

Elon Musk: the high-stakes gambler of technological capitalism

by Arnaud Saint-Martin

The career path of SpaceX's CEO traces the contours of new technological capitalism. However, while Elon Musk is often hailed as a revolutionary and visionary entrepreneur, he also relies on traditional business strategies.

Elon Musk is part of the select club of entrepreneurs who aim to change the world. The co-founder of Paypal, CEO of SpaceX and Tesla, and Chairman of Solar City as well as a range of other start-ups and projects (Hyperloop, Neuralink, Boring Company), the billionaire regularly makes the headlines, generating fascination and exasperation in equal measure. Portraits and biographical sketches of Musk tend to showcase and play with clichés and expectations, but also either his positive attributes or conversely a rejection of everything he supposedly stands for. Musk is presented as the face of a very common cultural trajectory in Silicon Valley. It's all there. Musk's story is that of the metamorphosis of a 'nerd' born in South Africa who progressively made his dreams come true in North America, where he emigrated at the age of 17; of a science-fiction fan and video gamer turned entrepreneurial 'genius'; of commercial savvy combined with high-tech hubris, but also of the spontaneity and obstinacy of a forceful man capable of realising dreams beyond the reach of ordinary people, the poster boy for 'free enterprise'; of the self-assertion of a public figure high up in the world ranking of billionaires,¹ part of the pantheon of pop culture 'superheroes',² the 'captain of

¹ Depending on stock market valuations, particularly of Tesla, Musk's personal fortune stands at around 20 billion dollars.

² Hollywood has transformed him into a cultural object for mass consumption. Musk inspired the character of Tony Stark in the Marvel Comics adaptation 'Iron Man' (2008) and went on to appear ironically in the sequel (2010). He has also become an entrepreneur in TV series, appearing in 'The Big Bang Theory' in 2015, featuring in an episode of the Simpsons ('The Musk Who Fell to Earth', 2015), as well as in episodes of South Park

industry who plans to die on Mars'.³ His public persona gives hyperbolic expression to dominant cultural models. Musk attaches great importance to the impact he makes in the different worlds in which he plays out his role. Ubiquitous and omniscient, he charges ahead, equally at home in the fields of rocket science and merchandising, even as he appears on the brink of burn out.⁴ His 'performances' are visibly staged to showcase his self-sacrifice as adventure leads him to his destiny, leaving those who excitedly chronicle his 'new quest to colonize the cosmos'⁵ endlessly astounded by his electrifying charisma. All this self-projection serves as a kind of trademark: Musk sells, but 'Musk' is a selling point.

This essay does not offer further speculation about Elon Musk, nor is it a biography,⁶ nor does it aim to extol his merits or to tear him down. Instead, it outlines the main features of this story of an entrepreneur hitting the jackpot: the story of an individual whose successes and personal qualities have been shaped by social, technical, and political worlds which he navigates dramatically and opportunistically; the story, also, of a high-stakes gambler from Silicon Valley always on the verge of losing everything, despite – or perhaps because of – his immense fortune. Drawing on a range of sources, my aim here is to put into perspective this embodiment of the new spirit of technological capitalism, which profits from the commercialisation of tech industry promises and from the cult of 'disruptive' entrepreneurship, in line with the values that structure the moral economy of science in the early 21st-century.⁷

'Elon', the Serial Entrepreneur

'Disruptive' innovation is framed as the DNA of a successful entrepreneur at the turn of the 21st century and Musk's career as the perfect illustration of this principle.⁸ In reality, though, this comes down to nothing less than *destruction*, whatever the sector: by introducing (among possible strategies) new ideas, concepts, technologies or industrial methods that are more or less radically opposed to the existing order and by exploiting them ruthlessly to shake

(2016) in which he embodies a galactic superhero, and presenting himself as an authority in the National Geographic series 'Mars' (2016).

³ 'Elon Musk, le capitaine d'industrie qui veut mourir sur Mars', *Le Monde*, 6 July 2015.

⁴ The disconcerting interview Musk gave to the *New York Times* last August gave rise to all sorts of speculation about his mental health. David Gelles, James B. Stewart, Jessica Silver-Greenberg and Kate Kelly, 'Elon Musk Details "Excruciating" Personal Toll of Tesla Turmoil', *The New York Times*, 16 August 2018.

⁵ See, for example, Christian Davenport, *The Space Barons: Elon Musk, Jeff Bezos, and the Quest to Colonize the Cosmos*, New York, Public Affairs, 2018; Tim Fernholz, *Rocket Billionaires: Elon Musk, Jeff Bezos, and the New Space Race*, Boston, Houghton Mifflin Harcourt, 2018.

⁶ For the time being, the most fully-documented biography remains Ashley Vance's book *Elon Musk: How the Billionaire CEO of SpaceX and Tesla is Shaping Our Future*, London, Virgin Books, 2016 [2015].

⁷ Steven Shapin, *The Scientific Life: A Moral History of a Late Modern Vocation*, Chicago, The University of Chicago Press, 2008, p. 269-303.

⁸ Jeff Dyer, Hal Gregersen, Clayton M. Christensen, *The Innovator's DNA: Mastering the Five Skills of Disruptive Innovators*, Cambridge, MA, Harvard Business School Publishing, 2011.

up the status quo. This personification of the myth of the innate entrepreneur⁹ and creator can be seen in the spontaneous thought associated with innovation and its linear model (from the spark created by an original idea to its application on the market), which is cut and pasted in Readers, manuals, and business school classes on entrepreneurial savvy.¹⁰ Schumpeter's 'creative destruction' is the desired horizon for a capitalist economy driven by the 'perennial gale'¹¹ of disruption. The start-ups, companies, and fancy companies founded or co-founded by Musk offer some salient case studies. Paypal? The destruction of the banking industry by making online payment the norm. SpaceX? The destruction of the aeronautical military-industrial complex by developing low-cost and partially recyclable launchers. Tesla? The destruction of the giant car companies of Detroit who have yet to shift to electric and self-driving vehicles. Solar City? The destruction of the fossil fuel industry by providing widespread access to solar energy. Whether indirectly or directly, the aim is destruction by exerting control over every aspect of a vertically integrated production line, from the supply chain to delivery of services. This principle of the 'full-stack start-up' has been replicated time after time.

The chronology of Musk's disruptive breakthroughs is well established. The problem, though, is that this linear grand narrative, produced with the benefit of hindsight, gives the impression of a secret master plan slowly unfolding. And yet while the narrative of this career now seems stable, it involved both failures and adjustments and this is one of the major contributing factors to the aura that surrounds him. Musk certainly did not start from nothing. In order to achieve specific market objectives, his disruptive technologies have drawn on a common wellspring of knowledge, industrial processes, infrastructures, and public resources available under certain conditions. To begin with we have Zip2, Musk's first start-up, which he founded in 1995 in Palo Alto with his brother and which Compaq bought in 1999 to integrate in its search engine AltaVista: this online directory/portal used mainly public information and benefited from subscriptions to its services from local businesses and the press. A window of opportunity opened up and, in his capacity as a programmer, Musk took advantage of it, working using available code and selling the right solution at the right time. Similarly, X.com—the start-up that Musk merged with Confinity, which turned into PayPal, in 2000—showed a strategic sense of 'mafia'¹² investment: coding geniuses charging into the breach of the 'new economy' before the dot.com bubble burst. The experience was short-lived. Musk left PayPal with a profit and the company survived the crash and was bought by eBay in 2002. Now a man of leisure, the multi-millionaire founded a new start-up, this time in the space industry. Space Exploration Technologies Corp. promised to develop

⁹ Like so many other entrepreneurs who 'started from nothing' in Silicon Valley, Musk left university (Stanford University's doctoral programme in Physics, just after enrolling in 1995) to launch his own company.

¹⁰ See Erwan Lamy, 'La pensée gestionnaire de l'innovation et son enseignement' in Ivan Sainsaulieu, Arnaud Saint-Martin (eds.), *L'innovation en eaux troubles. Sciences, techniques, idéologies*, Vulaines-sur-Seine: Éditions du Croquant, 2017, p. 111-129.

¹¹ Joseph Schumpeter, *Capitalism, Socialism and Democracy*, London, Routledge, 2003 [1943], p. 84.

¹² Peter Thiel uses the highly revealing metaphor of the 'PayPal Mafia' to refer to this mechanism. See Peter Thiel, with Blake Masters, *Zero to One: Notes on Startups, or How to Build the Future*, London, Virgin Books, 2015 [2014], p. 119-120.

low-cost launchers to make space routinely accessible and, in the long run, to allow for the colonization of Mars. Once again, the technologies had to be proven, the investors convinced, and the sceptics silenced. Above all, they had to establish themselves as part of the inner circle of companies as well-established and far-reaching as Boeing and Lockheed Martin and earn the trust of the gatekeepers of NASA. Tesla was no less of a challenge: building a company from the ground up that promised to break with ‘business as usual’ in an industry built around big brands and fossil fuel consumption. This has involved manufacturing high-end Aston Martin-style electric cars, which are almost autonomous, sold at attractive prices, and fuelled by green energy delivered free of charge by the company’s network of stations—all in the name of sustainable and environmentally-friendly industrial growth.¹³

This was an attractive proposition for many wealthy consumers and certain media outlets, and seemed to herald a less rosy future for ‘historical’ manufacturers who watched with envy as Tesla’s market capitalisation rose, strongly inflated by speculation. However, this destruction by ‘techno-entertainment’ has come up against the realities of the automobile industry: despite an iron-fisted management style and increased outputs from the production line, the factory cannot always meet demand and its production model appears questionable. The company is not making a profit and has seen heavy losses without showing any sign of bucking the trend.¹⁴

From Storytelling to the Test of Reality

Both the specialist and the general press combine these same ingredients with the same dramatic intensity generated by ‘disruptive’ entrepreneurialism in order to describe Musk’s trajectory. The venture capital that injects funds into techno-scientific start-ups functions in fits and starts; its funders and entrepreneurs are never so inspired as when their investments reap significant rewards in the short and medium term. As soon as the first funds are raised, entrepreneurs are expected to show early on that their projects are viable. This requirement doesn’t last long though: as soon as the start-up has established that it is a safe bet and as soon as the more outlandish ideas¹⁵ have been separated out from the realistic commercial prospects, the entrepreneur enters the critical phase of resizing activities to an

¹³ The company’s marketing strategy is sufficiently smart to circumvent the major ecological risks of the mass use of strategic rare materials for electromobility. See Guillaume Pitron, *La guerre des métaux rares. La face cachée de la transition énergétique et numérique*, Paris, Les Liens qui libèrent, 2018.

¹⁴ ‘Pertes record et nouvelles promesses chez Tesla’, *Les Echos*, 8 February 2018.

¹⁵ The Boring Company that Musk founded in 2016 is a perfect caricature of this. The company’s official aim is to dig urban tunnels enabling drivers to avoid traffic jams, especially in Los Angeles where the start-up is based. It is an artist’s impression, but projects are apparently underway, in particular the installation of a ‘loop’ transporting passengers in a shuttle at 200km/h between the airport and Chicago city centre. Many observers do not seem to be phased by the fact that the Boring Company marketed a flame-thrower at \$500 apiece (20 000 have been sold so far...) to pump-prime liquidity or that the entrepreneur now caught up in his tunnels admitted that they had ‘no idea’ what they were doing; instead, they continue to hail the marketing genius of the project.

industrial scale. The time for disruptive demos and for overselling out of necessity has passed; now, exponential growth is expected. This often fatal moment of transition is when Musk's companies lie open to the risk of self-destruction. While failure and its possible consequences are tolerated to a certain point, it has to be built into the business model. In June 2015, a Falcon 9 launcher exploded a few seconds after take-off and with it, supplies for the International Space Station. In March 2018, a driver died in a Tesla in semi-automatic mode. All these high-profile incidents then require new public relations efforts, providing reassurance and, above all, avoiding further missteps, lest the start-up vanishes as quickly as it appeared.

In their early stages, emerging high tech industries are founded on promises. Media and speculative bubbles form, supported by business angels who gamble on the future, often at a loss. It would be too hasty simply to dismiss the companies in which Musk is involved as baseless ramblings without a business plan. Or at the very least, we have to distinguish between, on the one hand, projects that are here today, gone tomorrow, openly acknowledged jokes, and whimsical visions, and, on the other hand, fully developed projects. This is not as easy as it might sound, because some of his present-day successes seemed eccentric at the outset and often justifiably so. Looked at one way, then, we have the arrogance of an entrepreneur born from the 'net economy' planning to develop a commercial launcher using his own funds and a team of breakaway engineers to teach him the basics of rocket science. When Falcon 1 failed three times between 2006 and 2009, it seemed to vindicate the sarcasm of his jaded critics. Ultimately, though, it is thanks to Falcon 1 that the Merlin 1C rocket engine was perfected and went on to equip the first and second stages of Falcon 9, a launcher with exemplary reliability that has gone on slowly but surely to turn SpaceX into the leading player in the commercial launcher market. And then, of course, there was the successful development of reusable first stages. A few years ago, engineers and launcher industry specialists laughed at the concept, but it is now tried and tested technology for SpaceX. What, though, of the 'Hyperloop' projects, drawing on Musk's open-source concept, publicised in 2013, of a passenger and freight transport system using capsules propelled at 1200km/h through a tube covered in solar panels? The first 'demos' of start up Hyperloop One, bought out by Richard Branson, met with bafflement from even the most open-minded experts.¹⁶ This has not prevented the growth of these projects however, with the Hyperloop TT version now based in Toulouse thanks to French state support.¹⁷ Looked at another way, we have a messianic vision of humanity being 'augmented' by Neuralink's neuro-technological implants and, thanks to the colonization of Mars, saved as a 'multi-planetary species'. Here, Musk breathes new life into Patrick McCray's notion of the 'visioneer'—a US-born cross between a

¹⁶ For a definitive critique of the 'big idea' of Hyperloop, see Alon Levy, 'Elon Musk's Ideas About Transportation are Boring', *Pedestrian Observations* blog, 15 December 2017, <https://pedestrianobservations.com/2017/12/15/elon-musks-ideas-about-transportation-are-boring/>, accessed 14 September 2018.

¹⁷ 'À Franczal, des pistes d'essai pour faire léviter le train Hyperloop', *Le Monde*, 4 July 2018.

visionary and an engineer,¹⁸ as well as, of course, a salesman. The building of possible worlds, on Earth or elsewhere, is a common trope of science fiction¹⁹ that adds a final touch to the range of values and objectives that Musk and the ultra-rich elites allow themselves to envisage as they project themselves, literally and figuratively, into space.

Musk looks far ahead into the future, but he does not do so alone. The companies he runs and ‘inspires’ employ thousands of people. Like all organisations of this type, they are led by a Board of Directors, run by Chief Officers whose work is considered indispensable (for example, Gwynne Shotwell and Tom Mueller at SpaceX), and financed to a greater or less extent by investors and, in Tesla’s case, shareholders. In putting together his projects, Musk has managed to surround himself with highly-competent key figures and experts. SpaceX and Tesla have ceased being start-ups for many years now. They comprise thousands of employees and substantial order books. Their hiring policies emphasise fanatical commitment—workers should not count the hours they devote to the cause—as well as remarkable technical skills and a passion for the CEO’s ‘vision’. This last point is presented as particularly essential for the running of these companies, all of them under constant pressure. It’s Mars or bust, a crisis model of management, the arrogance of thinking they can change the world, and the creation of a ‘cult’ that only insiders confined to their place of work/home can understand.²⁰ The employee accounts that filter out from the SpaceX factory all converge to paint a picture of work that is exhausting and alienating, but that co-opts everyone in a ‘fun’ and epic adventure sublimating the orders of an exemplary leader who knows how to work up a sweat in his Silicon Valley T-shirt.

Musk applies himself to blocking the path of the establishments disturbed by his activities. His ‘inspiring’ speeches at the great astronautics conventions—where he unveils plans to ‘colonize’ Mars, galvanizing and dumbfounding his audiences in equal measure—place him in direct competition not only with NASA but also with the industry actors on whose markets he is encroaching, in particular United Launch Alliance. The mock-ups of SpaceX’s Mars base are reminiscent of the dreams of the 1950s or recent plans by the Mars Society,²¹ but Musk and SpaceX have made them tangible. By broadcasting the progress of the Big Falcon Rocket, designed to make the inaugural journey to Mars and then to support the initial phases of establishing colonies there, in theory all before 2030, the company would have us believe that this is tomorrow’s world. These very optimistic projections force NASA’s spokespeople to save face and, whatever their feelings on the matter, to encourage this private initiative as something that encourages emulation but that obviously cannot challenge the space agency’s greater legitimacy when it comes to setting the pace for space exploration. Doubts are setting in, though, including within NASA itself. In some respects, these

¹⁸ Patrick McCray, *The Visioneers: How a Group of Elite Scientists Pursued Space Colonies, Nanotechnologies, and a Limitless Future*, Princeton, Princeton University Press, 2013.

¹⁹ Gene Seymour, ‘The Billionaires’ Fantasia’, *The Baffler*, n° 24, 2014, pp. 63-74.

²⁰ Peter Thiel, with Blake Masters, *Zero to One, op. cit.*, p. 124-125.

²¹ See Howard McCurdy, *Space and the American Imagination*, Baltimore, Johns Hopkins University Press, 2011, 2nd ed.

disruptions are exaggerated and partly feigned. While they are by no means a new development—they serve the interests of new ‘disruptive’ players, fuelling their strategies for self-affirmation in the field of astronautics—they have become a constant feature of discourse over the recent years. This testifies to the fact that Musk and other ‘NewSpace’ entrepreneurs are challenging NASA’s monopoly over cultural authority regarding space. The fact that the heads of space agencies in the USA or in Europe are now so quick to brandish the slogans of entrepreneurship and ‘disruption’ is a sign, at the very least, of a change in tone. It is also the result, and proof of the not-so-paradoxical success, of policies favouring entrepreneurship and private space exploration that NASA’s leaders have striven to put in place since the end of the 1980s.²²

Is Musk a Political Animal?

Because CEOs want to ‘change the world’, they position themselves in the public spaces where they can best make themselves heard. Like other tech billionaires, Musk is involved in philanthropy. He signed the ‘Giving Pledge’ in 2012, which requires its signatories to donate a significant portion of their wealth to humanitarian causes. The Musk Foundation was created in 2002 with, as its key priorities, humanitarian aid, the environment, and, more recently, private education.²³ Musk is also involved in organisations and think tanks dedicated to issues that concern him: for example, until recently, ‘OpenIA’ a non-profit organisation that nevertheless ‘raised’ 1 billion dollars to ‘democratise’ and ‘contain’ undesirable developments of Artificial Intelligence; or, dealing with the same issues, the Future of Life Institute. While he has not been as visibly engaged politically as his PayPal associate Peter Thiel,²⁴ a well-known libertarian and President Trump’s intermediary in San Francisco Bay, Musk has nevertheless adopted some political positions. Most of them place him on the centre-left of the political scene, particularly through his emphasis on green energy and fighting global warming. His political opinions are also expressed through the donations made by the Musk Foundation to political organisations, primarily on the centre-left of US politics. His self-professed concern for non-partisan independence nevertheless saw him donate 38,900 dollars to the Republican Political Action Committee in the last

²² See Xavier Pasco, *Le nouvel âge spatial. De la Guerre froide au New Space*, Paris, CNRS Éditions, 2017.

²³ Musk Foundation, <https://www.influencewatch.org/non-profit/musk-foundation/>, accessed 20 September 2018. It is also no secret that such foundations can serve as a cover for tax evasion. Alongside actual donations for various causes and charities, billionaires have every opportunity to place parts of their private wealth in these foundations sheltered from tax. On Musk’s tax planning, see Drew Millard’s hypotheses in ‘Why did Elon Musk stash a quarter-billion dollars of Tesla stock in a non-profit back in 2016?’, *TheOutline.com*, 5 August 2018, <https://theoutline.com/post/5707/elon-musk-has-a-quarter-billion-dollars-of-tesla-shares-parked-in-a-non-profit>, accessed 20 September 2018.

²⁴ Peter Thiel, with Blake Masters, *Zero to One, op. cit.*, pp. 119-120.

presidential campaign, to the disbelief of environmental activists.²⁵ Until then, Musk's public interventions had seemed to suggest closer proximity to the Democrats and he certainly benefited greatly from the Obama administration's support. His agreement to sit on the short-lived committee of prominent business leaders formed by Donald Trump after his election sowed further confusion and fuelled speculation about a potential rapprochement with the new administration. However, his public criticism of the Federal State's withdrawal from the COP21 agreements has placed him, de facto, among the opposition. This dissent should be put in perspective though: *realpolitik* means not only that Musk's publicity coups fuel the Make America Great Again propaganda machine but also that some of Musk's business depends on public commissions, so that he must remain relatively restrained in order to defend his business interests.

Political commentary produces considerable chatter in response to Elon Musk's countless tweets. He posts in reaction to current affairs and against press reports, rejecting their analysis, in a direct and sometimes crude style. However, it is first and foremost on his own terrain, i.e. in relation to his businesses, that he expresses his political 'vision', through his actions and through the strategic decisions and investments that he makes. In terms of the 'possible world' the entrepreneur aims to build, there is nothing that is new or that lies outside the scope of what is already politically imaginable in the US. The type of society that emerges from the artists' impressions and computer-generated images borrows as much from 'hard science fiction' as from the political aesthetics of the 'frontier', of the utopianism of 'colonization', and of America's 'Manifest Destiny', as well as from techno-futurist faith and optimism, and liberal individualism projected into outer space.²⁶ This world is still the one populated by the most capable and heroic individuals, by self-made men and women who are confident in their ability to emancipate themselves through relentless but creative work and who raise themselves above the anonymous mass of their fellow humans. However, until proven otherwise, this promised world remains a dream. Although the converts to SpaceX, as well as other companies and lobbies, dangle before us the promise of a new Martian society in which they firmly believe,²⁷ for the time being at least, reality still has the upper hand.

While we await missions to Mars, Musk's philanthrocapitalism suggests that his foundation's 'investments' aim to turn humanity into a 'Multi-planetary species'.²⁸ However, what remains key is ensuring the profitability of companies that can afford the luxuries of a social conscience, by 'greenwashing' (Tesla, Solar City), and of 'fun' cosmic adventures. And this is why 'disrupting' the State is not on the cards. Musk's 'adventures' have benefited from

²⁵ Taylor Link, 'Elon Musk revealed as one of the largest donors for a House Republican PAC', Salon.com, 14 July 2018, <https://www.salon.com/2018/07/14/elon-musk-revealed-as-one-of-the-largest-donors-for-a-house-republican-pac/>, accessed 14 September 2018.

²⁶ Daniel Sage, *How Outer Space Made America: Geography, Organization and the Cosmic Sublime*, Farnham, Ashgate, 2014.

²⁷ David Valentine, 'Exit Strategy: Profit, Cosmology, and the Future of Humans in Space', *Anthropological Quarterly* 85, n° 4 (2012): 1045-1067.

²⁸ On philanthrocapitalism's *raison d'être*, see Linsey McGoey, Darren Thiel, Robin West, 'Le philanthrocapitalisme et les "crimes des dominants"', *Politix* 121, 2018, pp. 29-54.

so much state funding and so many tax breaks that it would be disloyal of him to want the state to disappear. And given the extent to which the Federal State and its administrations have framed themselves as entrepreneurs for several decades now,²⁹ spending astronomical sums of money on R&D and the infrastructures without which ‘disruption’ would not be possible, it is in the interests of Musk and his ilk to play the game of public-private synergy. This is self-evident as far as Silicon Valley’s ultra-rich ‘innovating class’ is concerned, some of whose members are strongly involved in the creative destruction of government structures and political parties, with a view to replacing them with hybrid structures at the very heart of power in Washington. This is evidenced by the revolving doors of at the higher levels of the Federal Government and by the intense lobbying of Congress by the leaders of Google and Amazon.³⁰

Conclusion

Elon Musk is a public figure who encapsulates the ways in which our era sees itself. A Hercules of the post-modern world, he appears to be engaged in superhuman activities that may eventually lead to his downfall because, according to the *Wired* journalist Alex Davies, his arrogance as a creator leaves him vulnerable to self-destruction, in which case he would eventually bring his creations crashing down with him.³¹ This is reminiscent of the staging of Burning Man,³² a festival that has taken on mythical status for techies and that Musk likes to attend for ‘inspiration’: its ephemeral sculptures are ritually burnt on the *playa* after hallucinatory festivities and all traces of them disappear into the Nevada desert. The high-stakes gambler, burning his way through everything he touches, starting with money, just for the fun of it, such is the New Age vision of ‘Martian colonization’. In this rush towards the future,³³ Musk is not the only one to burn through money. The Japanese billionaire and ‘art collector’ Yusaku Maezawa is the first ‘tourist’ to pay an undisclosed but no doubt exorbitant fee for a ticket to fly over the Moon on the Big Falcon Rocket ‘in around 2023’,³⁴ in the company of artists enjoying a free residence in orbit. After ‘Starman’, the mannequin placed on board the Tesla Roadster sent into space on the Falcon Heavy launcher in February 2018,

²⁹ Mariana Mazzucato, *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*, New York, Public Affairs, 2015 [2013].

³⁰ Thomas Frank, *Listen Liberal: Or Whatever Happened to the Party of the People?*, New York: Picador, 2017 [2016], p. 197-245.

³¹ Alex Davies, ‘Elon Musk is Broken, and We Have Broken Him’, *Wired.com*, 18 August 2018.

³² Olivier Alexandre, ‘Burning Man : l’esprit de la Silicon Valley. Un festival libertaire devenu libéral’, *Revue du Crieur* 11, 2018, pp. 86-107.

³³ This is illustrated by the meltdown that followed Musk’s tweeted announcement that Tesla might pull out of Wall Street last August, which horrified shareholders and warranted an investigation (still underway) by the Department of Justice. ‘Elon Musk Steps Down as Chairman in Deal With S.E.C. Over Tweet About Tesla’, *The New York Times*, 29 September 2018.

³⁴ ‘Le milliardaire Yusaku Maezawa sera le premier touriste à faire le tour de la Lune’, *Le Monde*, 18 September 2018.

amidst the general commotion of an astounding and historic launch,³⁵ SpaceX has managed to create for itself another communications coup, overtaking its competitors in the niche market of space tourism. This rush towards the future gives contemporary life to the values and dreams of a prosperous and dominant America, guided by inventive minds who tirelessly push back all limitations, starting with their own. Musk is therefore at the vanguard of the rearguard, embodying a new Californian spirit of capitalism: the technological feats accomplished by the companies he controls, along with all the hype around them, could almost make us forget the origins of his vertiginous wealth, built on the ruins of the 'new economy' thanks to financial speculation and the promise of a new world on Mars.

First published in laviedesidees.fr, 26 October 2018.

Translated from the French by Lucy Garnier.

Published in booksandideas.net, 18 March 2019.

³⁵ Arnaud Saint-Martin, '*Falcon Heavy*, plus qu'une curiosité spatiale', AOC, 14 February 2018, <https://aoc.media/analyse/2018/02/14/falcon-heavy-plus-quune-curiosite-spatiale/>.