## Introduction

## Greening Italian Science Fiction – New Approaches to a Deep-Rooted Genre

Daniel A. Finch-Race, Emiliano Guaraldo, and Marco Malvestio<sup>1</sup>

The important connection between science fiction and ecological issues is borne out by an abundance of creative works about climate change and environmental degradation, ranging from Margaret Atwood's Oryx and Crake (2003) to Paolo Bacigalupi's The Wind-Up Girl (2009), from Nathaniel Rich's Odds against Tomorrow (2014) to Jeff VanderMeer's Southern Reach Trilogy (2014), from Christopher Nolan's Interstellar (2014) to Denis Villeneuve's Blade Runner 2049 (2017). Deliberations on the Anthropocene have also opened up opportunities for revisiting classics such as John Wyndham's The Day of the Triffids (1951), James Ballard's The Drowned World (1962), and Ursula Le Guin's The Left Hand of Darkness (1969). What's more, science-fiction tropes are employed in non-fiction about our planet's future, as in Alan Weisman's The World Without Us (2007), Erik M. Conway and Naomi Oreskes's The Collapse of Western Civilization: A View from the Future (2014), and William T. Vollmann's two-volume Carbon Ideologies (2018). In the words of Ursula K. Heise, 'science fiction has become one of the primary genres in literature and film to address the issues raised by increased public awareness of environmental crisis'.<sup>2</sup> Such a drive to address significant areas of

- <sup>1</sup> This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 890656.
- <sup>2</sup> Ursula K. Heise, 'Reduced Ecologies', European Journal of English Studies, 16.2 (2012), pp. 99–112 (p. 99). See also Ursula K. Heise, Sense of Place and Sense of Planet: The Environmental Imagination of the Global (Oxford: Oxford University Press, 2008); Gerry Canavan and Kim Stanley Robinson (eds.), Green Planets: Ecology and Science Fiction (Middletown, CT: Wesleyan University Press, 2014); Chris Pak, Terraforming: Ecopolitical Transformations and Environmentalism in Science Fiction (Liverpool: Liverpool University Press, 2016); Andrew Milner and J. R. Burgmann, Science Fiction and Climate Change: A Sociological Approach (Liverpool: Liverpool University Press, 2020).

cultural production with innovative tools is squarely within the remit of Italian ecocriticism.

Science fiction is usually described, following Darko Suvin, as the genre of cognitive estrangement *par excellence*: 'a literary genre or verbal construct whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main device is an imaginative framework alternative to the author's empirical environment'.<sup>3</sup> In other words, science fiction is a genre founded on imagining a different reality (estrangement) in line with what is empirically possible (cognition). Sci-fi tropes like interstellar voyages, sentient robots, and aliens are possible in principle, however unrealistic they may sound: they do not break the rules of an existing reality. Two kinds of abstraction are at play according to Suvin: an extrapolation of aspects of the present to build future scenarios, and an approximation of invented elements.<sup>4</sup>

Science fiction's function as a form of cognitive estrangement has gone hand in hand with environmental concerns. Extrapolating a future from the present is bound up with foreseeing the consequences of relationships between humans and the planet – the genre's capacity for inventing extraterrestrial ecosystems stimulates reimaginings of the known world. Moreover, science fiction constantly challenges anthropocentrism, and broaches the possibility of a post-human/post-humanist world, through representing non-human and even inorganic agency in terms of alien beings or animal/vegetal life.<sup>5</sup>

In 2015, Umberto Rossi and Arielle Saiber opened a special issue of *Science Fiction Studies* by asking whether Italian science fiction was dark matter or a black hole – is it closer to the former's invisible yet omnipresent force, or the latter's all-absorbing nature?<sup>6</sup> This rather pessimistic simile

- <sup>3</sup> Darko Suvin, Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre (New Haven, CT: Yale University Press, 1979), pp. 7–8. See also Damien Broderick, Reading by Starlight: Postmodern Science Fiction (London: Routledge, 1995); Adam Roberts, Science Fiction (New York: Routledge, 2006); Nick Hubble and Aris Mousoutzanis (eds.), The Science Fiction Handbook (London: Bloomsbury, 2013).
- <sup>4</sup> Suvin, Metamorphoses of Science Fiction, pp. 27-30.
- <sup>5</sup> On posthumanism, see Donna Haraway, 'Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s', *Socialist Review*, 80 (1985), pp. 65–108; N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: The University of Chicago Press, 1999); Cary Wolfe, *What Is Posthumanism?* (Minneapolis: University of Minnesota Press, 2010); Rosi Braidotti, *The Posthuman* (Cambridge: Polity Press, 2013).
- <sup>6</sup> Arielle Saiber and Umberto Rossi, 'Introduction Italian SF: Dark Matter or Black Hole?', *Science Fiction Studies*, 52 (2015), pp. 209–16.

gives a flavour of the relative lack of attention that the genre had received in Italy until that point. By contrast, the subsequent half-decade saw a flurry of activity, with several publications devoted to the genre: Giulia Iannuzzi's Fantascienza italiana: Riviste, autori, dibattiti daqli anni Cinquanta aqli anni Settanta (2014) and Distopie, viaggi spaziali, allucinazioni: Fantascienza italiana contemporanea (2015); Simone Brioni and Daniele Comberiati's Italian Science Fiction: The Other in Literature and Film (2019) and Ideologia e rappresentazione: Percorsi attraverso la fantascienza italiana (2020); a monographic issue of Italian Studies in Southern Africa (2021) on 'Terrore, soprannaturale, fantascienza, utopia e distopia a firma femminile', edited by Daniela Bombara and Serena Todesco, covering authors such as Roberta Rambelli, Gilda Musa, and Alda Teodorani; a monographic issue of Narrativa (2021), edited by Luca Somigli and Daniele Comberiati, about contemporary Italian science fiction. In May 2022, Eleonora Lima, Michele Maiolani, and Marco Malvestio organized a conference at the Italian Cultural Institute in London on the topic of Primo Levi's science-fiction works. At the same time, publishers like Kipple Officina Libraria, Future Fiction, and Edizioni Hypnos came to broaden the market for Italian science fiction at home and abroad.

Whole generations of Italian intellectuals considered the genre unworthy of exploration – its long, complex, and multilayered history in Italy was neglected. Discussions of the problematic reception of Italian science fiction can hardly overlook an infamous quote by Carlo Fruttero that goes to the root of its marginalization throughout the second half of the twentieth century: 'a flying saucer would never land in Lucca'.<sup>7</sup> From 1961 to 1989, Fruttero (and later Franco Lucentini) oversaw Arnoldo Mondadori's prestigious magazine Urania, founded by the publisher's nephew Giorgio Monicelli in 1952 as I romanzi di Urania. During those 30-odd years, when circulation reached 100,000 copies per issue, its pages almost never featured an Italian author, mostly pieces in translation that were predominantly Anglo-American in origin. No wonder that the genre suffered such marginalization in Italian culture, with Italian authors being roundly excluded from the landscape of science fiction in Italy by even its most important publisher at the point of it reaching stylistic and thematic maturity.

Fruttero's position is evidence of a paradoxical anti-Italian prejudice<sup>8</sup> in Italian science fiction that led authors to publish with English

<sup>&</sup>lt;sup>7</sup> On the debated origins of Fruttero's sentence, see Arielle Saiber's 'Flying Saucers Would Never Land in Lucca: The Fiction of Italian Science Fiction', *California Italian Studies*, 2.1 (2011), pp. 1–51 (p. 7).

<sup>&</sup>lt;sup>8</sup> Saiber, 'Flying Saucers Would Never Land in Lucca', p. 15.

pseudonyms for the sake of attracting a broader readership: Luigi Rapuzzi became L. R. Johannis, Roberta Rambelli became Robert Rainbell, Ugo Malaguti became Hugh Maylon, and so on. Similarly, the first Italian sci-fi movies were marketed to an international audience with their directors' names transposed into English, such as Caltiki, il mostro immortale by Riccardo Freda a.k.a. Robert Hamton (1959), and the Gamma Uno tetralogy by Antonio Margheriti a.k.a. Anthony M. Dawson (1965–1967). Science fiction ended up relegated to a cluster of specialized and sometimes amateurish magazines, periodicals, and fanzines - its great authors like Lino Aldani, Gilda Musa, Pierfrancesco Prosperi, and Roberta Rambelli failed to reach a mainstream audience, and even went out of print. Still, magazines akin to Urania convey vibrant fandom: Cosmo (1957-1967), Oltre il cielo (1957-1970), Galassia (1961-1979), Futuro (1963-1964), and Robot (1976-1979 and 2003-). Moreover, works were widely read, as evidenced by the Premio Bancarella going to the best-selling Non è terrestre (1969) by Peter Kolosimo, a non-fiction author whose relationship with science fiction can scarcely be underestimated.

For years, there was a significant divide between popular and highbrow manifestations of Italian science fiction. Italian intellectuals only heeded firmly established authors' forays into the genre, as in the case of Italo Calvino's *Le cosmicomiche* (1965) or Paolo Volponi's *Il pianeta irritabile* (1978). Even here, however, there were considerable exceptions: Dino Buzzati's science-fiction novel *Il grande ritratto* (1960) went a long time without receiving critical attention. Interest in Italian science fiction as a specialized fandom and publishing system tended to be haphazard, as in the case of Luigi Cozzi's informative but chaotic *La storia di 'Urania' e della fantascienza in Italia* in five volumes (2006–2016). Pierpaolo Antonello notes that science fiction in Italy had to pay the price of two 'original sins': being concerned with science, which was quite remote from the focus of traditional humanism, and being an imported product for the masses, which attracted the contempt of left-wing intellectuals influenced by the Frankfurt School.<sup>9</sup>

It is worth bearing in mind that the proliferation of science fiction in Italy paralleled the escalation of ecological anxieties in the era of the Economic Miracle, those two decades prior to the energy crisis of 1973 during which production of industrial and consumer goods grew massively albeit unevenly across the peninsula. The sprawl of refineries, mobility infrastructure, and residential zones resulted in radical

<sup>&</sup>lt;sup>9</sup> Pierpaolo Antonello, 'Prefazione: Archeologie del futuro', in Giulia Iannuzzi, *Distopie, viaggi spaziali, allucinazioni: Fantascienza italiana contemporanea* (Milan: Mimesis, 2015), pp. 7–16.

transformations that went beyond economic and physical geographies. aggravating inequalities and social conflicts. In particular, urbanization and South-to-North migration led to significant demographic adjustments in major hubs, an ever deeper urban-rural divide, and sea-changes in labour relations, especially in the agricultural sector. Under the state-sponsored and private banners of Ente Nazionale Idrocarburi, Fabbrica Italiana Automobili di Torino, Istituto per la Ricostruzione Industriale, Italsider, Montedison, and Olivetti, corporate capitalism became a cultural and political force with substantial influence via the media, as critiqued by public figures like Pier Paolo Pasolini and Michelangelo Antonioni. The boom exacted a heavy price in terms of public health: slipshod practices and chemical contamination contributed to horrific industrial disasters and instances of slow violence. The landslide at the Vajont Dam in 1963 and the dioxin leak at Seveso in 1976 - emergencies without precedent in the country - resulted in thousands of deaths that sent shockwaves around the world. Likewise, the dispersed effects of petrochemicals and other contaminants in places as disparate as Taranto, Porto Marghera, and Casale Monferrato fuelled depression and cancers. Such revelations of the dark side of industrial modernity spurred eco-activism and scholarly engagement.<sup>10</sup>

One of the most distinctive markers of the Anthropocene – the epoch of humans assuming geological force – is radioactive isotopes in stratigraphic samples.<sup>11</sup> Italian science fiction flourished during the tensest decades of the Cold War, when nuclear proliferation entwined with all

<sup>10</sup> The far-reaching and long-lasting effects of toxic contamination on workers, local communities, and ecosystems have been widely documented. Examples of journalistic and first-person testimony works include: Cristiano Dorigo and Elisabetta Tiveron's Porto Marghera: Cento anni di storie (1917-2017) (Venice: Helvetia, 2017); Laura Centemeri's Ritorno a Seveso: Il danno ambientale, il suo riconoscimento, la sua riparazione (Milan: Bruno Mondadori, 2006); Diego Colombo's I ragazzi della diossina (Rome: Lavoro, 2005); Alberto Prunetti's Amianto: Una storia operaia (Rome: Alegre, 2014); Fulvio Colucci and Giuse Alemanno's Invisibili: Vivere e morire all'Ilva di Taranto (Calimera: Kurumuny, 2011); KTH Environmental Humanities Laboratory's Toxic Bios: A Guerrilla Narrative Project (www.toxicbios.eu). Studies of literature and film include: Monica Seger's Toxic Matters: Narrating Italy's Dioxin (Charlottesville: University of Virginia Press, 2022) and Landscapes in Between: Environmental Change in Modern Italian Literature and Film (Toronto: University of Toronto Press, 2015); Elena Past's Italian Ecocinema: Beyond the Human (Bloomington: Indiana University Press, 2019); Alberto Baracco and Manuela Gieri's Basilicata and Southern Italy between Film and Ecology (Cham: Palgrave, 2022).

<sup>11</sup> Dipesh Chakrabarty, 'The Climate of History: Four Theses', *Critical Inquiry*, 35 (2009), pp. 197–222.

kinds of anxieties, from the personal to the ecological. According to Pierpaolo Antonello, the bomb was a touchstone for ideological issues and collective disquiet among entire social and generational groups.<sup>12</sup> Italian intellectuals were extremely active in commenting on the dangers of atomic energy, above all in the 1960s while Italy was the world's third-highest producer of nuclear power. Not only does one of the first Italian science-fiction novels, C'era una volta un pianeta by Luigi Rapuzzi (1954), feature an alien civilization destroyed by an atomic catastrophe, but also the first Italian movie in the genre, Riccardo Freda's Caltiki, il mostro immortale (1958), sees the eponymous monster awakened from his sleep by a radioactive comet. Nuclear apocalypses came to feature heavily in literature such as Giorgio Scerbanenco's Il cavallo venduto (1963), Emilio De Rossignoli's H come Milano (1965), Vittorio Curtoni's Dove stiamo volando (1972), and Paolo Volponi's Il pianeta irritabile (1978). Imaginings of disasters of anthropic origins paved the way for contemporary eco-dystopias, such as Laura Pugno's Sirene (2007), Tommaso Pincio's Cinacittà (2008), Niccolò Ammaniti's Anna (2015), and Bruno Arpaia's Qualcosa, là fuori (2016).

The parallel between growing interest in the consistently undervalued genre of science fiction and fresh waves of explorations in Italian ecocriticism is emblematic of an eagerness to apply innovative research tools to a field replete with curiosities. A key Italian strand of Anthropocene studies and environmental humanities - both in the sense of being produced in Italy, and addressing Italian creative works - revolves around bespoke frameworks for localized realities: Serenella Iovino's Ecologia letteraria: Una strategia di sopravvivenza (2006) and Ecocriticism and Italy: Ecology, Resistance, and Liberation (2016); Pasquale Verdicchio's edited volume Ecological Approaches to Italian Culture and Literature (2016); Niccolò Scaffai's Letteratura e ecologia: Forme e temi di una relazione narrativa (2017); Damiano Benvegnù's Animals and Animality in Primo Levi's Work (2018); Alessandro Macilenti's Characterising the Anthropocene: Ecological Degradation in Italian Twenty-First Century Literary Writing (2018); Iovino, Enrico Cesaretti, and Elena Past's edited volume Italy and the Environmental Humanities: Landscapes, Natures, Ecologies (2018); Past's Italian Ecocinema: Beyond the Human (2019); Cesaretti's Elemental Narratives: Reading Environmental Entanglements in Modern Italy (2020); Marco Malvestio's Raccontare la fine del mondo: Fantascienza e Antropocene (2021); Monica Seger's Toxic Matters: Narrating Italy's Dioxin (2022).

<sup>&</sup>lt;sup>12</sup> Pierpaolo Antonello, "How I Learned to Stop Worrying and Love the Bomb": Minaccia nucleare, apocalisse e tecnologia nella cultura italiana del secondo Novecento', *The Italianist*, 33.1 (2013), pp. 89–119 (p. 90).

This profusion of approaches, ranging from material ecocriticism to multispecies justice, has opened up Italian culture in paradigm-changing ways. Few of the aforementioned works deal with science fiction, though, and never with its Italian manifestations, which should not come as a surprise, given the marginality of the genre in Italian culture. With regard to the proliferation of studies on post-apocalyptic science fiction, a key subgenre for the treatment of ecological concerns, the twentieth-century 'highbrow' has tended to be the focus, as opposed to the considerable diversity of texts available. We three editors believed that this gap needed to be closed. In interrogating the richness of Italian science fiction through the environmental humanities, our book aspires towards a quantum leap in knowledge about narratives of cognitive estrangement that have a bearing on the climate crisis.

In line with science fiction's intrinsic intermediality and ecocriticism's fundamental multidisciplinarity, our volume covers a wide variety of topics and media forms that span comics, music, visual art, prose narratives, cinema, and non-fiction. Our hope is that this innovative exploration of how Italian science fiction has addressed environmental concerns and metabolized ecological changes shall inspire further studies. The following chapters adopt theoretical and methodological perspectives including ecocriticism, ecofeminism, animal studies, posthumanism, eco-media studies, and the energy humanities, entering into conversation with the work of key authors like Donna Haraway, Rosi Braidotti, Giorgio Agamben, Anna Tsing, and Timothy Morton. This collective investigation across disciplines is intended as an intervention in debates such as the predicament of petromodernity and the politics of energy transitions, non-human and new materialist ontologies, the history of utopian and dystopian imaginaries, critiques of anthropocentrism, species thinking and ecomodernism, the articulation of planetary and regional struggles for environmental justice, and the construction of post-depletion futures.

This book is divided into four parts. The first is 'Visions of Annihilation', which highlights how apocalyptic imagery has been employed to ground reflections on matters of sustainability and the long-term planetary impacts of human societies. The three contributions therein deal with how imagining extinction – of humanity or non-humanity – has proven pivotal to sci-fi visions of climate change, as typified in the American tradition by Octavia E. Butler's *Parable of the Sower* (1993) and Cormac McCarthy's *The Road* (2006). In 'A Post-Apocalyptic Garden of Eden: Marco Ferreri's *Il seme dell'uomo'*, Emiliano Guaraldo proposes an ecopolitical analysis of the prolific and visionary Italian director's only foray into science fiction. The film from 1969 imagines the life of a young couple in a post-apocalyptic setting where the world's population has

been decimated by a global war, and a struggle for reproductive power simmers among the ruins. Guaraldo reveals how Ferreri reinterprets the language of science fiction to bring a planetary dimension to his political concerns and *negative filmmaking*, thereby denouncing the desire for control over nature and the drive to self-annihilation in consumerist societies.

'Cultural and Ecological Extinction in Primo Levi's Science Fiction' sees Michele Maiolani examining the ways in which popularizations of scientific and anthropological topics shaped science-fiction works by Levi. These were far from an instance of *divertissement* on the part of an otherwise-serious author: they were an essential part of his imaginative world. Maiolani focuses on a diptych of stories from *Vizio di forma* (1971), 'Recuenco: La nutrice' and 'Recuenco: Il rafter', inspired by magazine articles about world hunger, synthetic food, and technological inequalities that appeared in the *Scientific American*, as well as contemporary political debates and Levi's friendship with the engineer and computer scientist Roberto Vacca. Maiolani's enquiry into this complex network of influences and inspirations offers a view of Levi's science fiction as stories that deal with the crucial issues of the decades of the Economic Miracle.

At the centre of Marco Malvestio's 'Spaceships in the Anthropocene: Peter Kolosimo and the End of (Our) Times' is one of Italy's best-selling authors of the 1970s, whose non-fiction dealt with topics in pseudoarchaeology ranging from mysterious civilizations (e.g. Atlantis) to 'ancient astronaut theory' (the hypothesis that aliens visited Earth in prehistoric times). Kolosimo's many books linked Italian legends and mysteries to international archaeological sites, thus reflecting an age of mass tourism that was radically changing ways of moving across Italy and experiencing the landscape. Malvestio expands on the idea of disasters being fundamental to reflections on the Anthropocene to demonstrate that Kolosimo's depictions of the collapse of technologically advanced societies are apt for encouraging engagement with the dangers facing human society.

The volume's second part is 'Degeneration and Retrotopia'. Environmentally themed science fiction often indulges in fantasies of degeneration (the collapse of human societies is paired with biological reversion) or retrotopia (the mythologization of past times as a counterpoint to the chaos and violence of the present). The four contributions in this section highlight how this tendency pervaded science fiction during the Cold War, as well as reflecting on the potential for hybridization with the non-human by way of degeneration. Daniele Comberiati's 'Italian Science-Fiction Writers against the Economic Boom in the 1960s' analyses how high-profile Italian intellectuals including Dino Buzzati, Lino Aldani, Emilio De Rossignoli, and Giorgio Scerbanenco became preoccupied with the sweeping evolution of Italy's economy, landscape, culture, and social relations. Comberiati shows how authors who were profoundly sceptical about the changes argued for a more ethical idea of science in a humanist mode.

Whereas much science fiction is concerned with ideas of progress, Simona Micali's 'Barbarism, Animalization, and the End of the World: Fantasies of Regression and Mutation in Italian Science Fiction' explores how Darwinist notions such as atavism are evoked in apocalyptic works as an emblem of the darker side of modernity, as well as the fragility of civilization. Ranging from Vittorio Curtoni to Emilio De Rossignoli, from Antonio Scurati to Paolo Volponi, she reveals how science-fiction fantasies of regression can not only underline brutal aspects of existing societies, but also present a redeeming process, as in the case of Laura Pugno's *Sirene*, which raises the possibility of post-anthropocentricism.

In 'Against Eco-Fascism: Space and Place in Tullio Avoledo's Furland®', Florian Mussgnug addresses the topic of a securitarian response to climate change and environmental collapse. He dissects Avoledo's uncanny fictionalization of Friuli seceding from Italy and initiating operations of ethnic cleansing as part of a warped recourse to local traditions, with reference to how right-wingers appropriate discourse around climate change to promote retrotopian and nativist agendas. His examination of the problematic dimensions of a 'return to nature' and its underlying nostalgia in Avoledo's presentation of Friuli as a large historical theme park where tourists can indulge in any part of the region's history serves to illuminate the sinister artificiality of nostalgic drives.

Entanglements with the non-human and anxieties of degeneration are the core of Robert A. Rushing's 'Eco-Horror: Human–Animal Encounters in Italian Science-Fiction Films'. Against the backdrop of the widespread sense in the 1980s that genre movies were not fit to discuss sociopolitical and environmental changes occurring in Italy, he looks at a series of eco-horror films pivoting on animal monstrosity and human– animal hybridizations, namely Prosperi's *Wild Beasts* (1984), Mattei and Fragasso's *Rats: Night of Terror* (1984), De Angelis's *Killer Crocodile* (1989), and Margheriti's *Alien from the Deep* (1989). In these films suffused with anti-Italianness, where pollution enhances animals' deadliness, the true horror lies in the creatures' human qualities.

The book's third part, 'Scaping Eco-Flux', deals with ecological transformations in Italy during the Great Acceleration in the years following the Economic Miracle. The three contributions deal with

how science fiction, in imagining technological developments and their consequences for the environment, comprises an array of angles on the nature–culture dichotomy and degradation. Valentina Fulginiti's 'Bonsai Children, Enchanted Gardens: Nature as Artifice in Paolo Zanotti's Dystopian Fairy Tale' mulls over an exemplar of climate fiction. Zanotti's novelistic output from 2010 expounds the consequences of environmental change not only in terms of disasters, but also as something that forces humans to create synergies with the non-human – animal, vegetal, and artificial. By framing his story within non-human timescales, he questions distinctions between the human and the non-human, thus speculating on a world without an artificial distinction between natural and societal temporalities. Fulginiti argues that the chronotopes of fairy tales, chiming with the child protagonists, point up the arbitrariness of the concept of nature.

In 'Uncanny Spaces in Inhuman Times: The Art of Giacomo Costa', Matteo Gilebbi takes into account the work of a digital artist whose mix of photography and computer graphics bestows uncanny visualizations of urban agglomerates that speak to the excesses of the Anthropocene. His artistic depictions of enormous spaces deprived of human presences not only appear disturbingly alien and almost self-replicating, but also merge organic and inorganic morphologies, which is a characteristic connected with 'inhuman time', a non-anthropocentric notion challenging the historical centrality of human life, and inviting a view of time based on deep thinking.

Eleonora Lima's 'Herbert Pagani's *Mégalopolis*: A Rock Opera between Dystopian Science Fiction and Ecological Utopia' ruminates on a concept album from 1972 that owes a debt to the work of Roberto Vacca, whose popularization of the Club of Rome's reporting as non-fiction (*Il medioevo prossimo venturo*, 1971) and fiction (*La morte di megalopoli*, 1974) met with great success. By delving into how Vacca's renderings of questions of sustainability influenced Pagani's dystopian portrayal of contemporary consumerism, pollution, and urban sprawl, Lima illustrates how different forms of science fiction showcase environmental concerns in distinctive ways.

The book's fourth part, 'Rethinking Environmental Politics and Ethics', contains four contributions that address the pressing need for alternatives to anthropocentric relationships with environments, especially in relation to practices of caring. For Raffaella Baccolini and Chiara Xausa in 'Ecofeminist Care at the End of the World: Collaborative Survival in Niccolò Ammaniti's *Anna* and Maria Rosa Cutrufelli's *L'isola delle madri*, ecofeminist theory provides a lens for examining a pair of stories set in a post-apocalyptic future riddled with climate change,

environmental pollution, and pandemics. *Anna* and *L'isola delle madri* do not succumb to existential and species pessimism, Baccolini and Xausa show, instead proposing a relationship with the non-human in opposition to paradigms based on confinement, exploitation, and the sexual division of labour.

'Green Traces: Vegetal Imagination in Italian Science Fiction from Gilda Musa to Solarpunk' finds Enrico Cesaretti pairing archetypal science fiction with the emergent writings of Giulia Abbate, Serena Barbacetto, and Franci Conforti. He explores instances of the uncanniness of the vegetal world as an example of ecophobia, the fear caused by the agency of nature – horror and fascination are simultaneously prompted by plants that are vital to our species yet essentially alien. The concept of the 'dark green' is adopted by Cesaretti as a touchstone for delving into the relationship between the vegetal world and petro-culture in the sense of a phytogenetic perspective on oil and changes in the landscape resulting from the economic boom and the construction of motorways, with a counterpoint in the sustainable energy appearing in solarpunk.

Danila Cannamela's "All We Need Is Love"?: Eros, Agape, and Koinonia in the Time of Mass Extinction' suggests that environmentally oriented distress originates in a loss of loving. Differentiating the concept of love into eros, agape, and koinonia, she reflects on texts by Gilda Musa, Alda Teodorani, and Clelia Farris that signal the importance of interpersonal and interspecies relationships. It is affirmed by Cannamela that sharing, acknowledgement, and pleasure deserve to be the guiding principles of a new paradigm for ecological thinking and action on the climate crisis.

Daniel A. Finch-Race's 'Industrial Wonders and Pitfalls in Agostino della Sala Spada's *Nel* 2073! (1874) and Émile Souvestre's *Le monde tel qu'il sera en l'an 3000* (1846)' revolves around six topics: aerial colonization, copy culture, domestic automation, industrial infrastructures, dietary homogenization, and mass machining. In the course of illustrating the worth of delving into language associated with feeling/representing/ envisaging ecological concerns over the long term, he reveals how della Sala Spada and Souvestre shrewdly extrapolated mid-nineteenth-century technological and conceptual strides when conjuring up their respective visions of utopia and dystopia that foreground how ethical or uncaring choices around *becoming-industrial* might shape Earth's potential futures.

The book draws to a close with Arielle Saiber interviewing the award-winning author and editor Francesco Verso on the topic of 'Solarpunk, or rather *Solartivismo'*. Verso's founding of the independent publishing house Future Fiction, which specializes in ecologically inflected sci-fi, has proven decisive in bringing together international

work and the Italian market. The dialogue here encompasses not only the positives and negatives of publishing science fiction in Italian against the backdrop of cultural globalization, but also the history and future of solarpunk as an eclectic artistic movement that tries to reimagine a sustainable present.

Taken as a whole, the volume's diverse contributions attest to the affinity between ecological thinking and Italian science fiction. Each piece problematizes the idea of the genre as univocal/monolithic by drawing on an array of thematically and stylistically rich works, some of which are scarcely known in Italy, let alone worldwide. This panorama of distinctive forms and perspectives no doubt speaks to a uniquely Italian way of doing science fiction – an 'Italian difference' in contrast to, say, English-language literature and cinema about planetary futures – as well as the universal relevance of such representations of issues that demand urgent engagement. Ultimately, our book is an opportunity to think differently about Earth and other planets/realms, about encounters with familiar and outlandish forms of life, and about the many worlds within a given world at a particular moment in time.