### V2.o

#### The year is 2187, human exploration of space has taken leaps to extend deep in the universe thanks to innovations of Amazon, Alibaba, and Gazprom the human species has been able to jump from planet to planet colonizing everything in its path taking resources, pillaging, and killing anything in the feudalist leader’s path. But these decisions did not come from the leaders of the United States, Russia, and China rather Jeff Bezos, Jack Ma, and what used to be Russians shareholders, but were recently bought out by the consciousness of Mark Zuckerberg uploaded into the metaverse – the United BMZ under the guidance of these people have turned what we know as planet earth into a company feudalism that has begun to expand the universe in their thirst for resources need to oil the gears of racial intergalactic capitalism

#### These images of NewSpace companies’ broader goals for colonization is reminiscent of NASAs 2010 art series “Visions of the Future.” These frontier symbolics are coded to invite the expansion of settler colonial racial capitalism as the necessary condition of the future of “all humankind.” In these posters, the earth is a site of foreclosure, a non-oasis without respite nor air to breathe; the future is simply the “redder” grass able to provide a new settler monument “cold faithful.” This inextricable link between world making propaganda and extraterrestrial sovereignty reveals that the future offered is simply a hyperreal repetition of settler colonial racial capitalism subtended by the domesticating infrastructure of the drive for colonization and resources

#### The colonization of space is a part of a technoscientific development where technology becomes the sedimentation of hyperreality – the status quos attempt for space development is a colonial romanticism, an image of a future of a terraformed Mars – these representations are philosophical and ideological simulacrum of space developments not for the survival of the human but for the survival of capital – NewSpace has invaded the social imaginaries of consciousness which has become another iteration of that libertarian imaginary

Genovese, T. R. (2017). [The new right stuff: Social imaginaries of outer space and the capitalist accumulation of the cosmos (Doctoral dissertation, Northern Arizona University) Accessed 10/3/2021] CSUF JmB

The discussion of human futures is a difficult topic with which to engage. Within the Western conception of linear time, the future is temporally forward and veiled within statically three-dimensional existence. Therefore, in this chapter, I will turn to some postmodern theorists and philosophers in order to engage with how to situate the role of science fiction, science, and NewSpace within human futures in outer space. This section is also a dreamscape of ideas that may not be fully fleshed out, but are here to generate discussion, hence the heavy reliance on phenomenology. The ideas of hyperreality were first generated by Jean Baudrillard ([1981] 1994) who defined the concept as “the generation by models of a real without origin or reality” (1). Hyperreality is a simulation; an intense blending of “reality” and representation so that there is no longer any clear line wherein one ends and the other begins—and in fact, if one accepts the theory of hyperreality, there is no reality anymore, only simulations of reality, which are unmeasurable because reality and hyperreality are indistinguishable—there’s nothing to measure against the two since reality no longer exists as a separate entity (Baudrillard [1981] 1994). Umberto Eco (1986) expands on Baudrillard’s ideas to suggest that hyperreality is created through a desire for a certain “reality,” and in order to realize that desire, one must fabricate a reality that can be consumed as real. Like Baudrillard before him, Eco (1986) uses Disneyland as an example of hyperreality that manufactures desires that can only be realized within the hyperreality it has created, leading one to wish for the hyperreal rather than nature/the “real.” Eco (1986) illustrates this by saying In this sense, Disneyland not only produces illusion, but—in confessing it— stimulates the desire for it: A real crocodile can be found in the zoo, and as a rule it is dozing or hiding, but Disneyland tells us that faked nature corresponds much more to our daydream demands. When, in the space of twenty-four hours, you go (as I did deliberately) from the fake . . . wild river of Adventureland to a trip on the Mississippi, where the captain of the paddle-wheel steamer says it is possible to see alligators on the banks of the river, and then you don’t see any, you risk feeling homesick for Disneyland, where the wild animals don’t have to be coaxed. Disneyland tells us that technology can give us more reality than nature can. (44) Baudrillard ([1981] 1994) further discusses what happens when science emerges out of science fiction and what happens when the difference between the two is indistinguishable—in other words, the real recedes and all that is left are simulations of the hyperreal and “science fiction in this sense is no longer anywhere, and it is everywhere” (126). In this age of accelerated technoscientific development—as I have argued in previous chapters—science and science fiction are melded into a Baudrillardian simulation where artificial intelligence, autonomous rocket boosters that land on autonomous drone ships, and a constant human presence in outer space is the sedimentation of hyperreality where, as Milburn (2003) has said, “the model becomes indistinguishable from the real, supplants the real, precedes the real, and finally is taken as more real than the real” (267). When the hyperreal meets the hyperobject of the cosmos, a term coined by Timothy Morton (2013) to describe a thing that is “massively distributed in time and space relative to humans” (1), interesting (and confusing) discussions can arise. For the purpose of this thesis, I would like to argue that the nebulous entity of NewSpace— which is multifaceted in that it is philosophical, ideological, and physical in itself—has emerged as a simulacrum from the hyperreality of contemporary space developments. Baudrillard ([1981] 1994) describes a simulacrum as not exactly a copy or imitation of the real, but a thing that becomes a truth in itself—as it has emerged from hyperreality, which is its own truth. I believe Gilles Deleuze (1990) defined simulacra (plural of simulacrum) best when he said: “The copy is an image endowed with resemblance, the simulacrum is an image without resemblance” (257). The overarching colonial romanticism—of a rustic pioneer traveling to a distant land—that is utilized so often by NewSpace plays into similar romanticisms employed by NASA, but instead of the objectives remaining the same, the NewSpace agenda is only concerned with profits. This is why I argue that NewSpace is acting as Saturn devouring his son, simultaneously destroying and emerging as a simulacrum from the 32 hyperreality of cosmic imaginaries. In essence, NewSpace is a copy without an original —feeding off of imaginaries that are simulations and creations of their own devising. The public, in turn, is buying into this vision as if it is the only reality possible. To utilize Eco’s (1986) example above, NewSpace is Adventureland in Disneyland and NASA and other governmental agencies of “OldSpace” are the paddle-boat on the Mississippi. No one wants to wait ten years for a scientific mission when Elon Musk can bring them to Mars in half that time. However, this is not a defense of the “real.” I am a proponent of “utopic thinking,” which in itself is hinged on a dislocation from reality in order to imagine a better world. The tyranny of the so-called real—a term that is often defined by governments and corporations in order to sustain the status-quo (Collins 2008)—is precisely how NewSpace is able to invade the imaginaries of the future so easily. If one is able to dismiss a social justice minded futurologist or science fiction writer with a “Get real!” or “That could never work in reality” then it shuts down entire social theories that resist the established ideology. David Harvey (2000) discusses this in relation to alternatives to capitalism, which fits quite well when discussing the resistance to NewSpace: If the mess seems impossible to change then it is simply because there is indeed “no alternative.” It is the supreme rationality of the market versus the silly irrationality of anything else. And all those institutions that might have helped define some alternatives have other been suppressed or—with some notable exceptions, such as the church—brow-beaten into submission. (154) In the “rationality of the market” all that remains are “degenerate utopias” (Collins 2008; Marin 1993), places like the previously mentioned Disneyland, which presents itself as a utopic place, but is actually shrouding the commercial “reality”—“the Main Street façades are presented to us as toy houses and invite us to enter them, but their interior is always a disguised supermarket, where you buy obsessively, believing that you are still playing” (Eco 1986, 43). According to Eco (1986), Disneyland’s hyperreality begins when one submits to the complete “fakeness” of the simulation in order to bask in the desirous visions of the utopia that it presents. Thus it becomes completely real. I saw this attempt at creating a hyperreality at Spaceport America, with the science fiction inspired door frames and the tour guides dressed in flight suits. Elon Musk presents it to us when he utilizes a four-stage image of Mars, starting with the red planet and ending with a terraformed, Eden-like utopia of oceans and clouds and green forests; a new Earth that beckons to colonizers with new possibilities and untapped markets. This photo is a Debordian “spectacle” that establishes and mediates a social relationship with the public through images (Debord 1994). Photos like the one above are preambles to the spectacle of 1,000 ships departing to Mars every 26 months. Even if that does not become a reality, Musk and other NewSpacers have already begun to creep into the social imaginary of space and supplant their own ideologies as truth into the cosmic hyperreality, which may relate to why my survey results contained foundationally contradictory answers. These photos are part of a larger trend within the space science hyperreality. Messeri (2016) ethnographically uncovers how Martian mapmakers are creating incredibly detailed maps that are created without direct reference to the landscape, since we have never set foot there. Therefore, “the primary goal of today’s [Martian] maps is . . . to establish Mars as inviting to human explorers,” much like the images of a terraformed Mars advertised by SpaceX (Messeri 2016, 74). Like the Jorge Luis Borges short story Del rigor en la ciencia, the map precedes the territory, and the obsession of creating a perfect map makes that map the new reality (as a simulation), while the empire it’s supposed to represent—or in this case, the planet Mars—crumbles away, ceding to the hyperreality of its representation. NASA—in its neoliberal present—is enveloped within this hyperreality as well, perhaps as it recognizes the simulation that NewSpace exists within, and how powerful it can be in the sphere of public relations. However, their production of nostalgia inducing travel posters for places humans have never been are coded to invite—and exclude—certain types of futures (Messeri 2016). Namely, these futures are white, colonial, and evoke vintage 1950s–1960s travel advertisements, a period of U.S. history ripe with inequality and oppression. The political cannot be divorced from aesthetic, no matter how much opponents may try to argue against this point; I’m sorry but Foucault 33 was right. And these theoretical frameworks are the reason why I have argued for social science to take science fiction seriously, especially science fiction that does not espouse the tropes of Spencerian social theory. Science fiction writers who identify as people of color, Indigenous, women, and LGBTQI+—with enough critical mass—can create a simulation and hyperreality with their own work that forces change at the root. The power of words, of worldmaking, of placemaking that is so inherent in science fiction writing are the catalysts for social change, especially in Earth-bound space science. Furthermore, social scientists should not only embrace the political world that science fiction inhabits, but we should be working together as a collective to actively disseminate the social science that good science fiction writers are already conducting. CHAPTER 11: WHAT IS TO BE DONE? This chapter title should really be the title of the entire thesis since it is the question that I have been muttering since the beginning of this research project—except that the title has already been skillfully used by the likes of Nikolai Chernyshevsky, Leo Tolstoy, and Vladimir Lenin. I do not think that my name has quite the prestige to fit in with the company of those gentlemen. So instead, I have decided to make it the name of my final chapter in which I try to discuss how we move forward from the rather bleak present I have divulged in these pages; but I will also throw in some radical tangents in order to keep with the titular theme. As I have argued extensively in this thesis, American imaginaries of the future are dominated by right-libertarianism. NewSpace venture capitalists like Elon Musk and Peter Thiel have latched on to futurist thinking and have the power and capital to begin enacting some of their visions. This is no surprise; engagements with the future emerged as a distinct field of social inquiry during the Cold War when neoliberal capitalism was battling state Communism for supremacy—and the political context has changed very little (Tolon 2012). However, NewSpacers depend on a climate of stress and conflict in order to justify their drastic socio-political-economic actions. For example, Peter Thiel—founder of PayPal, Facebook board member, and heavy investor in SpaceX—has said: “Because there are no truly free places left in our world, I suspect that the mode for escape must involve some sort of new and hitherto untried process that leads us to some undiscovered country; and for this reason I have focused my efforts on new technologies that may create a new space for freedom” (Gittlitz 2016, para. 8). To Thiel, and many of his right-libertarian venture capitalist revolutionary vanguard, these places are threefold: artificial island micro-nations, the Internet and cyber-communities, and outer space (Gittlitz 2016). Thiel has invested in all three of these areas and was recently placed on Trump’s transition team. Soon after Thiel’s appointment, Trump decided to divert NASA funds from climate change studies to deep space exploration. This has a lot to do with the fostering of another American frontier. As of the time of my writing this thesis, Trump has announced plans to build a wall along the United States / Mexico border. These Earthly enclosures are direct manifestations of the cosmic enclosures championed by NewSpace—and often these two proclamations are advocated by the same people in the same positions of power. Is the cosmic frontier doomed to represent the same tragedies and oppression as our Earth frontiers? Not necessarily. And here, I will begin to take a long needed—albeit brief—shift toward optimism. Today, our borderlands are places of violence, where states exert their influence in order to destroy or capitulate the Other—either figuratively or literally. However, this was not always the case. As Durrenberger (2016) has said: [In the past] the borderlands were less foreboding, places the regularizing reach of states had bypassed because they were not worth the effort. To them went those castoffs the states threw off in their great drives to define and unify: prophets, anthropologists, missionaries, and more recently revolutionaries and terrorists. Many who have lived in those areas return with stories of human potential, encouraged by what they have seen of the power of our species’ humanity. (para. 5–6) Could outer space provide a space to unleash the human potential for compassion? With the absolute vastness of the cosmos, it seems impossible—past a certain technoscientific level that I believe we are rapidly approaching—for dominant power systems like states or corporations to garner control over such enormous distances. A certain degree of anarchy—if not full fledged social anarchism or anarchistcommunism—seems to be, in my mind, an inevitability. As I have argued in previous publications, direct democracy within communities outside of the Earth’s influence seems to be the most equitable and efficient way to socially organize in a hostile environment (Genovese 2016d). Haqq-Misra (2015) proposes “liberated settlements” on Mars that reject Earthly authority and operate within their own self-determination. Philosophers, social scientists, and science fiction writers all seem to be contributing socio-political theory to this new “Space Age of Enlightenment.” With the continued generation of liberatory work, we may have a chance at chipping away at NewSpace’s hegemonic lineage of the frontier that I introduced in Chapter 6 and establish a lineage of liberation instead. In fact, I do not think that we have a choice any longer. As of this writing, as I sit behind the abrasive glow of my computer screen at 11:49pm on February 1, 2017, the United States and the world seem to be at a dangerous tipping point. The fascist creep has turned into a fascist sprint, and those that wish to claim neutrality or inaction are implicitly siding with the dominant powers that wish for nothing less than the destruction of the environment for capital gains, a stripping of what little civil protections are left, a mass defunding of all educational systems, a homogenizing of this country utilizing Nazi-era racial order schemes, a villainization of anyone who is not a right, white, Christian man, continued colonial expansion into sovereign Indigenous land while repeatedly breaking treaties, rampant hetero-patriarchy, and the list continues ad nauseam. It is our duty as anthropologists, as social scientists, as science fiction writers, as space enthusiasts, as educators, as human beings to make sure that while we are on Earth, we will fight for the weak, the marginalized, and the disenfranchised by any means necessary and with respect, ears open to the requests of those people who have suffered for years under the boots of oppression, and for whom we may have very little frame of reference in regard to their suffering under structural violence. And as we begin to journey and live away from the only place we have ever called home, we must leave into the cosmos for the right reasons—not for capital, for power, or for narcissistic perceptions of glory, but in the spirit of equity, mutual aid, love, diversity, as well as playful curiosity, and we must do it with soul, with heart, and with joy.

#### This dystopic future is not just symbolic, it is legal – Obama’s 2010 “national space policy” stated: “The US is committed to… facilitating the growth of a… commercial space sector that supports U.S. needs… [and] advances US leadership in the generation of new markets.” The 2015 “SPACE Act” cemented this vision of the future, signaling the beginning of the regime of NewSpace, a hyperreal playground projecting the shared colonial desire of NASA’s future via the newly inaugurated regimes of space privatization – the SPACE Act revealed the OST’s (en)framing of space as commons only ceded sovereignty to capital, hiding statecraft’s ties to accumulation in plain sight. These directives enclose the future of space to the highway exits of accumulation.

#### NewSpace companies act as a black hole taking and destroying everything in its path – energy cannot be destroyed, it can only be transformed. Therefore, the energy the black hole strips away from the matter it consumes is released back into space, structuring reality around itself, the same way that the matter capital consumes is broken down, transformed and released as value. the impact is eternal exploitation – value subsumes labor to capital, justifying utter exploitation of the working masses in the name of accumulation for accumulation’s sake, and then it shapes labor to the needs of capital creating a vicious cycle. this same abstract form of domination applies to the space which capital exploits, subsuming it and transforming it to its’ needs ultimately absorbing everything toward annihilation.

Wilson, J., & Bayón, M. (2016). Black hole capitalism: Utopian dimensions of planetary urbanization. City, 20(3), 350-367. Accessed 2-3-22 CSUF JmB <3 Fullerton GK

Black holes are the eternal endgame of huge exhausted stars, whose explosive powers have lost the battle against their own gravitational forces. Smaller stars become red giants before shrinking into white dwarfs or neutron stars, in which the last structures of matter are able to retain their integrity. But the enormous mass of black holes causes them to enter a state of infinite collapse. According to Einstein’s theory of relativity, gravity is generated by the distortion of space-time caused by the mass of the objects within it. The space-time around a black hole becomes so contorted that light cannot escape, and black holes are therefore invisible. The point at which this occurs is called the event horizon, because from the point of view of a distant observer the extreme velocity with which objects approach it would make time appear to stop. Inside the event horizon, however, unobservable processes continue to unfold. The gravitational power of the black hole draws in vast amounts of matter from the galaxies that surround it. Having crossed the event horizon, this matter continues to collapse towards the singularity, an impossible point of infinite density buried deep within the void of the black hole. Yet as matter approaches this point of no return, it sheds vast quantities of energy that pour back into space. Through this combination of gravity and energy, black holes structure the entire universe, and at the heart of almost every galaxy is a supermassive black hole (Bartusiak 2015; Scharf 2012). Black holes are therefore ‘real holes in space-time’ (Bartusiak 2015, 15), which are unobservable and unrepresentable, and whose existence is only betrayed by their effects on the galaxies that surround them (Scharf 2012, 95– 121). As such, they are the cosmological equivalent of the Real in Lacanian psychoanalysis. According to Lacan, our sense of reality is structured by a combination of symbolic and imaginary elements that defend us against a traumatic and unsymbolized Real. Just as black holes are invisible voids that structure the material universe, so the Real is ‘a hole, a gap, an opening in the middle of the symbolic order—it is the lack around which the symbolic order is structured’ (Zˇ izˇek 1989, 170). Like black holes, the Real is unobservable and its existence ‘can be constructed only backwards, from its structural effects. All its effectivity lies in the distortion it produces in the symbolic universe of the subject’ (Zˇ izˇek 1989, 169). The Real is therefore variously defined by Zˇ izˇek as ‘the central “black hole” around which the signifying network is interlaced’ (Zˇ izˇek 1992, 40); the ‘destructive vortex ... which we cannot approach too closely’ (Zˇ izˇek 2008, civ); and ‘the unfathomable X which ... curves and distorts any space of symbolic representation and condemns it to ultimate failure’ (Zˇ izˇek 1997, 124). This understanding of the Real also resonates with Marx’s theory of value. According to Marx (1976), the value of a commodity is entirely abstracted from its material use value, existing as a pure measure of the socially necessary labour time expended in its production, which is determined by innumerable acts of exchange conducted by private producers throughout the world market. Just as gravity structures the material coordinates of the universe, despite having no concrete materiality of its own, so the law of value determines the space-time of global capitalism, despite the fact that value is a social relation and not a quality inherent in discrete material ‘things’. As Marx himself once argued, value, like gravity, is therefore ‘immaterial but objective’ (Marx, quoted in Harvey 2013, 70). Building on this understanding of value, Chris Arthur (2002) has argued that ‘capitalism is marked by the subjection of the material process of production and circulation to the ghostly objectivity of value’ (154). Like the Lacanian Real, value is therefore an unobservable presence –absence that structures our entire social universe—‘a void at the heart of capitalism’ (154). This description again recalls the image of the black hole, which has been defined as ‘mass without matter ... the mass disappears from our view; only its gravitational attraction remains behind to affect us’ (John Wheeler, quoted in Bartusak 2015, 107). Furthermore, like the black hole, value not only structures the universe of global capitalism, but also drags an ever-increasing mass of use values into its sphere of expanded reproduction, as ‘a shape opposed to all materiality, a form without content, which yet takes possession of the world the only way it can, through draining it of reality’ (Arthur 2002, 167). This understanding of value resonates with Moishe Postone’s (1993) theorization of capital as ‘an abstract form of domination’, which is created and progressively reinforced by our own alienated productive activity. Postone follows Marx in arguing that capitalist production is undertaken for the sole purpose of extracting surplus value through the exploitation of living labour. Competition compels all capitalists to obey an increasingly monolithic logic of ‘accumulation for accumulation’s sake’, and capital emerges as an abstract form of domination, which is ‘blind, processual and quasiorganic ... an alienated, abstract self-moving Other, characterized by a constant directional movement with no external goal’ (Postone 1993, 270, 278). This process begins with what Marx conceptualized as the formal subsumption of labour to capital: the subordination of pre-existing forms of production under the reign of wage labour. Formal subsumption, however, is limited to the production of absolute surplus value. This can only be increased through the expansion of the labour force and the extension of the working day, and as such has concrete limits. In its blind desire for endless selfvalorization, capital therefore drives the transition from the formal to the real subsumption of labour, through which the labour process itself is transformed in accordance with the requirements of capital. Real subsumption enables the production of relative surplus value, through the deployment of technologies that increase the productivity of labour and the rate of surplus value extraction, thus further empowering capital as an abstract form of domination (Marx 1976, 1019 –1038; Postone 1993, 283– 284). This entails a corresponding transition from the formal to the real subsumption of space. If capital initially occupies and exploits the space that it encounters, the shift to real subsumption implies the concrete transformation of this space into an apparatus for the production and realization of relative surplus value (Harvey 1982, 186). Planetary urbanization can be understood as the realization of this ‘tendency towards real spatial integration’ (Smith 1984, 186), through the interconnection of global megalopolises, the construction of transnational transportation systems and the opening of vast terrains of resource extraction at the boundaries of planetary space.3 Planetary urbanization thus transforms the planet into ‘an infernal machine’ for the endless valorization of value (Jameson 2011, 146), through which capital ‘realizes its own agenda of “accumulation for accumulation’s sake, production for production’s sake”’ (Harvey 2014, 58). Like a black hole, this machine ‘must continue to absorb everything in its path, to interiorize everything that was hitherto external to it’ (Jameson 2011, 146). This process of implosion is dialectically related to an explosion of infrastructure networks and transportation systems dedicated to ‘the annihilation of space by time’ (Marx, quoted in Harvey 2001, 244), which further contributes to the process described by David Harvey (2001, 123) as ‘time-space compression’—an expression that recalls the extreme distortion of space-time produced by a black hole. This dialectic of implosion –explosion mirrors the dynamics described by the astrophysicist Caleb Scharf (2012): ‘The more matter is fed into its core, the more food there is for the black hole, and the more the black hole will pump out disruptive energy’ (165). The contradictory forces of planetary urbanization likewise unleash a wave of creative destruction that takes the form of a ‘kaleidoscopic churning of socio-spatial arrangements’ (Brenner 2014b, 17) reminiscent of ‘the enormous whirlpools of turbulence’ that surround ‘the thrashing forces of a supermassive black hole’ (Scharf 2012, 180, 166).4

#### BUT, neoliberalism fascism has run out of places to expand this accumulation – Biden’s neoliberalism is just a safety valve for colonize desire that cannot imagine alternatives to a collapsing system. Enter Outer Space, the final frontier, the accumulation of the ultimate terra nullius where desire saturates the Adventureland that NASA and Elon Musk both imagine as space. The stakes are the inevitable stripping the earth and its peoples to fuel this endless expansion of the market into the cosmos.

#### Thus, in response to the unjust appropriation of outer space by private entities, I affirm global orbital counter-operations

#### Outer space policy theorized through histories of racial capitalism can only ever produce another launch site on stolen land. Instead, our response must tie the materiality of orbital counter insurgency to a worlding practice that can intervene in the NewSpace Race. Counter-operations repurpose space infrastructure against its progenitor, tying insurrectionary violence to prefiguring experimentation in alternative modes of socio-political organization. Counter-operations sabotage the systems of accumulation, blockading the operations of logistics and hacking the networks of communication to world new worlds.

Mezzadra, S., & Neilson, B. (2013). Extraction, logistics, finance: Global crisis and the politics of operations. Radical Philosophy, 8-18. Recut – CSUF JmB

The politics of operations What is an operation? In our understanding an operation is something more than a relation of cause and effect or a model driven by linear processes of input and output. Throughout this article we have utilized the concept to name and analyse the syncopated pace of opening and closure that gives texture to and counterpoints the heterogeneity of space and time under global capitalism. In elaborating her famous distinction between labour and work, in The Human Condition, Hannah Arendt was well aware of the etymological nexus associated with the Latin opus. For Arendt ‘labour’ relates to the life or biologically necessitated dimensions of the human metabolism and reproduction. By contrast ‘work’ is inherently connected with the fabrication of an ‘“artificial” world of things’ that endures beyond the act of creation. [35] While Arendt associates the rise of industrial modernity with the encroachment of labour over work and its consequent effects of alienation, we wish to register the continuing role of the operation in the global present. But while for us an operation is connected with the fabrication of an ‘artificial’ world, it does not necessarily produce a ‘work’, a material ‘thing’. Operations also play a role in activities of finance and extraction. Think of the crane that lifts a container full of soy from a ship to a truck, the software-driven coordination of forklift vehicles in a fully wired warehouse, or the transmission of financial data through electronic networks by means of packet switching technologies. What is produced in these operations is not a ‘thing’ but rather a set of links or relations between things, which is to say the framework or skeleton of a world. In our use of the term, an operation refers primarily to this fabrication of the world, to the production of the connections, chains and networks that materially envelop the planet enabling and framing the labour and action of subjects well beyond those directly involved in the execution of the operation itself. In observing the ways in which such linkages are made we are observing the operations of capital. Aside from the material infrastructures required to establish such articulations, there is a need for rules, instructions and standards that guide and frame the operative principles at stake in these dynamics. Increasingly the frameworks and processes that enable the deployment of these operative principles are organized by means of computer code. More than a set of executable instructions or a means of information exchange, code alters conditions of perception, communication and representation. It participates heavily in the economic, political, military and governmental domains, organizing and disrupting relations of power and collective life. The code that governs activities of finance, extraction and logistics introduces the social relation of capital into the most minute and detailed of operations. Capital’s code, we might say, insinuates itself into the world of operations, embedding itself as a kind of organizing element or blueprint. Returning to the terminology of Arendt, the boundary between ‘labour’ and ‘work’ appears blurred in the operations of capital. At the same time, we have to recognize that some of the key features of ‘action’, the third concept discussed by Arendt, play an important role in the operations of capital, making them politically pregnant. This is to say that these operations are increasingly confronting the elusiveness, plurality, relationality and unpredictability of the ‘human condition’, which comprised for Arendt the domain of ‘action’. It thus makes sense to speak of a politics of the operation, taking into account both its structuring effect on human relations and the ways in which work, labour and action are combined both in the execution of specific tasks and in the articulation of different subjects that make operations possible. What we are calling operations of capital are a privileged field of surveillance and control. The rise of sophisticated performance measurement techniques makes it possible to monitor labour in real time. Data produced on the basis of such measurement can be fed back into production systems in order to adjust them accordingly. Traditional forms of workplace action are thus disrupted. Consider the worker who deliberately slows down. Not only can she be easily identified, but the effects of her foot-dragging can be minimized through computerized processes of system adaptation. Performance measurement is increasingly tied to algorithmic patterns and processes that give the operation a life of its own. We need to ask how the operation relates to performance and what the significance of this relation is in a situation where the operation threatens to detach itself from its performer. Is the operation a kind of paradigm of pure performativity? The concept of performativity has been at the centre of many recent debates about and approaches to the political. An important feature of the performative is its self-referring function – it constitutes that which it enunciates. The operation, by contrast, connects. It fabricates a world but does not do so only in relation to its own premisses. Its ontological moment is thus quite different to that of the performative, even if it retains a performative dimension. The operation has an outside, albeit constrained by parameters of connection and adaptation. The performative is self-contained, even if its affective dimension can trouble this containment. In the case of the operation, its politics registers the interaction between its inside and outside, between the protocols and standards that allow it to build connections across different situations and the heterogeneity of space and time in which it subsists. Only by thinking through these dynamics, which it is important to insist are productive of struggles and subjectivity, can we begin to understand how the Arendtian realm of action is increasingly folded into the worlds of work and labour. There is another sense in which the operation differs from its performance. This is the sense in which the operation is effectual rather than performative, the sense in which it is productive of something other than itself. We can think of the operation as a kind of interval: at one end lies that which initiates or triggers it, and at the other end lies that which it creates. While in reality these two aspects of the operation concatenate, in so far as one operation spurs another, it is instructive to consider the situation in this way to shed light on what unfolds between these moments of concatenation, which is to say on the time and space of the operation itself. We have already stressed the nonlinear and uneven nature of the operation. What we now want to emphasize is how thinking through these knotted relations gives us a different perspective on the theorization question of politics today. If the operation’s trigger or spur recalls a performative approach to politics, its creative capacities can be correlated with a version of politics that centres on the event. There is a temporality to the operation that cannot be separated from the temporality of politics. There is also a striking parallel between a politics of the event and the image of an operation that stresses only its generative outcome, particularly as regards the punctuated nature of time characteristic of both. While a focus on the performative aspects of the operation obscures the moment of connection, disconnection and friction generated through the articulation with its ‘outside’, a focus on its outcome does not shed light on the complex materiality of the operation, on the internal as well as external conditions of its effectiveness. Thinking of the operation in terms of its interval, which it is important to stress is only a heuristic approach, allows us to begin to specify in more philosophical terms what we mean by the politics of operation. We do not equate a causal notion of the operation with the moments of performance and event. The politics of performativity can never be correlated with the linearity of a cause; nor can the event be reduced to an effect. But once we begin to understand the workings of the operation beyond the mechanism of cause and effect, we enter an ontological and epistemological domain in which the questions of performativity and event become relevant. For now we limit ourselves to some brief comments on how such a politics diverges from what Giorgio Agamben, following Jean-Luc Nancy, terms an ethics of ‘in operativity’. [36] Such an ethics is supposed to signal a radical deactivation of the operation that is held in the tension between potentiality and activity. Inoperativity corresponds to the possibility inherent in potentiality that an activity has not realized. For Agamben, this suggests a way of living ‘without purpose’ since it refuses an orientation towards ends or outcomes. [37] This is not the occasion to explore Agamben’s theological derivation of the concept of inoperativity. [38] Suffice it to say that it suggests a style of politics that seems rather contemplative. Agamben explicitly contrasts a politics based on in operativity with ‘the ingenuous emphasis on productivity and labour that has long prevented modernity from accessing politics as man’s most proper dimension’. [39] Arguing that subjectivity ‘opens itself as a central inoperativity in every operation’, he develops what one of us has previously described as a ‘politics without action’ and an ‘economy without labour’. [40] By contrast, what we are calling the politics of operation involves the coalescing of action, labour and work and attempts to imagine processes of antagonism rooted in the production of subjectivity, implied by such coalescing. The interval of the operation not only separates it from the moments of performance and event; it also establishes a mesh of connections that challenge boundaries between ways of living, ways of earning a living and the fabricating of worlds. Considering the operation from the point of view of its interval operates like a freeze-frame that brings into relief the combination of social activities, technical codes and devices that make an operation possible, while at the same time it allows us to look at the outcome of the operation without taking it for granted. This means that there is a need analytically to suspend the role played by the operation in the fabrication of the world in order to grasp the tensions and conflicts produced by the encounter of the operation with its ‘outside’. It is through this suspension that other ways of fabricating the world become theoretically visible and the politics of operation can give way to the forging of ‘counter-operations’. These differ fundamentally from an ethics of inoperativity. While inoperativity implies a withdrawal from productivity and a gestural ethos of play, counter-operations involve targeted action within existing networks of production. Crucial to their effectiveness, which is to say to their ability to fabricate a world, is the political task we have already mentioned of determining the time and space in which to focus the organization of struggles. In this regard, knowledge of the interlinked operations of logistics, finance and extraction is decisive. Between the expansion of capital’s frontiers and its drive to closure, the workings of differential accumulation produce an excess of labour that can no longer be contained by traditional models of technical or political division. Here the production of subjectivity meets what we earlier described as the intensification of labour, its multiplication beyond the wage relation and its explosion of established legal and social statuses. Under these conditions, political organization must establish forms of coordination and solidarity that reach across these multiple lines of division, ranging across borders at different geographical scales and keeping in view the way supply chains, financialization and extractive economies overlap. A movement like Occupy Wall Street, which boldly challenged finance capital by taking hold of its territorial and symbolic heartland, is probably not enough. It needs to connect to struggles that confront capital’s logistical and extractive logics, such as those conducted in ports and mines that we discussed earlier. This is not to valorize horizontal, networked or communicative modes of organization at the expense of vertical structures that can help ensure discipline and continuity. There are still lessons to be learned from historical episodes of party, trade-union and internationalist organization. Elsewhere, we have argued that contemporary efforts of political organization need to grapple with what, following Gramsci’s interpretation of a famous speech by Lenin, we call the question of ‘translatability’. [41] This means these efforts need to come to terms with the deep rooting of struggles in material networks and settings. It also means they have to devise strategies for dealing with the untranslatable aspects of struggles, which expose the limits of communication, tear established political subjectivities away from themselves, and provide an unstable ground on which to open new horizons of organization. We have in mind a similar process of politicization when discussing counter-operations. In this sense, the counter-operation is something more than an act of sabotage. Undoubtedly, sabotage remains one of the primary ways in which the generative claims and actions of subjects within and against the social relation of capital can be realized. To be sure, sabotage has a long history, within which the activities of early-twentieth-century dock workers, miners and railwaymen documented by Émile Pouget figure prominently. [42] What has become more pronounced within current systems of extraction, financialization and logistics is the capacity for capital to route around episodes of disruption. Although we still might assert with Antonio Negri that ‘self-valorization is sabotage’, [43] it has become more urgent to coordinate struggles across the heterogeneity of global time and space. Isolated conflicts may register subjectivity’s excess over the networks of subordination within which they are situated, but their ability to ‘leap vertically’ and challenge capital on the global level (as Hardt and Negri wrote over a decade ago now) [44] has been curtailed. What is needed are new models of solidarity that can negotiate difference across the fractured geographies of globalization, taking into account and finding alternative paths to the socio-technical systems and assemblages that enable current processes of financialization, extraction and logistics. We thus speak of counter-operations both as a way of registering the constitutive moment of struggles, which can easily get lost if one focuses only on the ‘negative’ moment of sabotage, and as a thread along which the vested question of organization can be tested and rethought. It is important to stress that speaking of counteroperations does not imply a simply reactive use of ‘the master’s tools’ in order to prompt practices of resistance. It involves an accurate analysis of the processes of dispossession and exploitation that crisscross the operations of capital and an attempt to build new forms of political organization capable of combining struggles and multiplying their affirmative aspects. This is the chance that exists within the moment, the political decision that would make the crisis worthy of its name.