human body rather than computer accessories. Consumed with presenting a benevolent public face, he meets with children to promote his company while, much like Elizabeth Holmes, sacking anybody who crosses him and even using his influence to have investigative journalists and lawyers for his subsidiary companies removed from their posts (Carreyrou, 256-8, 272-3). He anticipates a post-human, post-Earth society, one in which he owns the real estate, a nod to the exorbitant rents charged by San Francisco landlords and their use of the Ellis Act, a state law enabling landlords to evict all the tenants in a building before selling the building to another landlord for a quick profit and enabling the new landlord to offer the property at even higher rents (San Francisco Tenants' Union; Brahinsky).

By contrast, *Venom*'s hero, Eddie Brock, represents unaugmented humanity and a world on the edge of destruction courtesy of Silicon Valley. As one of the dwindling numbers of journalists still active thanks to social media's hoarding of advertising revenues and the consequent devastation of the American newspaper trade, his preoccupations are the

experiences of the Bay Area's forgotten people, such as the homeless and displaced victims of gentrification in the Mission District. He shares a friendship with the female, bilingual Chinese-American owner of his local food market, a relationship that nods to the multiracial, dystopian Los Angeles of *Blade Runner* (Ridley Scott, 1982, 1992, 2007), which similarly pits an all-too-human protagonist against posthuman villains. Heavily critical of "Silicon Valley overlords," Brock is intensely skeptical of their vacuous rhetoric, amorality, and rapacity. He works for a media firm that fears their power, a precarious existence made ever more difficult when he deigns to criticize Drake in an interview. The film thus sets up a clash between old media and Silicon Valley, reflecting the wider cultural and economic battle between the tech corporations and the print media.

When overtaken by Venom, Brock becomes a monster from the male id, the epitome of toxic masculinity who does what he wants, when he wants without suffering the expected consequences (this includes destroying property, assaulting, killing, and even eating other men). Luckily, Venom's interaction with Brock's softer, more humane side convinces the alien that human beings are worthy of protection. If we present Brock as the embodiment of the old media ecosystem that Hollywood inhabits and Drake as an avatar of new media's relationship with tech capital, Brock's ability to overwhelm his symbiote's penchant for human flesh offers a piece of wish-fulfilment. Drake's rapaciousness and disregard for human niceties find itself at the mercy of the symbiote's even more malevolent talents. Accordingly, his hubris leads to his nemesis, whereas Brock-Venom continues to champion the cause of the poor, weak, old, and infirm.

Such metaphors also exist in *Terminator Genisys*. Following the film's final battle, the torso and head of the Schwarzeneggerian T-800 is briefly drowned in a "mimetic polyalloy." This substance allowed the T-1000 in *Terminator 2* to shape itself into different forms and reconfigure itself after being shot. The T-800's decades of living alongside humans

(even as a construction worker before the 2008 economic crash led to his redundancy), not to mention the decades-long tutoring of Sarah Connor has enabled it to develop certain empathic traits. This hybrid machine combines the Terminator's lethality with devotion to the human race and, viewers are led to presume, will fight indefinitely in defense of humanity.

The films thus present humanity in combat with posthumanity, arguing in slightly conservative fashion for the preservation of old-fashioned values amid the dizzying changes wrought by twenty-first-century technology. Yet when the films' critique of capitalism is brought into this equation, they take on a more radical, perhaps even countercultural edge. For them, posthumanity is a consequence of untrammeled capitalist greed rather than a genuine quest for knowledge or human fulfilment. The transformations wrought on Darren Cross, John Connor, and Cameron Drake come at the end of a quest for the two objects most prized by capitalists: money and power.

Conclusion

The Silicon Valley films establish numerous dialectical relationships: between old media conglomerates and the new tech overlords, exemplified by Drake using his financial power to dictate to print and television media; between humanity and posthumanity, exemplified in by the literal conversations between Brock and Venom, Brock/Venom and the symbiote-enhanced Drake, and Connor and his human foes; between science and capitalism. It goes without saying that all of the problems emerge thanks to the actions, ignorance, egotism, and general toxicity of male capitalists, driven by greed, lust for power, and a general indifference towards fellow humans. Underlying the destructive force of these dynamics are the repercussions from ignoring a precautionary approach to scientific and technological developments. Here, again, Anders is instructive in noting:

> the more complex the apparatus within which we are embedded, the greater its repercussions, the less we can see, the more diminished is our ability to understand the processes of which we are part or understand their implications (cited in Schwarz, 105).

Importantly, however, none can develop a radical critique of Silicon Valley, defined as they are by their relationship with major Hollywood production companies and the exigencies of the mainstream audiences they covet. Yet they remain striking for expressing such profound concerns about twenty-first century capitalism and specifically of Silicon Valley; consequently, they represent fears within Hollywood of the expanding power of Silicon Valley to supplant Hollywood's previous dominance of American popular culture. As such, Hank Pym is the emblematic character of the films: suspicious of the new tech overlords, willing to fight them, but similarly unwilling to offer a truly radical solution: after all, his challenge to Cross involves using similar technology but melded with a moral, self-sacrificing and generous man rather than amoral, self-centered and selfish man. The films thus offer a critique of a particular form of capitalism, one that emerged in Silicon Valley in the decades after the 1960s, that lacks the morality and humility of previous capitalist forms, that respects only power and wealth, and that tramples over science, ethics, morals, and indeed the human race in its quest for hegemony.

Works Cited

Kirsten Acuna, 'The office of evil corporation in "Terminator Genisys" is based on a real Silicon Valley tech company' *Business Insider* July 1, 2015 at https://www.businessinsider.com/terminator-genisys-cyberdyne-based-on-oracle-2015-7?r=US&IR=T (accessed October 29, 2021).

Allergic to my own Swag (@coherent states), "How is it that the Madame Tussauds wax model of Mark Zuckerberg looks way more like a real person than Mark Zuckerberg does? Oh my god", *Twitter*, October 25, 2019, 7:58am, https://twitter.com/coherentstates/status/1187624408413700096?s=20 (accessed October 29, 2021).

Andreesson Horowitz, 'About' *Andreesson Horowitz* (2019) at https://a16z.com/about/ (accessed October 29, 2021)

Andrew Auger, 'Venom and Black Cat Movies Will Be "Adjuncts" to the MCU's Spider-Man' *ScreenRant* June 18, 2017 at https://screenrant.com/venom-silver-sable-spider-man-homecoming-movies-connections/ (accessed October 29, 2021).

'Ant-Man' https://www.boxofficemojo.com/title/tt0478970/?ref_=bo_se_r_1 (consulted October 24, 2022)

Simon Bacon, '"We Can Rebuild Him!": The Essentialism of the Human/Cyborg Interface in the Twenty-First Century, or Whatever Happened to *The Six Million Dollar Man*?' *AI & Society* 28 (2013).

David Bell, *Cyberculture Theorists: Manuel Castells and Donna Haraway* (NY: Routledge, 2007).

Sam Biddle, Ryan Devereaux, 'Peter Thiel's Palantir was Used to Bust Relatives of Migrant Children, New Documents Show' *The Intercept* May 2, 2019 at

https://theintercept.com/2019/05/02/peter-thiels-palantir-was-used-to-bust-hundreds-of-relatives-of-migrant-children-new-documents-show/ (accessed October 29, 2021).

Nick Bilton, 'Silicon Valley's Most Disturbing Obsession' *Vanity Fair* October 5, 2016 at https://www.vanityfair.com/news/2016/10/silicon-valley-ayn-rand-obsession (accessed October 29, 2021).

M. Keith Booker, *Historical Dictionary of Science Fiction Cinema* (Rowan & Littlefield, 2020).

Rachel Brahinsky, 'The Death of the City?' *Boom: A Journal of California* July 2014 at https://boomcalifornia.com/2014/07/02/the-death-of-the-city/ (accessed October 29, 2021).

Mike Brown, 'Facebook CEO Mark Zuckerberg Says He "Was Human" in Viral Video' *Inverse* October 23, 2017 at https://www.inverse.com/article/37656-mark-zuckerberg-was-human (accessed October 29, 2021)

Jeffrey Broxmeyer, 'From the Silver Screen to the Recall Ballot: Schwarzenegger as Terminator and Politician' *New Political Science*, 32 (2010)

Paul Bradley Carr, 'Travis Shrugged: The Creepy, Dangerous Ideology Behind Silicon Valley's Cult of Disruption' *Pando* October 24, 2012 at https://pando.com/2012/10/24/travis-shrugged/ (accessed October 29, 2021).

John Carreyrou, *Bad Blood: Secrets and Lies in a Silicon Valley Startup* (London: Picador, 2019).

Cision, 'Andreesson Horowitz, Matrix Partners Invest $11.2 Million in Meteor' *Cision* July 25, 2012 at https://www.prnewswire.com/news-releases/andreessen-horowitz-matrix-partners-invest-112-million-in-meteor-163687206.html (accessed October 29, 2021).

Norm Cohen, *The Know-It-Alls: The Rise of Silicon Valley as a Political Powerhouse and Social Wrecking Ball* (London: Oneworld, 2019).

Harry Cooper and Nicholas Hirst, 'Silicon Valley Tech Lobbyists Swarm Brussels' *Politico* January 28, 2018 at https://www.politico.eu/article/silicon-valley-tech-lobbyists-swarm-brussels/ (accessed October 29, 2021).

R. Del Rosario, 'Arnold Schwarzenegger Wraps Up Production on New "Terminator" Film' August 6, 2014 at https://sanfrancisco.cbslocal.com/2014/08/06/arnold-schwarzenegger-wraps-up-production-on-new-terminator-film/ (accessed October 29, 2021).

Jessica Dickson, 'Do Cyborgs Desire Their Own Subjection?: Thinking Anthropology With Cinematic Science Fiction' *Bulletin of Science, Technology & Society* 36 (2016), 78-84.

Andrew Dobson, *Green Political Thought*, 2nd Edition (London: Routledge, 1995).

Martin Eve and Joe Street, 'The Silicon Valley Novel' *Literature and History* 27 (2018).

Fortune 500 at https://fortune.com/fortune500/search/?mktval=desc (accessed October 29, 2021).

Christopher Frayling, *Mad, Bad and Dangerous? The Scientist and Cinema* (London: Reaktion Books, 2018).

Gough, Simon, Noel Gough and Annette Gough, 'Cyborg, Goddess, or Magical Girl/Heavenly Woman?: Rethinking Gender and Technology in Science Education via *Ghost in the Shell*' *Continuum* 2022 at https://doi.org/10.1080/10304312.2022.2045903.

Ben Guarino '"I am not a lizard": Mark Zuckerberg is latest celebrity asked about reptilian conspiracy' *Washington Post* June 15, 2016 at https://www.washingtonpost.com/news/morning-mix/wp/2016/06/15/i-am-not-a-lizard-mark-

zuckerberg-is-latest-celebrity-asked-about-reptilian-conspiracy/?noredirect=on&utm_term=.3479d6c3b25d (accessed October 29, 2021)

Donna Haraway, 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century' in idem., *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991).

Donna J. Haraway, *How Like a Leaf: An Interview with Thyrza Nichols Goodeve* (New York: Routledge, 2000).

Robert Pogue Harrison, 'The Children of Silicon Valley' *New York Review of Books* July 17, 2014 at https://www.nybooks.com/daily/2014/07/17/children-silicon-valley/ (accessed October 29, 2021).

Matt Hunter, Anita Balakrishnan, 'Apple's Cash Pile Hits $285.1 Billion, A Record' *CNBC* February 1, 2019 at https://www.cnbc.com/2018/02/01/apple-earnings-q1-2018-how-much-money-does-apple-have.html (accessed October 29, 2021).

Russ Hunter, 'Nightmare cities: Italian Zombie Cinema and Environmental Discourses' in Leon Hunt, Sharon Lockyer, Milly Williamson (eds.), *Screening the Undead: Vampires and Zombies in Film and Television* (London: I.B. Tauris, 2014).

----, 'Eco-Zombies: The Italian Horror Film and Political Ecology' *The Italianist* 33 (2013)

Walter Isaacson, *Steve Jobs* (London: Little, Brown, 2011).

Susan Jeffords, *Hard Bodies: Hollywood Masculinity in the Reagan Era* (New Brusnwick: Rutgers University Press, 1994).

KEEM (@KEEMSTAR), '#Zuckerberg is not human!', *Twitter*, April 10, 2018, 9:38pm, https://twitter.com/KEEMSTAR/status/983806461607280641/photo/1 (accessed October 29, 2021)

Jon Kelvey, ‘Pirate Radio in Space’ *Slate* April 9, 2018 at https://slate.com/technology/2018/04/space-startup-swarm-defied-the-fcc-to-launch-tiny-satellites.html (accessed October 29, 2021).

Brent Lang and Justin Kroll, ‘What’s Next for the Spider-Man Universe after “Venom”’ *Variety* August 9, 2018 at https://variety.com/2018/film/news/whats-next-for-the-spider-man-universe-after-venom-exclusive-1202900203/ (accessed October 29, 2021).

Nicholas Lemann, ‘The Network Man’ *The New Yorker* October 5, 2015 at https://www.newyorker.com/magazine/2015/10/12/the-network-man (accessed October 29, 2021).

Katherine Losse, *The Boy Kings: A Journey into the Heart of the Social Network* (New York: Free Press, 2012).

Edward Luttwak, *Turbo-Capitalism: Winners and Losers in the Global Economy* (London, Weidenfeld & Nicolson, 1998).

Antonio García Martínez, *Chaos Monkeys: Mayhem and Mania Inside the Silicon Valley Money Machine* (London: Ebury, 2016).

Linda Mizejewski, ‘Action Bodies in Futurist Spaces: Bodybuilder Stardom as Special Effect’ in Annette Kuhn (ed.), *Alien Zone II: The Spaces of Science Fiction* (London: Verso, 1999).

Movie-Locations, ‘Rise of the Planet of the Apes’ at http://movie-locations.com/movies/r/Rise-Of-The-Planet-Of-The-Apes.php (accessed October 29, 2021).

Samantha Murphy, ‘Facebook Changes its “Move Fast and Break Things” Motto’ *Mashable* April 30, 2014 at https://mashable.com/2014/04/30/facebooks-new-mantra-move-fast-with-stability/?europe=true (accessed October 29, 2021).

Susan J. Napier, ‘Ghosts and Machines: The Technological Body’ in Sean Redmond (ed.), *Liquid Metal: The Science Fiction Film Reader* (London: Wallflower Press, 2004).

Corey Pein, *Live Work Work Work Die: A Journey into the Savage Heart of Silicon Valley* (London: Scribe, 2018).

Simon Orpana, ‘We Can Rebuild Him and Her: Bionic Irony, Hysteria, and Post-Fordism’sTechnological Fix in *The Six Million Dollar Man*’ *English Studies in Canada* 42 (2016), 89-114.

Mike Rampton, ‘New footage of Tom Hardy on the “Venom” set reveals more interesting plot details’ *Shortlist* n.d. at https://www.shortlist.com/entertainment/films/new-footage-of-tom-hardy-on-the-venom-reveals-more-interesting-plot-details/342801 (accessed October 29, 2021).

Salvador Rodriguez, ‘Mark Zuckerberg Says These 5 Technologies Will Completely Change How We Live’ *Inc.Video* n.d. at https://www.inc.com/video/5-technologies-mark-zuckerberg-thinks-will-change-the-world.html (accessed October 29, 2021).

Cari Romm, ‘The Enduring Scariness of the Mad Scientist’ *The Atlantic* October 29, 2014 at https://www.theatlantic.com/health/archive/2014/10/the-enduring-scariness-of-the-mad-scientist/382064/ (accessed October 29, 2021)

San Francisco Tenants’ Union, ‘Ellis Act Evictions’ *San Francisco Tenants’ Union* at http://www.sftu.org/ellis/ (accessed October 29, 2021).

Brent Schlender and Rick Tetzeli, *Becoming Steve Jobs: The Evolution of a Reckless Upstart into a Visionary Leader* (London: Sceptre, 2015)

Mike Scott, ‘Terminator: Genisys begins shooting today in New Orleans’ *NOLA.com* April 21, 2014 at https://www.nola.com/movies/2014/04/terminator_genesis_begins_shoo.html (accessed October 29, 2021).

John Shimal, ‘Mark Zuckerberg Couldn’t Buy Snapchat Years Ago, and Now He’s Close to Destroying the Company’ *CNBC* July 12, 2017 at https://www.cnbc.com/2017/07/12/how-mark-zuckerberg-has-used-instagram-to-crush-evan-spiegels-snap.html (accessed October 29, 2021).

David J. Skal, ‘A-Bombs, B-Pictures, and C-Cups’ in Darryl Jones, Elizabeth McCarthy, Bernice M. Murphy (eds), *It Came From the 1950s!: Popular Culture, Popular Anxieties* (London: Palgrave, 2011)

Olivia Solon, ‘Mark Zuckerberg out-robots his AI robot in saccharine holiday video’ *The Guardian* December 20, 2016 at https://www.theguardian.com/technology/2016/dec/20/mark-zuckerberg-facebook-jarvis-artificial-intelligence-video (accessed October 29, 2021)

Olivia Solon, Cyrus Farivar, ‘Mark Zuckerberg Leveraged Facebook User Data to Fight Rivals and Help Friends, Leaked Documents Show’ *NBC News* April 16, 2019 at https://www.nbcnews.com/tech/social-media/mark-zuckerberg-leveraged-facebook-user-data-fight-rivals-help-friends-n994706 (accessed October 29, 2021).

Susan Sontag, ‘The Imagination of Disaster’ *Commentary* October 1965

Claudia Springer, ‘Psycho-Cybernetics in Films of the 1990s’ in Annette Kuhn (ed.), *Alien Zone II: The Spaces of Science-Fiction Cinema* (London: Verso, 1999)

Morgan Sung, ‘There’s a Whole Meme Community That Doesn’t Think Mark Zuckerberg is Human’ *Mashable* April 5, 2018 at https://mashable.com/2018/04/05/mark-zuckerberg-memes/?europe=true (accessed October 29, 2021).

‘Terminator Genisys’ https://www.boxofficemojo.com/title/tt1340138/?ref_=bo_se_r_1 (consulted October 24, 2022).

Andew Tudor, *Monsters and Mad Scientists: Cultural History and the Horror Movie* (Oxford: Blackwell, 1989)

Phillip E. Wegner, 'Relics from a Deleted Timeline: The Economics of *Terminator Genisys*' *Science Fiction Film and Television* 10 (2017).

'Venom' https://www.boxofficemojo.com/title/tt1270797/?ref_=bo_se_r_1 (consulted October 24, 2022)

Julia Carrie Wong, Olivia Solon, 'Uber Accused of "Calculated Theft" of Google's Self-Driving Car Technology' *The Guardian* February 24, 2017 at https://www.theguardian.com/technology/2017/feb/23/alphabet-sues-uber-self-driving-cars-technology-waymo-otto (accessed October 29, 2021).

World News Media, 'Mark Zuckerberg is not human!' thread at https://www.theworldnewsmedia.org/forums/topic/55150-mark-zuckerberg-is-not-human/ (accessed October 29, 2021).

Films and television:

Ant-Man (Peyton Reed, 2015).

Blade Runner (Ridley Scott, 1982, 1992, 2007)

Silicon Valley (HBO, 2014-19)

Terminator: Genisys (Alan Taylor, 2015).

Venom (Ruben Fleischer, 2018).

[1] *Ant-Man* took $519,311,965 at the global box office; *Genisys*: $440,603,537; *Venom* $856,085,151. ‘Ant-Man’; ‘Terminator Genisys’; ‘Venom.’

[2] The citation of Haraway’s 1985 article might appear slightly archaic. Yet it continues to be a touchstone for studies of science fiction: see, for example Gough et al, 2022; Dickson, 2016.

[3] All time stamps as per *Venom* (Hollywood, CA: Sony Pictures, 2018) DVD; *Ant-Man* (Hollywood, CA: Marvel Studios, 2015) DVD; *Terminator: Genisys* (Hollywood, CA: Paramount Pictures, 2015) DVD.

[4] See, for example, series 1 episode 1, “Minimum Viable Product”, directed by Mike Judge, written by Mike Judge & John Altschuler & Dave Krinsky, aired April 6, 2014 on HBO; series 1 episode 5, “Signaling Risk”, directed by Alec Berg, written by Jessica Gao, aired May 4, 2014, on HBO; series 1 episode 8, “Optimal Tip-to-Tip Efficiency”, directed by Mike Judge, written by Alec Berg, aired June 1, 2014, on HBO; series 2 episode 1, “Sand Hill Shuffle”, directed by Mike Judge, written by Clay Tarver, aired April 12, 2015 on HBO.