Introduction: the rape of Europa

> The machine has become more than a mere adjunct to life. It is really part of human life – perhaps the very soul. (F. Picabia, cit. in 'French artists spur on American art', *The New York Tribune*, 1915)

0.1 Ivo Pannaggi, *Il ratto d'Europa* (The rape of Europa), 1963–68

The dynamic image in Figure 0.1, projecting energetically forward, is a modern representation of a classical theme: the rape of Europa. The artist is Ivo Pannaggi, the Bauhaus-trained painter, metalworker and architect. This mixed media oil on canvas was completed in the course of five years, drawing on several reworkings, e.g. *Centaur* (1931) and an etching of 1959. Europa, the beautiful, naked nymph, is cruelly abducted and transported westwards, as is related in the classical myth by Apollodorus. Her rapist, a lusty, tribal Zeus, assaulting his victim in the archaic guise of a bull, undergoes here a modern metamorphosis into a helmet-clad, goggle-wearing centaur, riding a powerful, roaring motorcycle – 'I motorised Zeus', Pannaggi proudly declared. Mechanical features and details are on display, from the prominent wheels to handlebars and headlights. Thick fumes exhale from a visible exhaust pipe.

Pannaggi's polemic against neoclassical figurative painting, betrayed by this parody, is framed within a representational space dominated by an arresting motorcycle, magnified in its dazzling mechanical appearance. This is more than a motorcycle. Kidnapping and ensconcing a symbolic Europa, it is modernity itself hurling towards the viewer at infernal speed. This irresistible piece of machinery, glorified in its constructive mechanical beauty, is foregrounded as a means to consigning a recalcitrant, traditional, 'organic' and yet irresistible Europa, traditionally typified by her naked body, full breasts and long and flowing mane of hair, to the circuits and corridors of modernity. In the spatial and temporal expansion of Empire and modernity, suggests Arjun Appadurai, the world is re-written, re-encoded as 'Europe's tomorrow and Europe's elsewhere'.[1]

I take the compellingly modern representational space constructed by Pannaggi here as a point of departure to explore the extent and manners in which postwar Italian futurist artists deployed the machine as a vehicle – quite literally as in this particular case – of modernity. Dynamic engines of social and constructive engagement, pistons and carburettors of displacement, of re-envisioned times and spaces, machines are lodged at the core of the futurist belief in a totalitarian and utilitarian art. Especially after the First World War, machines become the very syntax and architecture of futurist aesthetics and ideology.[2]

Machines are objects in motion. The field of mechanics studies objects set in motion by the influence of internal or external forces, including serial or automatic. In the modern age, the machine's mobility is underpinned by a 'postulate of automatism', blurring the boundary between animate and inanimate.[3] The modern machine is a social construct, locked in a binary with us humans. Machines are motors and engines. Symbolically, and by extension, they signify traffic and circulation, elision of distance: fast means of transport and communication connecting together the furthermost corners of the world, compressing time and space. The *futuristi* translated the tension between nationalism and internationalism entrenched in the *avant-guerre* into the postwar via the machine, in tandem with a broader semantics.[4]

Futurismo was first and foremost a movement of the now, of the here and of the elsewhere. Originally labelled 'dynamism' (*dinamismo*), with reference to 'dispersion

1 A. Appadurai, *The Future as Cultural Fact: Essays on the Global Condition* (London and New York: Verso, 2013), 225.

2 M. Perloff, *The Futurist Moment: Avant-Garde, Avant Guerre, and the Language of Rupture* (Chicago and London: University of Chicago Press, 2003), 228.

3 T. Veblen cit. in M. Seltzer, *Bodies and Machines* (New York and London: Routledge, 1992), 144.

4 Perloff, *Futurist Moment*, 207.

of dynamic energy from inert matter'[5] and the flow of kinetic forces it aimed to tap into, the movement was quickly re-branded 'futurism', reoriented towards a measure of time and forward direction on the temporal line. The new appellation implies a rupture in the fabric of present time, a leap forward. In fact, the futurists aimed to compress space and time, reconfiguring them so that 'heterogeneity and homogeneity, decentralization and centralization occur simultaneously'.[6] The futurist machine re-envisions Kantian space and time, pursuing novel and globalised politics and economics. Encompassing the spatial lust for an undivided, pluralist, constructive, expansive modernity, embodying the temporalities embedded in the denomination 'futurism', the machine is, quite literally, *futurismo*'s time machine.

The new mobility pursued by futurism both reflected and propagated altered perceptions of time and space. Space in modernity became 'dynamically, historically significant', as Andrew Hewitt puts it.[7] Proximity generated anxiety. Simultaneity acquired broad cultural signification in its capacity to foster 'a growing sense of unity among people formerly isolated by distance and lack of communication'.[8] If modernity is characterised by 'totalising temporalities',[9] this politics of time is particularly pertinent to futurism and its overlapping root notions: 'dynamism' and 'simultaneity'.

Since 1914, Umberto Boccioni (1882–1916), arguably the most prominent exponent of the original futurist group, had sought to infuse his art with energy and 'force lines' (possibly inspired by Michael Faraday's 'lines of force'). Boccioni underscored the inevitable evolutionary convergence of human and machine.[10] Awareness of the 'plastic' status of reality must naturally lead to an appreciation of machines and mechanisms, Boccioni further argued. Drawing on a romantic, anti-classical legacy, Boccioni's pronouncements on the inextricable bond between dynamism and machines constitute in embryo a manifesto of mechanical intent grafted in *futurismo* from the word go.

From then onwards, mechanical notions including dynamism, simultaneity, speed, velocity, acceleration, vibration, states of matter began to populate futurist discourse, progressively becoming constituent parts of its grammar. Dynamism and simultaneity govern duration and temporality, as well as travel across space. This is

5 E. Braun, 'Vulgarians at the gate', in L. Mattioli Rossi (ed.), *Boccioni's Materia: A Futurist Masterpiece and the Avantgarde in Milan and Paris* (New York: Guggenheim, 2004), 7.

6 F. Loriggio, 'Introduction', in *Social Pluralism and Literary History: The Literature of the Italian Emigration* (Toronto, New York and Lancaster: Guernica, 1996), 8.

7 A. Hewitt, *Fascist Modernism: Aesthetics, Politics, and the Avant-Garde* (Stanford: Stanford University Press, 1993), 37.

8 S. Kern, *The Culture of Time and Space 1880–1918* (London: Weidenfeld and Nicholson, 1983), 88.

9 P. Osborne, *The Politics of Time: Modernity and Avant-Garde* (London and New York: Verso, 1995), x.

10 U. Boccioni, *Pittura e scultura futuriste (dinamismo plastico)* (Milan: SE, 1997), 21–2: 'man evolves into machine and machine into man'.

exemplified in Boccioni's work. Boccioni's paintings and sculptures sought a new plasticity predicated on movement, with a view to capturing moving mechanisms, their speed and energy. Boccioni pursued a 'plastic dynamism' predicated upon de-hierarchisation and decomposition of the constituent building blocks of space, as in the sketch *Bottle Evolving in Space* (1911–12), cast into a bronze sculpture in 1913. The body of the bottle sheds its inherent opacity while subject and background become merged in a continuum traversed by force lines and the ghostly traces left by past and future trajectories.[11] For Boccioni, in other words, the footprints of past and future coexist *dynamically* and *simultaneously* in space. His original focus on the underlying forces holding together matter and their mutual interactions, dynamism and simultaneity constitute an archaeology of machine art. Thrown off course by a skittish mare during a cavalry training exercise in 1916, Boccioni did not live to see the consolidation of a futurist style. His legacy, however, was vivid and widely influential.

Dinamismo, in particular, held sway in the early futurist worldview. Drawing on Friedrich Nietzsche and Henri Bergson, conversant with Taylorist tempo and Henry Ford's mass-produced economy, references to accelerated time punctuated early futurist manifestos, most notably Boccioni's Manifesto of futurist sculpture (1913). Dynamism was posited as an axiomatic mechanical force engendering agency and mobility, permeating the manners in which reality speaks and becomes known to us, the engine of an art where 'bodies and objects are no longer opaque, no longer immobile [but where] light penetrates objects, emanates from them or constructs them'.[12]

Emphasis on dynamism and simultaneity are also a testament to the extent and depth of Bergson's influence on Italian futurism. A diffusive, pantheist view of speed correlated with duration modulated the early futurist experience. Chiming in with Bergson's theories, the constant flux of thoughts, sensations and memories which constitutes our experience was perceived as moving backwards and forwards, shifted by power of cognition and analogy, complicating and collapsing time. Simultaneity and its relative mechanical of movement found aesthetic application particularly in the visual arts, where simultaneity translated into a form of visual fragmentation consisting of disembodied, discrete realities reassembled on the canvas.

Momentous scientific developments correlate with these theories. Albert Einstein's special relativity theory (1905) was premised on motion's relativity to a specific system of reference and multiple observation stations. Simultaneity and dynamism, from this perspective, underpin mechanics at the fundamental level of universal energy.[13] Homing in onto matter's relational properties and interactive

11 See also Kern, *Culture of Time and Space*, 163–4 and 185.

12 U. Apollonio, 'Introduction', in *Futurist Manifestos* (London: Thames and Hudson, 1973), 16.

13 See also J. Stubbs, 'Futurism and surrealism: a two-speed avant-garde', in G. Berghaus (ed.), *International*

strategies in the dynamic, fuzzy environment it inhabits, the futurist cult of dynamism is therefore hardly an exercise in 'gladiatorial futility'.[14] While the cubists focused on spatial representation, the futurists explored the deeper fabric of reality and underpinnings of space-time 'through research into movement', relying on the discovery that 'objects in motion multiply and distort themselves, just as do vibrations, which indeed they are, in passing through space'.[15] If there is no such thing as objective simultaneity, as Einstein postulated, the futurists represented motion on the canvas as sequences of simultaneous occurrences. In collapsing space and time, congealing motion into pictorial engineering, pursuing agency through assemblage, construction and modularity, mechanics and the machine are implicated and intertwined with the foundational paradigm of *futurismo*.

Not impermeable to popularisations of electromagnetism, relativity theory, quantum physics and radio transmission, Italian futurism remained nonetheless explicitly conversant with the legacy of positivist culture and the specific mechanical technologies forged within the framework of the First and Second Industrial Revolutions. While the scientific debate concerning matter at the sub-atomic level was raging on, between Copenhagen, Germany and the Cambridge Cavendish Laboratory (see section 1.1), the futurists regarded the large and visible machines of production and power, e.g. the bulky, grubby industrial machine, the steam engine and the locomotive, the power station and the airplane, as more compelling markers of 'mechanics'. The futurists rarely spoke of 'technology', always relying on more reassuring terminology, e.g. 'machine'. The seminal futurist machine was the product of traditional engineering rather than speculative physics. While there is little evidence that the futurists steered public reflection and debate over the newly found cultural role of science and applied technology in society, they aimed, however, to embrace a broader conceptual and representational field that had the machine at its core.

Stemming from a technologically progressive, positive nineteenth century, the industrial machine and the factory engaged and enthused the futurists beginning with the official Founding and manifesto of futurism in 1909. William Blake's 'dark Satanic

Futurism in Arts and Literature (Berlin and New York: de Gruyter, 2000), 319: 'the machine breaks down the human self and inserts it into the network of analogies that is the world. The machine's very essence is […] an immediate, spontaneous transfer of energy'.

14 A. Gramsci, cit. in Q. Hoare and G. Nowell Smith (eds and trans), *Selection from the Prison Notebooks of Antonio Gramsci* (London: Lawrence and Wishart, 2007), 307.

15 S. Giedion, 'The research into movement: futurism', in *Space, Time and Architecture: The Growth of a New Tradition* (Cambridge, MA: Harvard University Press, 1982), 444. Cf. also Marinetti's Second technical manifesto of futurist painting (1912), cit. in *ibid*. See also A. Broeckmann, *Machine Art in the Twentieth Century* (Cambridge, MA and London: MIT Press, 2016), 18: 'technology is the abstract form in which people think about technics, and it is the ideological form that makes people think about their world in technical terms'.

mills' had little traction in the Italian collective consciousness: machines and the first tangible evidence of industrialisation were largely associated with progress, dynamism and emancipation. Together with swift and uneven, if robust, industrial development, novel interactions between humans and machines began to hold sway over social, political and labour relations, bringing about a nuanced set of expectations. Self-conscious artisanal, commercial and industrial practices, informed and backed up by the industrial machine, increasingly turned traditional modes of production towards serial and standardised practices at the turn of the century. Machine-lust and a technologically determinist view of art in modern society rendered the *futuristi* uniquely placed to recognise and exploit the aesthetic possibilities of scientific, technological and industrial progress.

One of the main drivers was social embedding of machines in Italy via industrial relations, market, labour, consumption and commodity culture. Beginning with systematic applications of industrial military technology in the First World War, through to the Bolshevik revolution, two moments in time when industrial production in the service of the war and the revolutionary cause reached a pinnacle, up to and including the global market crash of 1929, brought to the fore the irresistible social and political agency of machines. Machines marched forcefully into social and political arenas, in and beyond Italy, embodying the promise of utopian technological futures and, on the other hand, prospecting dystopian catastrophes encoded in increasingly complex and intimate human–machine interactions.

This book does not focus on ruination and machine archaeology. My aim here is to interrogate as broad as possible a set of artists and their trade with a view to exploring the machine's enduring signification, empirical as well as symbolic, its politics and economics, with special attention for the 1920s and 1930s. I contend that the machine needs to be placed firmly at the core of the futurists' strategy of modernity, including their contribution to a Fascist cultural modernity predicated on a mechanical epistemology and a metallic anthropology. Artistic practices examined here pursue a new classicism predicated upon clean, streamlined, engineered forms, functional and automatic, frequently cradled in sleek, metallised, shiny containers, and conversant with human flesh and blood. In many cases artists cherished a political agenda, whether utopian or dystopian, frequently underpinned by, or laced with, Marxist undertones, centred on labour relations within the factory, and, later, as is the case with aerofuturism, enmeshed in the industrial and cultural strategies of the Fascist regime to which it lent reputation, as well as content and material.

The relationship between futurism and Fascism is a long-drawn, vexed question. There is little doubt that marginalisation of Italy in debates around modernism has contributed to an 'oversimplification of the discursive field operating during Fascism

and the ideologies and practices constituting it'.[16] Sandwiched between Walter Benjamin's 'aesthetisation of politics' and Edoardo Sanguineti's 'cynical moment' of the avant-garde, *futurismo* has been dismissed all too easily as the product of a reactionary involution of politics and mouthpiece of totalitarian propaganda. As a result, 'because the futurists supported the Fascist government, few critics have studied the second phase at all'.[17]

The issue, however, has been addressed and by now thrashed out. Beginning from the 1990s, Benjamin's largely misused equation between aesthetics and Fascist politics was debunked in numerous welcome reappraisals and is now largely regarded as reductive.[18] While it is broadly acknowledged that in Italy 'the avant-garde [was] employed in the shaping of a Fascist "new man" and a new "style of life" throughout the duration of the regime',[19] it is also recognised that 'postwar futurism maintained an uneasy relationship with the regime, defending its artistic independence while demanding recognition as the founding spirit of Fascism itself'.[20] At no point, however, did postwar *futurismo* seek unreserved association with the regime, unlike its sister school *novecento*, whose major exponents, Mario Sironi first and foremost, applied themselves to developing an art entirely consistent with the style and political agenda of the Fascist regime.[21]

Furthermore, the futurist proposal to form a political party predated the earliest manifestations of *fascismo* (1919). At the end of the First World War, the futurist leader Filippo Tommaso Marinetti (see Chapter 2) became attuned to contemporary democratic, national and secular discourses. On 30 November 1918 he formally joined the political arena founding a Futurist Political Party, seeking close alliance with the veteran storm trooper corps *arditi*. Later, on 23 March 1919, Marinetti took part in the foundation of Benito Mussolini's *fasci di combattimento* in Milan. In April,

16 R. Pickering-Iazzi, *Politics of the Visible: Writing Women, Culture and Fascism* (Minneapolis, MN and London: University of Minnesota Press, 1997), 21.

17 W. Bohn, *The Other Futurism. Futurist Activity in Venice, Padua, and Verona* (Toronto, Buffalo and London: University of Toronto Press, 2004), 6. See also E. Crispolti, 'The dynamics of futurism's historiography', in V. Greene (ed.), *Italian Futurism 1909–44: Reconstructing the Universe* (New York: Guggenheim, 2014), 54: 'In the abruptly anti-Fascist atmosphere that followed World War II [...] futurist politics were oversimplified into the undiscriminating cliché of a protracted collusion with Fascism, from the party's revolutionary beginnings through to its seizure and consolidation of power. This issue stubbornly became the foundational pretext, in Italy and beyond, for a summary, shallow, and dismissive equation of futurism and Fascism.'

18 A useful outline of this debate is provided by Pickering-Iazzi, *Politics of the Visible*, 129.

19 E. Braun, *Mario Sironi and Italian Modernism: Art and Politics under Fascism* (Cambridge: Cambridge University Press, 2000), 8.

20 *Ibid.*, 9.

21 *Ibid.*, 114. See also 90–112.

futuristi and *arditi* carried out the first major round of Fascist violence, culminating with the thrashing of the premises of the Socialist daily *Avanti!*

By May 1919 Marinetti had rejected Karl Marx's historical materialism and economic determinism.[22] In an article published two months later,[23] he clamoured for a 'technical government' made up of representatives of the unions, as well as agricultural, industrial and manual workers. He further argued in favour of a 'Council of the young', to expedite new legislation held back by the 'gerontocracy' ruling the Senate. However, the Fascist's crushing defeat in the general elections of November 1919 resulted in Mussolini's marked swing to the right, in a bid to win over the middle classes alarmed by the rising success of Socialism. This decisive right-wing turn of *fascismo* is the point at which Marinetti and Mussolini parted ways.[24]

Following the Fiume enterprise,[25] and watching with interest the artistic vitality of the Soviet Union, Marinetti was once more attracted by left-wing politics. In the pamphlet 'Al di là del comunismo' ('Beyond Communism'; 15 August 1920) he borrowed Paul Lafargue's argument whereby machines are a means to free humankind from the oppression of salaried labour.[26] The pamphlet may have been expedited through the press in order to predate the radical democratic Constitution of the free State of Fiume, or *Charter of Carnaro*, co-authored by Gabriele D'Annunzio and the syndicalist Alceste De Ambris, proclaimed on 8 September 1920, which addressed comparable political and aesthetic concerns.[27]

Marinetti's pamphlet provides further evidence of his parting company with Mussolini. In incendiary articles published in the official newspaper of the anarchic command of Fiume, *La Testa di Ferro* (Iron head), both the editor, the futurist Mario Carli, and Marinetti advocated a rapprochement with the left, including anarchist and extreme-left fringes. They also emphasised all along their divergence

22 F. T. Marinetti, 'Sintesi della concezione marxista', orig. *Roma Futurista*, 11 May 1919, in *Teoria e invenzione futurista*, ed. L. De Maria (Milan: Mondadori, 1996), 419–20.

23 F. T. Marinetti, 'Governo tecnico senza parlamento, senza senato e con un eccitatorio', orig. *L'Ardito*, 13 and 20 July 1919, in *Teoria e invenzione futurista*, 410–17.

24 A. Lyttelton, 'Futurism, politics, and society', in Greene (ed.), *Italian Futurism 1909–44*, 64–5; E. Gentile, 'Political futurism and the myth of the Italian revolution', in Berghaus (ed.), *International Futurism in Arts and Literature*, 10.

25 On 12 September 1919, after the Wilson Line split Istria into Italian and Yugoslavian sovereignty, a group of demobilised soldiers, led by the charismatic poet Gabriele D'Annunzio, marched on the Istrian port city of Fiume and settled there, establishing a short-lived Italian Regency of Carnaro. The Fiume experience became a laboratory of radical constitutional politics, corporatist State governance, as well as futurist, anarchist and left-wing politics, unconventional cultures and eccentric lifestyles.

26 See P. Lafargue's influential *Le droit à la paresse* (1880; trans. 1883 as *The Right to Be Lazy*).

27 C. Salaris, *Alla festa della rivoluzione: artisti e libertari con D'Annunzio a Fiume* (Bologna: Il Mulino, 2002), 84. Salaris concedes that echoes of Marinetti's pamphlet may be affecting D'Annunzio's revision of the *Carta*, suggesting a common filiation between the two texts.

from Fascism.[28] Mussolini's Party had swiftly liquidated the Fiume cause, sanctioning the violent repression that followed around Christmas 1920, known as 'Bloody Christmas' (*Natale di sangue*), when the Italian military stormed Fiume. By the end of the Fiume fiasco, futurism and Fascism had parted ways.

Following from these traumatic vicissitudes, postwar futurism welcomed in its midst a constellation of specific and independent identities. The movement acquired stature and notoriety ahead of Mussolini's March on Rome (28 October 1922) and the authoritarian turn taken by the regime in 1924. Marinetti did seek Mussolini's patronage in a manifesto of April 1923, working to fill in a void in cultural policy redressed only after 1926. The schism, however, was made clear in 1924, when Marinetti advocated a dynamic role in the cultural sphere, unbound from the 'imposing dictating constraining forbidding' yoke of Fascist politics.[29]

Once it overcame the crisis and secured a monopoly on political power in 1926, *fascismo* applied itself to devise and strengthen a coherent cultural policy, resorting to 'aesthetic hyper-productivity' in order to redress its unstable, inconsistent ideological baggage'.[30] The Fascists aimed to bring independent cultural institutions under their control and forge ahead with a Fascist cultural revolution. They engaged Emilio Gentile to draft a Manifesto of Fascist intellectuals and the futurists undersigned it, though it was distinctively not futurist in content and form. Beginning in 1926, Fascism focused on instituting a corporate State. In the same year, Marinetti was classified as an 'anti-Fascist' in police records.

In 1927 Fascism turned away from its urban premises, embracing a distinctively non-futurist, ruralist ideology propagated by the image of the Duce as a bare-chested harvester. Nostalgic attachments to the rural and agricultural legacy of Italy came to the fore: a push towards 'ultravillage' ('strapaese') attempted to resist the tidal force of 'ultracity' ('stracittà'), its evil twin. An aggressive pro-natalist campaign in national expansionist function followed suit (see section 6.4d). The merger of the Federation of Intellectual Unions with the unions of the free professions in 1928 ushered in a powerful tool of State control on cultural activities including a register of professional cultural operators.[31] Artists continued to enjoy freedom of debate within these constraints and Mussolini declared there would be no official State art.[32] Giuseppe Bottai, who led the Ministry of Corporations between 1929 and 1932, was one of the voices

28 Cf., for example, M. Carli, 'Polemiche di anarchismo', *La Testa di Ferro*, I:30 (30 October 1920), cit. in Salaris, *Alla festa della rivoluzione*, 229, fn. 63.

29 Marinetti, 'Marinetti e il futurismo', in *Teoria e invenzione futurista*, 616: 'che esige impone limita vieta'.

30 J. T. Schnapp, *18BL: Mussolini e l'opera d'arte di massa* (Milan: Garzanti, 1996), 14.

31 Lyttelton, 'Futurism, politics and society', 68–9.

32 P. Fossati, 'Pittura e scultura fra le due guerre', in *Storia dell'arte italiana* (Turin: Einaudi, 1982), III, 230.

raised to openly oppose the notion of a single Fascist style. Bottai actively encouraged artistic innovation, the latter emerging as a winner in these culture wars, and, in 1940, created a new Office for Contemporary Art within the Ministry of Education, which he held at that time. The *novecento* group found favour, while the futurists competed for State patronage more fiercely after the Fascist State brought under public ownership swathes of private enterprises under the stranglehold of the on-going economic crisis. Fragmentation was enhanced, if not directly encouraged, by a State-driven articulation of exhibition policies. Emily Braun puts it eloquently:

> a series of administrative controls […] aimed to discourage opposition with an insidious combination of coercion and tolerance. As a result, the Fascist period was marked by pluralism in the visual arts, which permitted the avantgarde and the retrograde, abstraction and neoclassicism, to be deftly absorbed by the State's eclectic patronage. […] Intentionally or not, Mussolini's hands-off policy had the effect of dividing and conquering the intellectual community. […] the strategy of allowing a margin of creative freedom while rewarding capitulation led the majority of artists to coexist with, if not openly support, the regime.[33]

Marinetti was anointed Royal Academician in 1929. Still at the helm of *futurismo* and unrepentantly anti-clerical, he rejected the Lateran Pacts of 1929 that sanctioned the newly forged alliance between the Catholic Church and the State, preparing an opportunistic response in the 1931 Manifesto of futurist sacred art, penned with Fillia. The international crisis of 1929 fuelled anti-modern debates as applied technology and machines began to be regarded in less favourable light. While Fascism increasingly found identity and legitimacy in a particular style borne out of a set of myths, rhetoric, symbols and ideologies, an endorsement of late capitalism within a totalitarian framework, as convincingly discussed by Ernst Cassirer,[34] its aesthetics became more carefully crafted and integrated in sophisticated and identifiable manners. The Venice Biennale, showcasing Italian art on the international scene, was revamped in 1930. A comparably large-scale operation, the Quadriennale, was established in Rome in 1931.

The rise of National Socialism in Germany in 1933 was watched with interest by Mussolini and his Press and Propaganda office, later to be re-entitled Ministry of Popular Culture (Minculpop; 1937). Although the futurists played a role in Fascism's attempt to prove its superiority to National Socialism, Marinetti actively protested against Hitler's degenerate art campaign of 1937. Fascism was on a trajectory that

33 Braun, *Mario Sironi*, 1–2. For Marinetti's relationship with *fascismo*, see also E. Ialongo, 'Filippo Tommaso Marinetti: the futurist as Fascist, 1929–37', *Journal of Modern Italian Studies*, 18:4 (2013), 393–418. See also G. Lista, *Enrico Prampolini futurista europeo* (Rome: Carocci, 2013), 259.

34 E. Cassirer, 'The myth of the State', *Fortune*, 29:6 (1944), 165.

would bring it closer to its German counterpart, sanctioning this convergence at a later stage with a Pact of Steel (May 1939). A formal cultural agreement between the two regimes dated November 1938 persuaded *fascismo* to repudiate modernism, anti-traditional art and internationalism in favour of a homegrown 'autarchy'. In the same year, Mussolini issued a set of anti-Semitic laws. A new periodical entitled *La Difesa della Razza* (Racial manifesto) led a campaign against modern 'Judaised' art but avoided direct references to futurism.

Marinetti opposed the anti-Semitic campaign with soirées and debates in the name of creativity and intellectual freedom. However, 'this would be the final occasion on which the futurists exercised a real and positive influence on cultural policy'.[35] The futurist leadership seemed ultimately uncommitted and disenfranchised,[36] despite its further aesthetic contribution to Fascist ideology via the aerofuturist rubric (see Chapter 6).[37] Cast at the margins in an intensely volatile environment, the futurists made 'uneasy and contradictory Fascists, swaying between consensus and anti-conformism'.[38] They obtained little benefit from their alliance with Fascism: the regime ultimately co-opted them in order to emasculate them.[39] Poised uncomfortably between a traditional culture increasingly growing apart from the regime, and Fascist support with exploitative intent, *futurismo* ultimately became antagonised by both.[40]

Fascism borrowed extensively from futurist psychology and behaviours, e.g. the energetic, anti-conformist, anarchic and belligerent ethos of *futurismo*, the dynamic lifestyle and sporting practices.[41] It borrowed futurist politics, in part at least, and with notable exceptions (e.g. futurist anti-monarchism and anti-clericalism). Aesthetic and cultural borrowings coagulate into the convergence between technology and modernity. The futurist mechanical agenda contributed to shaping the Fascist project of cultural modernity. In particular, Marinetti's emphasis on the performing arts, which he considered a priority, fed into the cultural policies of the regime in the 1920s and 1930s when theatre began to encompass national culture to a greater degree than ever before in Italian history. Futurist mechanical theatre emerged in the wake of Fascist initiatives such as the Carri di Tespi, e.g. modular and mechanical theatres travelling across Italy, disseminating approved values. Exploiting Taylorist and scientific

35 Lyttelton, 'Futurism, politics, and society', 74.

36 See articles published in 1935 in *La Forza* (nn. 3–4 and 5–6), cit. in M. Härmänmaa, *Un patriota che sfidò la decadenza: F. T. Marinetti e l'idea dell'uomo nuovo fascista, 1929–1944* (Helsinki: Academia Scientiarum Fennica, 2000), 126.

37 M. S. Stone, *The Patron State: Culture and Politics in Fascist Italy* (Princeton, NJ: Princeton University Press, 1998), 52. See also Härmänmaa, *Un patriota che sfidò la decadenza*, 129.

38 Gentile, 'Political futurism and the myth of the Italian revolution', 11.

39 M. Verdone, *Il futurismo* (Rome: Newton & Compton, 2003), 105.

40 *Ibid.*, 106–7.

41 *Ibid.*, 104.

methods, drawing on the Soviet coupling of collectivisation and mechanisation, the Carri upheld a mechanical–human totality easily construed as a national and aesthetic totality and, as such, easily subsumed under a Fascist agenda, as is productively explored by J. T. Schnapp.[42]

The very same mechanical agenda, on the other hand, drove the international vocation and outward spread of postwar *futurismo* in the face of the increasingly centripetal trajectory of the regime. Numerous futurists in the postwar cultivated 'disillusionment with the Fascist project of modernisation, or observations of alternative developments in the Soviet Union, or the discovery of American models of modernity in economics and culture'.[43] They embraced the technological angle of real Socialism, from chain of capital and coercive power structure through to redemptive instrument of social and class emancipation (see Chapter 4). In post-revolutionary Russia, futurism became, in Sergei Tretyakov's words, 'the left front of art'.[44] Industrial art and production were regarded as the mainstays of contemporary Russian futurism. The technological underpinnings of the Bolshevik revolution were largely admired by the Italian futurists, including Marinetti. The reductive binary that construes 'techno-Communism' in opposition to 'spiritual futurism-Fascism' evaporates when considered in the light of an international machine politics (see also section 1.2).

Based on the industrial machine, technology was celebrated as a productive force, and also as 'model of organisation',[45] a figure of functionality, binding and constraint. While others venerated the machine as a fetish, investing it with sexual or mystical signification, the futurist machine needs to be approached as a plural, composite and diverse phenomenon, a system underpinning social, political and economic values, encompassing bio-politics, gender politics, perception and cognition through new and old media. Mediated through its futurist champions, the machine is the portal to a novel culture.

My monograph focuses in particular on the lesser-known 'phases' purported to comprise the futurist experience, e.g. the mechanical (early 1920s) and the aerial (1930s–1940s).[46] More recent work has reappraised this chronological span, redress-

42 Schnapp, *18BL*, 31–5. 18BL was an itinerant truck conveying the new mechanical aesthetics via avant-garde theatre. Resonant of Soviet internationalism, the project also attracted criticism from the ranks of Fascist intelligentsia; Schnapp, *18BL*, 124–5. Schnapp's volume provides a useful exploration of the manners in which futurist aesthetics and political commitment to the machine as agent of emancipation and modernisation was aligned with the totalitarian project of *fascismo*.

43 G. Berghaus (ed.), *Futurism and the Technological Imagination* (Amsterdam and New York: Rodopi, 2009), 30.

44 S. Tretyakov, 'Whence and whither (perspectives on futurism)', *Lef*, 1 (1923), 193–203.

45 Hewitt, *Fascist Modernism*, 147.

46 The earlier 'phases' are denominated 'analytical' (1910–13) and 'synthetic' (1914–15) – see E. Crispolti,

ing, directly or tangentially, a body of previously neglected work.[47] This body of work intersected major cultural, scientific and technological developments and paradigm shifts that transformed modern societies: the end of the First World War, the Bolshevik revolution, the installation of totalitarian regimes in Central and Southern Europe, the rise of the aviation industry, the Second World War, the development of media societies. These sat alongside momentous scientific advancements including Werner Heisenberg's indeterminacy principle, Kurt Gödel's incompleteness theorems and the development of quantum mechanics. The shifting of cultural centres of gravity from Paris to the capitals of Middle, Northern and Eastern Europe (Berlin, Oslo, Moscow, Prague) and a re-orienting of western capitalism outside Europe in the aftermath of the First World War, reinvigorated cultural discourses centred on the machine. The internationalism of the *avant-guerre* may have been 'as precarious as it was short-lived'.[48] This book argues that it was precisely through the conduit of the machine, especially the industrial machine, that the culture of Italian futurism remained part and parcel of a modern cosmopolitan avant-garde after the First World War.

With Frederic Jameson, I note that the paradox that aligns dictatorial regimes with intense bouts of modernisation is only partially resolved by the 'missed' emergence, to use Habermas's formulation, of proper theoretical and ideological apparatuses of modernism.[49] While I fully acknowledge the futurist contribution to Fascist cultural modernity, as I elucidate above, I am equally aware that this question not merely 'polarised' but also bedazzled and monopolised scholarship for a long while.[50] The paradigm of a straight dissolution of postwar futurism into Fascist ranks is both

'Come premessa', in *Futurismo 1909–44: arte, architettura, spettacolo, grafica, letteratura* (Milan: Mazzotta, 2001), 15–16.

47 Notable recent titles include monographs: G. Lista, *Enrico Prampolini futurista europeo* (2013) and P. Sica, *Futurist Women* (2016); edited collections: G. Berghaus, *Futurism and the Technological Imagination* (2009), E. Adamowicz and S. Storchi (eds), *Back to the Futurists* (2013), V. Greene (ed.), *Italian Futurism 1909–44* (2014) and P. Antonello, M. Nardelli and M. Zanoletti (eds), *Bruno Munari* (2017); journal articles: M. E. Versari, 'Enlisting and updating' (2011) and C. Adams, 'Historiographical perspectives on 1940s futurism' (2013). This book relates to this body of work by addressing a lesser-known chronological span and set of artists, as well as approaching this theme from new angles. Its original contribution lies in its primary focus on the machine and mechanical practices underpinning postwar futurism.

48 Perloff, *Futurist Moment*, xxxvii.

49 F. Jameson, *A Singular Modernity* (London and New York: Verso, 2012), 102–3.

50 W. Adamson, 'Fascinating futurism: the historiographical politics of an historical avant-garde', *Modern Italy*, 13 (February 2008), 75. Adamson usefully refers to scholarship addressing Futurist politics, reductive or not, including works by G. Mosse, R. S. Dombroski, G. B. Nazzaro and, more recently, A. D'Orsi, G. Berghaus, C. Salaris and M. Härmänmaa. Lista further claims that Marinetti's ideals collapsed when his former acolytes abandoned futurism to join the Fascist ranks, as his pièce *Tamburo di fuoco* (1921–22) vividly illustrates – G. Lista, *F. T. Marinetti: l'anarchiste du futurisme* (Paris: Séguier, 1995), 180.

reductive and superseded and should be abandoned. My principal aim here is to broaden the vista, gaze beyond the constraints of State cultural politics to discuss a broad range of supra-national intersections and epoch-changing developments that have the machine at its core.

The scope of my investigation is broader by virtue of including new material, as well as a previously examined corpus interrogated from novel critical angles. New interpretive and methodological protocols are deployed here to investigate a field previously examined only in term of a handful of established artists. Undeniable political tensions underlying this production will emerge with reference to the individual artists discussed in the chapters below. Overall, my goal is to transcend critical pigeonholing of the futurist experience into 'orthodox' or 'heterodox', 'left-wing' or 'right-wing', 'Fascist' or 'Communist', 'official' or 'heretic', as may be the case.[51] Containing and circumscribing a vast field, I take into account a set of approaches, for example, both the sustained interest in mechanics traversing the European avant-garde as well as specific subsets, such as Prampolini's 'arte meccanica' (mechanical art).

The primary object of my investigation is the material machine of the long Industrial Revolution. The product of engineering, object of consumption and vehicle of massification, the machine inhabits a symbolic, representational and ideological space within futurism. It is integrated in modern workplaces (e.g. the artisan workshop, the factory, the studio), deployed in conflict and rituals of entertainment and socialisation. Engineering, industry, market and manufacture, the energy wielded by mechanical technology in bringing together and sustaining groups and individuals are key hermeneutic sites here. The legacy of proto-industrial and early industrial cultures, particularly important in Italy, will be ancillary areas of enquiry to the evolutionary strategy of the machine in *futurismo*.

My book examines a large body of work straddling heterogeneous practices and disciplines, from the visual arts to dance, literature, music and performance. The constructive, mechanical grammar of theatre plays a prominent role, based on the premise that *futurismo* was a 'dramatic movement by definition'.[52] At least since the French Revolution, theatre constituted a revolutionary art form *par excellence*. Marrying utopia and utilitarianism, anti-bourgeois drama typified the activism of Proletkult, offering new forms of mass organisation including a 'mass theatre for the masses' close to the heart of the Fascist cultural revolution,[53] as mentioned above. Futurism perceived theatre as a quintessentially mechanical, highly technological art

51 These distinctions were introduced by M. Calvesi and G. Lista: see G. Lista, *Arte e politica: il futurismo di sinistra in Italia* (Milan: Mudima, 2009), 14–15.

52 W. Strauven, *Marinetti e il cinema tra attrazione e sperimentazione* (Udine: Campanotto, 2006), 57. See also M. Verdone, 'Music-hall, cinéma, radio du futurisme', cit. in Strauven, *Marinetti e il cinema*, 57.

53 Schnapp, *18BL*, 45.

form, even more so than cinema, whose status remained ambiguous and paradoxically competitive with respect to drama. Mechanical devices serving 'historicising' purposes, and whose outcomes were perceived as static and anti-dynamic, arresting the flow of life and prompting questions on their mechanical vocation – film and photography are a case in point – were assigned a subaltern status to theatre. These contemporary technologies, including communication (e.g. radio and TV), transportation (e.g. cars and planes) and image and sound reproduction (e.g. photography, cinema and audio-recording), are included in my discussion in so far as they mediated or translated a mechanical idiom into aesthetic expression. At first glance, fast and simultaneous cinema would appear to be an ideal medium to expand and contract atomised time. The conundrum of why the futurists failed to engage with it more robustly, leading to the paradox of a futurist 'cinema without films', is discussed here across several chapters.[54]

Fully conversant with mechanical technology too, architecture and town planning, on the other hand, will not be addressed at length here. Futurist architecture achieved a conceptual pinnacle before the First World War, thanks to the forceful and original architectural visions of Antonio Sant'Elia (1888–1916). Sant'Elia's projects, however, failed to materialise on the ground, remaining largely on paper. My reflections on futurist architectural innovation and urban re-envisioning saturated with technology will coalesce in a separate publication.

My overarching approach is cultural-historical, paying particular attention to cultural, aesthetic and media-related practices. Joel Dinerstein's 'technodialogism', a notion integrating the politics and aesthetics of modern industrial machines and Taylorist practices with cultural production, will prove particularly useful here.[55] Careful attention will be given to individual artists and the broad contexts of their production, including the transnational scope of their activities, cross-overs and translatability with the international avant-garde. Marxist critiques (e.g. Gramsci, Raymond Williams and Jameson) where modernity is seen as coterminous with the spread of capital in industrial societies, will be productive in shedding light on the ideological and aesthetic goals of postwar *futuristi* in tandem with their spatial orientation towards Central and Eastern Europe. I will take Jameson's arguments further by highlighting and exploring the tension between the 'singular modernism' engendered by Imperialist spread of capital and the diasporic and exilic experience of individual artists in postwar Italy, leading to capillary and rhizomatic fragmentation,

54 This paradox is addressed by Strauven, in 'Futurist poetics and the cinematic imagination: Marinetti's cinema without films', in Berghaus (ed.), *Futurism and the Technological Imagination*, 202.

55 J. Dinerstein, *Swinging the Machine: Modernity, Technology, and African American Culture between the World Wars* (Amherst and Boston: University of Massachusetts Press, 2003), 126 and *passim*.

both personal and professional, within a mutually intersected, international modernist framework (see especially Chapter 4).[56]

A broad spectrum is considered here: industrial machines and their social and economic agency first and foremost. The machine as anthropological universal myth, archetype, metaphor and pathos formula, a particularly relevant heuristic in late futurist years, is also elucidated in Chapters 5 and 6. Conversely, the cultural semantics of technologies of abstraction, underpinned by conceptual shifts and extraterritorialities of writing that open up new verbal and visual fields, what Tichi aptly called 'machines made of words',[57] are not addressed here. Formulations that fall beyond the scope of this monograph include translations of mechanical protocols into neural networks or into specific abstract practices, e.g. automatic language, words-in-freedom, kinetic poetics, analogy and figurative speech, montage and photomontage, consciousness as graft or citation, structured frameworks of causality and cognition. My book considers instead material machines situated in cities, factories, theatres, cinemas, squares and in the open sky. My aim is to investigate the contexts of production and consumption, the entanglements of the machine in postwar *futurismo*: industrial, migratory, social, political and aesthetic, in touch with material cultures and the everyday.

From this it follows that critiques as diverse as Gilles Deleuze and Félix Guattari's desiring machines, Donna Haraway's cyborg feminism, Michel Carrouges's celibate machines, Paul Virilio's military logistics, all the way up to Rosalind Krauss and Hal Foster's Lacanian and Freudian prosthetic and fetishist phallic and castration frameworks will be engaged with sparingly and only where appropriate, namely in Chapter 2 as concerns Filippo Tommaso Marinetti (for a summative discussion, see also the Conclusion: *Ex machina*). That there is scope for alternative approaches and readings of machines is clear from the numerous theories developed during and after the period under scrutiny here, some of which have been largely neglected so far. Cassirer's theory of symbolic forms, where technology's 'mechanical function' finds a corresponding 'purely spiritual function', which develops from and is 'indissolubly' correlated with it, is one case in point.[58] I shall address this spiritual turn when considering aerofuturism in Chapters 5 and 6. Fuelled by the Fascist regime's investment in the aviation industry, *aerofuturismo* encompassed a broad range of mechanics including explorations of the cognitive and sensual outcomes of visions from top down, cosmic idealism aimed at capturing the material and dynamic origin

56 Jameson, *Singular Modernity*, 13 and *passim*.

57 C. Tichi, *Shifting Gears: Technology, Literature, Culture in Modernist America* (Chapel Hill and London: University of North Carolina Press, 1987), 267. Tichi coins the phrase 'machines made of words' with reference to W. C. William's poems.

58 E. Cassirer, *The Philosophy of Symbolic Forms*, II, *Mythical Thought* (New Haven and London: Yale University Press, 1955), 215.

of matter, macroscopic and microscopic projections in the infinity of the cosmos, the documentary realism of real-time views from an airplane.

The set of mechanical practices under investigation here engaged numerous women: poets, painters, dancers and aviatrixes. My approach is not informed by implicit agreement with provocative misogynist pronouncements that were also part of futurism's political and agitational agenda. Far from concluding that 'different as they were from one another, one thing all the women artists of futurism shared was the destiny of being forgotten, sometimes totally obliterated from history',[59] I concur with the reassessment voiced by more recent scholarship, whereby 'permeable frontiers'[60] existed. If it is true that futurist artists crossed over into feminine territories and, conversely, that futurist women 'felt masculinised' by futurism, women associates were forcefully, if, to some extent, also piecemeal and contradictorily, drawn to feminist politics and the woman question.[61]

It is also now generally accepted that women found a platform within futurism specifically in the postwar period.[62] Both factory workers and affluent upper-class women who encountered *futurismo* experienced a degree of socioeconomic mobility and emancipation, especially after the First World War.[63] The Litolatta metal workers, the poet Maria Goretti and the dancer Giannina Censi are examined in detail. Censi's original aerodances, in particular, stand out as original mechanical reconfigurations of the body underpinned by 'the purest product of the machine age':[64] the airplane. Censi's mechanical aerodances are celebrated here as a pinnacle of modern kinetics and one of the most enduring examples to date of the marriage between the body, technology and aesthetic practice.

Chapter 1 is largely contextual, elucidating and exploring the background and chronology of *futurismo*. A summative discussion of the semantics and culture of the machine will pave the way to an overview of conceptual discourses about machines in modernity. Taking Marxism as a point of departure, this chapter explores the migratory and industrial contexts of Italian modernities. It further outlines background and trajectory of the machine in *futurismo* from the official inception of the movement in

59 M. Bentivoglio and F. Zoccoli, *The Women Artists of Italian Futurism – Almost Lost to History* (New York: Midmarch Arts Press, 1997), 84.

60 Pickering-Iazzi, *Politics of the Visible*, 207.

61 L. Re, 'Mina Loy and the quest for a futurist feminist woman', *The European Legacy*, 7 (2009), 808–11.

62 F. Zoccoli, 'Futurist women painters in Italy', in Berghaus (ed.), *International Futurism in Arts and Literature*, 373.

63 See also Pickering-Iazzi, *Politics of the Visible*, 210. E. Larkin recently highlighted the key role played by Benedetta in (re)'inventing' futurism after the war, see Larkin, 'Benedetta and the creation of "second futurism"', *Journal of Modern Italian Studies*, 18:4 (2013), 445–65.

64 R. Wohl, *The Spectacle of Flight: Aviation and the Western Imagination 1920–50* (New Haven and London: Yale University Press, 2005), 313.

1909. Chapters that follow illustrate and discuss individual and group practices. My aim is to integrate critique with an exploration of contexts, *tranche de vie* and in-depth analysis of better-known and lesser-known artists and the manners in which their thinking and practice were informed by the machine.

The financial assets and entrepreneurial acumen of Filippo Tommaso Marinetti (1876–1944) underpin much of the mechanical orientation of *futurismo*, from the early days through to the demise of the movement (see Chapter 2). Marinetti's iconoclasm disguises an awe of the machine understood as a trope of industrial modernity as well as a positivist investment in the imaginary capital of machines. Charged with erotic and sexual power, the machine is inextricably braided with flesh and metal. Cyborg-like couplings of human and machine, spanning technological conflict, electricity, film and new materials, give rise to a particular brand of mechanical 'machismo', or *mach(in)ismo*: a hyper-virile posturing laced with psychoanalytical undertones.

Closer to the seminal work of Giacomo Balla, Fortunato Depero (1892–1960) developed a pragmatic yet complex and multi-layered, if polarised, approach to the machine. Oscillating between artisanal and industrial practice, traditional craftsmanship and the appeal of radically modern modalities of production and consumption, Depero's conceptual duality is forcefully encapsulated in the late canvas *Tornio e telaio* (Lathe and loom; 1949). In Chapter 3 Depero's machine aesthetics is discussed as spanning a vast field, from mechanised fairy-tales and robotic puppets in plastic merry-go-rounds to a distinctively metallised machine form. The latter resulted in an original 'style of steel' hewn during Depero's expatriations away from the periphery of his home town, Rovereto in north-eastern Italy, to the hub of technological capitalism, New York. Conversant with standardisation, engineering and industry, Depero encodes New York's new urbanism in the emblematic icon of the skyscraper.

The ranks of postwar *futurismo* welcomed numerous Anarchists and Socialists, such as the Moscow-born Vinicio Paladini (1902–71). Chapter 4 scrutinises the manner in which radical artists favoured the machine as a conduit of proletarian redemption and harbinger of new social orders. Austere and ascetic, an emblem of rigour and discipline to engage with in the factory, the machine is instrumental in exploding social hierarchies. Voluntarily or forcibly exiled, migrating to the ideologically compatible technological societies of Northern and Eastern Europe and in tension with the reactionary officialdom back home, left-wing futurists are marked by a perpetual displacement and dislocated, frontier identities.

Through an examination of *arte meccanica* and 'spiritual' machines, Chapter 5 marks a transition to a later development: *aerofuturismo*. In concert with Mussolini's postwar investment in the aviation industry, aerofuturism further aimed to transcend the materiality of machines, leading to disembodied, 'spiritual' devices. Artists of transnational calibre discussed here (e.g. Enrico Prampolini (1894–1956) and Fillia

(Luigi Colombo; 1904–36) regarded the machine and flying machines as vehicles of cosmic states of being, elevating humankind to mystical heavens and tapping into long-lost symbolic values in the manner of Warburg's pathos formulas.

Aerofuturism's most original developments are explored in Chapter 6, namely Censi's technological aerodances and Munari's 'dysfunctional' machines. Before falling under the rubric of the demographic policies of the Fascist regime, Giannina Censi (1913–93) infused her original practice of *aerodanza* with the power to transform her own technologised body into an airplane. Drawing on Anton Giulio Bragaglia's fotodinamica, an early form of experimental photography leading to dematerialisation of bodies in motion, and resonating with the atomisation of reality underpinning quantum mechanics, Bruno Munari (1907–98) devised 'useless' machines. Munari conceived a counterculture which payed homage at the same time as it debunked the functional and ideological bias of the 1920s machine.

The concluding chapter, *Ex machina*, outlines the tensions and trajectories that mark the transition of the futurist machine from the machine age to the current digital age. Borrowing from Munari's 'useless' machines, the contemporary machine is dematerialised and abstracted. As such it both stems from and mirrors a radically altered technological paradigm: post-mechanical, postindustrial and digital. In a final twist, the machine of our own age is no longer the object of aesthetic or ideological worship or the demon of Taylorist dystopias. Rather, the contemporary machine acts with its own agency, supplying itself the subjectivity to compose and visualise art in sophisticated, if increasingly worrisome, entanglements with us humans.