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Nuclear Italy

An International History of Italian Nuclear Policies during the Cold War

edited by
Elisabetta Bini
and Igor Londero

with the collaboration of
Giulia Iannuzzi

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Giulia Iannuzzi

ITALIAN SCIENCE FICTION, NUCLEAR TECHNOLOGIES: NARRATIVE STRATEGIES BETWEEN THE “TWO CULTURES” (1950S-1970S)*

In 1953, the refined poet and critic Sergio Solmi wrote that science fiction could be read as the mythology of the atomic era.¹ While Solmi's words were not intended to axiologically judge the value of science fiction as a genre, or that of nuclear technology *per se*, often, over the following years, the term “nuclear age” when used by Italian writers really meant “the age of the nuclear threat”, and “science fiction” the literature of this new, blighted world.

This chapter aims to portray and critically investigate how science fiction interacted with and contributed to the development of a collective imagery related to nuclear energy in Italy, within the context of a culture characterized, during the twentieth century, by a difficult relationship between the “two cultures”.² To do this, I shall be looking at how the theme of nuclear technologies was dealt with in two different discursive practices: on the one hand, its treatment within science fiction genre narratives written by Italian authors; on the other hand the treatment of science fiction and the nuclear theme on the part of Italian (non-genre) writers. Both will be illustrated through a selection of cases, and the association between science fiction and nuclear technologies will show that the initial enthusiasm for the new technology was part of new hopes connected to an unprecedented modernization of Italy and a new centrality of techno-science, while

* I would like to thank all the attendees of the *Nuclear Italy* conference (Trieste, 2014) who with their questions and observations helped me improve the original draft of this paper: Matthew Evangelista, Cinzia Ferrini, Gianrossano Giannini, Igor Londero, Gianni Paoloni, Carlo Rizzuto, Elisabetta Vezzosi. This work also draws on conversations and exchanges of ideas for which I am in debt to Elisabetta Bini and Barbara Curli. For the revision of the English I would like to address my heartfelt thanks to Judith Moss. Last, but not least, I wish to express my deepest gratitude to Fabiano Stefanini, whose friendship and support have been an invaluable help in conducting this research.

1 Sergio Solmi, “Divagazioni sulla *science-fiction*, l'utopia e il tempo” (1953), in Solmi, *Della favola, del viaggio e di altre cose. Saggio sul fantastico* (Napoli: Ricciardi, 1971), 61-110.

2 Pierpaolo Antonello, *Contro il materialismo. Le «due culture» in Italia: bilancio di un secolo* (Torino: Aragno, 2012).

the hostility toward both of them on the part of the Italian cultural elite, especially during the decades 1960s-1970s, can be interpreted as two different sides of what we may call the same “malaise of modernity”.

To introduce the topic, I will explain why I think these literary expressions are of interest in a collective research work such as the present volume, designed to explore the international history of the Italian nuclear experience.

INTRODUCTORY REMARKS: SCIENCE AND FICTION, HISTORY, IMAGERY

As science fiction is a field of literary production characterized by a vast range of possible connections with the sciences, it is an ideal standpoint from which to scrutinize the interactions between literary culture and the hard sciences in a given cultural context.

While this might sound obvious, science fiction is usually ignored in scholarly works on science and literature,³ just as it is still marginalized by many scholarly traditions of literary studies, such as Italian studies in Italy. We could go as far as to say that, even today, science fiction still arouses (together with techno-science, and nuclear technologies) the same feelings of mistrust it aroused among Italian cultural elites during the economic boom. In fact, an interesting parallel could be drawn between science fiction as a recognizable literary genre and nuclear technologies as represented during the 1960s and 1970s: two expressions of the same process of modernization, at different levels – of literary and cultural industry the first, of research, development and industry the second. Science fiction was a genre especially concerned with techno-science, featuring in popular publications, sold at news-stands for a new mass public appearing for the first time (in Italy) in the years of the “economic miracle”, looked upon with suspicion by an Italian cultural elite which was nominally much more democratic with regard to politics than cultural practices.⁴ The fact that during the 1950s, science fiction started being identified with translations of Anglo-American and especially American authors⁵ was another reason for Italian intellectuals to distrust a genre perceived as a product of American cultural colonization, as a “popular” form of literature, but with

3 Gary Westfahl and George Edgar Slusser, eds., *Science Fiction and the Two Cultures: Essays on Bridging the Gap Between the Sciences and the Humanities* (Jefferson: McFarland, 2009).

4 David Forgacs, *Italian Culture in the Industrial Era, 1880-1980: Cultural Industries, Politics and the Public* (Manchester: Manchester University Press, 1990); David Forgacs and Stephen Gundle, *Mass Culture and Italian Society from Fascism to the Cold War* (Bloomington: Indiana University Press, 2007).

5 Pierpaolo Antonello, “La nascita della fantascienza in Italia: il caso ‘Urania’”, in *Italiamerica. L'editoria*, ed. Emanuela Scarpellini and Jeffrey T. Schnapp (Milano: Il Saggiatore, 2008), 99-123; Giulia Iannuzzi, *Fantascienza italiana. Riviste, autori, dibattiti dagli anni Cinquanta agli anni Settanta* (Milano: Mimesis, 2014); Iannuzzi, *Distopie, viaggi spaziali, allucinazioni. Fantascienza italiana contemporanea*

“popular” used pejoratively – produced in a top-down direction to entertain and distract the masses. At the same time, the dominant school in Italian literary criticism during the first half of the twentieth century, the “*idealismo*” established by Benedetto Croce, espoused an exalted idea of poetry while tending to penalize narrative in general, saw popular narrative genres as inferior literary forms, and looked down on the hard sciences and technology as subsidiary forms of knowledge.⁶

In this chapter I hope to contribute to draw the broader picture of the atom and public opinion in Italy.⁷ In the following pages, I will also present another side of the story: it should not be forgotten that in the course of the twentieth century, science fiction had a role in building many of the rhetorical *topoi* and themes used to discuss scientific issues. Numerous authors have played their part in developing our linguistic and imaginary repertoire as regards nuclear energy and weapons, sometimes anticipating the success of works of scientific popularization. Patrick Parrinder, for example, has underlined the importance of science fiction techniques in the field of so-called “futurology” or “future studies”.⁸

These are some of the reasons why I think that studying the case of science fiction can help throw light – from an unconventional source – on the reception and attitudes toward nuclear research and technologies in the Italian context. It also allows for an analysis of modernization processes in Italian history and of the relationship between cultural elites, decision-making processes and science laboratories, thereby contributing to a better understanding of the present state of scientific research and its relationship with public opinion and politics seen in an international (or, from the literary studies point of view, comparative) perspective.⁹

(Milano: Mimesis, 2015), esp. 21-98; Arielle Saiber, “Flying Saucers Would Never Land in Lucca: The Fiction of Italian Science Fiction”, *California Italian Studies* 2 (2011): 1-47.

6 Carlo Pagetti, “Twenty-Five Years of Science Fiction Criticism in Italy (1953-1978)”, *Science Fiction Studies* 6, no. 19 (1979): 320-26.

7 An examination of the theme across different media goes beyond the aims of the present essay, but awaits future research as a vast and promising field of enquiry. For the American context see Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* 1985 (Chapel Hill: University of North Carolina Press, 1994); especially on the big screen see Maurizio Zinni, *Schermi radioattivi. L'America, Hollywood e l'incubo nucleare da Hiroshima alla crisi di Cuba* (Venezia: Marsilio, 2013); for the nuclear theme on English small screens see David Seed, “TV Docudrama and the Nuclear Subject”, in *British Science Fiction Television: A Hitchhiker's Guide*, ed. John Cook and Peter Wright (London: Tauris, 2005), 154-73.

8 Patrick Parrinder, *Shadows of the Future: H.G. Wells, Science Fiction, and Prophecy* (Syracuse: Syracuse University Press, 1995), esp. 6-7; cf. Remo Ceserani, *Convergenze: Gli strumenti letterari e le altre discipline* (Milano: Bruno Mondadori, 2010) on the contributions of the literary discourse to other fields of knowledge.

9 Giovanni Paoloni, *Storia del nucleare in Italia tra passato e futuro*, roundtable moderated by Elisabetta Bini, *Next*, Trieste, Museo Revoltella, September 28, 2014, presentation.

BEFORE WORLD WAR II: ANGLO-AMERICAN PIONEERS, BETWEEN ENTHUSIASM AND FEAR

Before entering the realm of fantastic invention around nuclear technology in post-World War II Italy, it is worth mentioning the precursors of the theme within the national and international field of science fiction literature. The work done by Ernest Rutherford and Frederick Soddy on the spontaneous decay of uranium and radium clearly resonated, and greatly influenced scientific romances.¹⁰ Radioactivity immediately became part of the stock-in-trade of science fiction, and led to all kinds of new gadgets and rays being dreamt up, from Robert Cromie's *The Crack of Doom* (1895), where the villain invented a way of unlocking the atomic energy contained in matter and threatened to destroy the world, to Garrett P. Serviss' *A Columbus of Space* (1911), featuring the first-ever appearance of an atomic-powered spaceship, to the atomic missiles in George Griffith's *The Lord of Labour* (1911). Not to mention the threat of an atomic holocaust in a work by H. G. Wells, the founding father of the genre: *The World Set Free* (1914), which also describes the discovery of atomic energy.¹¹

As for the inventor of the very word *science-fiction*, Hugo Gernsback, "he had no hesitation in predicting its use as a power source in the near future, sometimes referring to the coming era of high technology as 'The Atom-Electronic Age' or 'The Age of Power-Freedom'";¹² and John W. Campbell Jr., another key figure in the history of the genre, the editor of the magazine *Astounding Science Fiction*, also wrote some of his first short stories around the power of the atom.¹³

To sum up the atomic presence in English-language science fiction during the 1940s, without going into a detailed survey, we can quote Brian Stableford: "After 1945, atomic power became one of the standard themes in science fiction, as the shock of revelation precipitated a wave of apocalyptic stories of the Holocaust (especially in the context of World War Three) and the Post-Holocaust aftermath. Mutational romance, popular since the mutagenic effects of X-rays had been discovered in the 1920s, also received a considerable boost".¹⁴

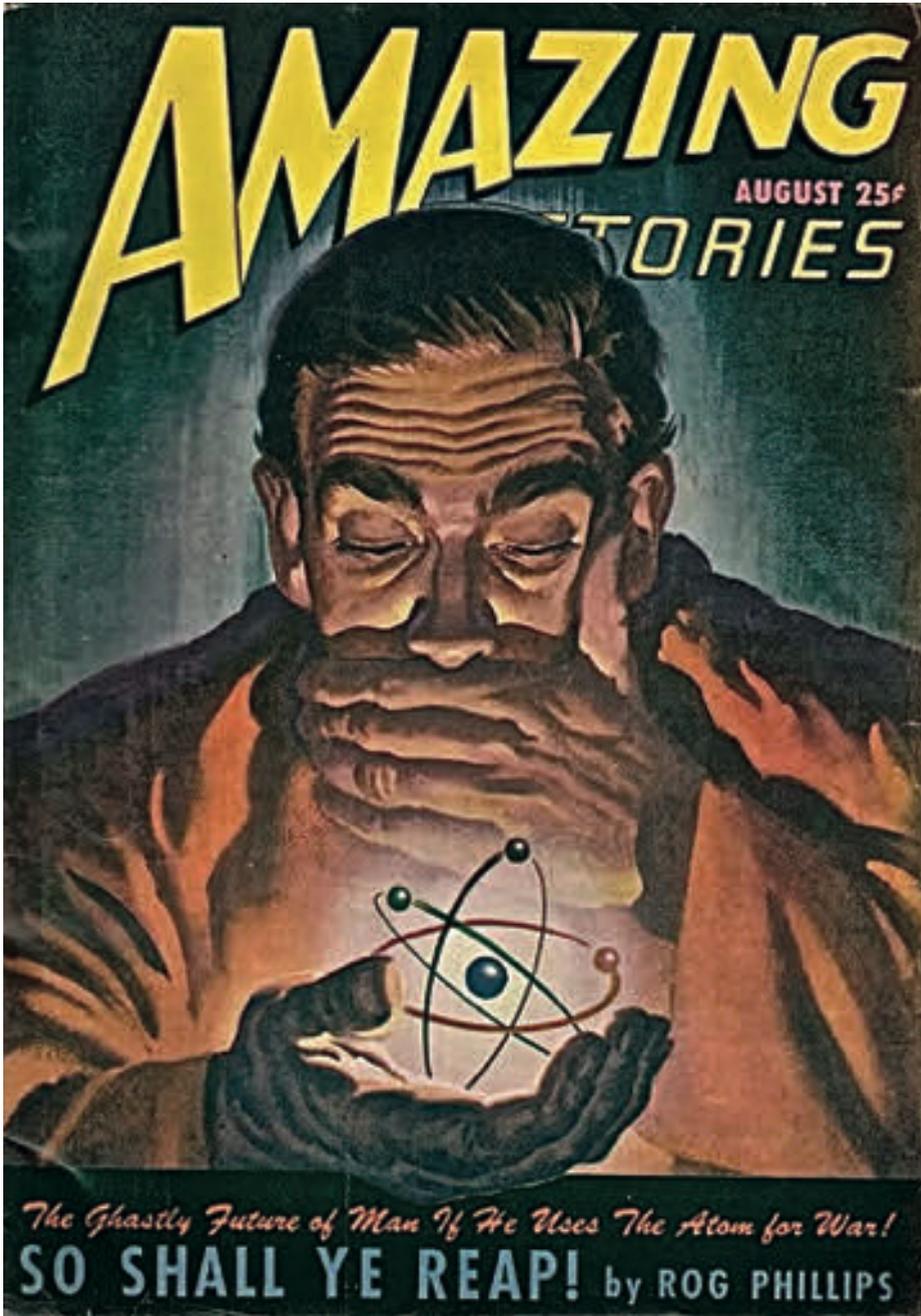
10 Brian M. Stableford, "Nuclear Energy", in *The Encyclopedia of Science Fiction*, ed. John Clute, David Langford, and Peter Nicholls, April 4, 2015, http://www.sf-encyclopedia.com/entry/nuclear_energy, last accessed May 6, 2016.

11 Parrinder, *Shadows*, 107.

12 Stableford, "Nuclear Energy".

13 For an overview on atomic technologies in American literary imagery see Boyer, *By the Bomb's Early Light*, part 7.

14 Stableford, "Nuclear Energy".



"The Ghastly Future of Man if He Uses the Atom for War!". Arnold Kohn's cover for the August 1947 issue of *Amazing Stories*.

As for the Italian precursors of the science fiction genre, in *L'anno 3000* (*The Year 3000*, 1897) by Paolo Mantegazza – a neurologist, physiologist, anthropologist, consultant and editor for Treves – there is significant concern about possible sources of energy for human activities, but the atom makes no appearance, and electricity in general is the (quite revolutionary enough!) source used to drive means of transport in place of coal or draught animals.

We have to wait for the dawning of the twentieth century to find the atom in the first fantastic adventures concerned with science and the future. In 1912, Yambo (aka Enrico Novelli), a prolific writer and illustrator of novels mainly for youngsters, wrote *L'atomo* (*The Atom*), set in the universe contained in an atom, with an invention non-related but parallel to Mark Twain's in *Three Thousand Years Among the Microbes* (1905).¹⁵

THE 1950S: PROMISES OF MODERNITY AND ILLEGITIMATE CHILDREN

It was not until the early 1950s that science fiction arrived in Italy as a specific literary genre, and in fact the word *fanta-scienza* was coined in 1952 as a translation of the English term *science fiction*. The inventor of the word and of *Urania*, the first magazine ever to be presented in Italy as a specialized science fiction publication, was Giorgio Monicelli, love child of the journalist Tomaso Monicelli and the actress Elisa Severi, and nephew of the publishing tycoon Arnoldo Mondadori.

Some twelve years before the birth of Felice Ippolito's *Le Scienze*,¹⁶ Mondadori agreed to Giorgio Monicelli's idea of starting a magazine on this “new” kind of fiction based on science that was popular in pulp magazines in the United States.¹⁷ Interested in science as well as in mysterious archaeology, oriental philosophies, and futurology, Monicelli mostly featured translations of English and French authors in *Urania*, but he also began to foster an Italian “school” of science fiction authors. Among the (eleven) Italian novels published in the series under his editing (out of more than two hundred fifty issues, 1952-1961),¹⁸ nuclear technologies made their appearance in more than one.

15 Federico Appel, “Mondi dentro mondi. Sull'uso della scienza nella letteratura per l'infanzia”, *Libri e Riviste d'Italia* 1 (2007): 51-60.

16 Enrico Battifoglia, “La scienza raccontata dalle riviste divulgative italiane”, in Treccani, Scuola, Dossier, April 14, 2011: n. p., http://www.treccani.it/scuola/dossier/2011/150anni_scienze/battifoglia.html, last accessed July 31, 2015.

17 Antonello, “La nascita”; Giulia Iannuzzi, “Giorgio Monicelli e l'alba della fantascienza in Italia”, in *Officina del libri 2012*, ed. Lodovica Braidà, Alberto Cadioli, and Edoardo Barbieri (Milano: Unicopli, 2013), 23-61; Iannuzzi, *Fantascienza italiana*, 23-42.

18 Iannuzzi, *Fantascienza italiana*, 43-57.



I Romanzi di Urania 1 (1952), cover by Curt Caesar.

Emilio Walesko's *L'atlantide svelata* (Atlantis Uncovered, 1954), presented in the blurb as the first Italian science fiction novel ever written, was the adventurous story of a fantastic voyage under the sea, made by the brilliant scientist Dr. Spargirus, and his younger companion, the engineer Satta.

Aboard a bathyscaphe not dissimilar to the one used in Jules Verne's *Twenty Thousand Leagues under the Sea*, our two heroes discover the lost civilization of Atlantis in the depths of the ocean, portrayed as a techno-scientific utopia, in which mankind has harnessed the forces of nature thanks to his scientific knowledge and to the mastery of incredibly advanced technologies. The source of power on Atlantis is nuclear energy.

[the Atlantis scientist to Spargirus -] The water that took everything from us [during the ancient flood that destroyed the first Atlantis on the Earth's surface], now gives us everything we need to survive. It provides the oxygen to breathe, and the hydrogen necessary for nuclear reactions; and these give us heat and electricity. The hydrogen is, moreover, our primary raw material, from which we obtain all the others. We have 5 thermoelectric stations, differently deployed and autonomous, all connected to the same grid ...

I know you for an expert in atomic energy and we know that your machine is powered by an atomic reactor. Which technology are you using?

[Spargirus -] Heavy water.

[the Atlantis scientist -] It is still a good technology, but we used it many years ago, and now it has been completely abandoned.

[Spargirus -] How many years ago?

[the Atlantis scientist -] I don't remember exactly, but at least 600 years ago.

[Spargirus -] And now?

[the Atlantis scientist -] We bombard the hydrogen, we bring about the same transformation cycle as that of the Sun, it's the cycle you call – if I am not mistaken – the Bethe cycle. It's simple and economical: nature herself has suggested it ...¹⁹

The same fascination for nuclear technologies as the promising energy source of the future is to be found in *Organizzazione Everest* (Everest Organization, 1958) written by Maria Teresa Maglione under the pseudonym Esther Scott.²⁰ The protagonist – a young mechanic – is recruited by a secret organization whose mission is to reconcile the Eastern and Western blocs, by faking the existence of an extra-terrestrial threat. The organization headquarters are located inside the Everest range and logistically and administratively structured as a modern scientific utopia: the researchers' code of conduct sounds like a small-scale version of the Universal Declaration of Human Rights, the small society has

19 Emilio Walesko, *L'atlantide svelata*, *I Romanzi di Urania* 31 (1954), 71-72. Translations are mine unless otherwise indicated.

20 Esther Scott [Maria Teresa Maglione], *Organizzazione Everest*, *I Romanzi di Urania* 192 (1958).



Emilio Walesko, *L'atlantide svelata*, *I Romanzi di Urania* 31 (1954), cover by Curt Caesar.

an egalitarian and socialist-like constitution. Atomic power plants, along with electronic calculators, are the technological basis of the advanced scientific research conducted by the Organization, to reach new frontiers of knowledge and technology (including human space flight).

A case in point with a different attitude, one offering an early example of atomic fear in Italian science fiction is *C'era una volta un pianeta...* (Once there was a Planet..., 1954), written by Luigi Rapuzzi – a writer and painter from Udine – under the pseudonym of Louis R. Johannis.²¹ The novel is set in a remote past and gives a fantastic and tragic explanation of the asteroid belt located between Mars and Jupiter. A planet used to be there, inhabited by an advanced species, but it was blown up in a nuclear war; the few survivors of the catastrophe landed on Earth and after mating with the Neanderthals, started the human race as we know it (a story narrated in the sequel: *Quando ero "aborigeno"* – When I Was an Aborigine, 1955).²²

Alongside these expressions of the science fiction genre, we must mention another side of the relationship between Italian humanistic culture and the nuclear issue: the extraordinary experience of an intellectual such as Leonardo Sinisgalli and his *Civiltà delle Macchine* (The Civilization of Machines), a journal published by the industrial group Finmeccanica and edited by Sinisgalli between 1953 and 1958. This publication was one of the most interesting attempts made in those years by Italian industrialists to have a cultural organ of their own, and was a fascinating laboratory for dialogues between the “two cultures” (in 1965, it would also feature reflections on the debate about Snow’s *Two Cultures*).²³ It is no coincidence that Sinisgalli was asked to collaborate first in *Pirelli* and then in *Civiltà delle macchine* by Giuseppe Eugenio Luraghi, another exceptional figure in the Italy of these years, who graduated from Bocconi University, worked for the Pirelli tyre company and enjoyed a long career from then on, eventually becoming managing director of the car industry Alfa Romeo.²⁴

Called early on by the physicists of via Panisperna, Sinisgalli preferred to study industrial engineering (1932), but he would remain receptive and interested in Enrico Fermi’s school and in nuclear technologies: he commissioned various articles on the via Panisperna group and its protagonists, on nuclear energy and fallout scenarios, featured between 1953 and 1956.²⁵ The study of protagonists such as Fermi and Robert

21 Louis R. Johannis [Luigi Rapuzzi], *C'era una volta un pianeta...*, *I Romanzi di Urania* 41 (1954).

22 Louis R. Johannis [Luigi Rapuzzi], *Quando ero "aborigeno"*, *I Romanzi di Urania* 110 (1955).

23 Antonello, *Il Menage*, 17n1.

24 Gian Carlo Ferretti and Giulia Iannuzzi, *Storie di uomini e libri. L'editoria letteraria italiana attraverso le sue collane* (Roma: minimum fax, 2014), 115-18.

25 Antonello, *Il Menage*, 154, 166n108, 166n109; Antonello, “How I learned to stop worrying and love the bomb”: Minaccia nucleare, apocalisse e tecnocritica nella cultura italiana del secondo Novecento”,



Civiltà delle macchine 1, no. 1 (1953), cover: Il volo degli uccelli di Leonardo da Vinci.

Oppenheimer without ostracism, and the reasoning about the splitting of the atom as part of the cognitive adventure of human kind, takes the issue of a nuclear catastrophe to a non-eschatological level, which is especially significant given what would happen in the years to come.

All in all, during the reconstruction years, despite the chronological proximity of Hiroshima and Nagasaki, atomic power was not considered negatively by some Italian intellectuals, being part of a broader optimism, enthusiasm and emphasis on its emancipative potential.²⁶

THE 1960S AND 1970S: MALAISE OF MODERNITY AND THE NUCLEAR MENACE

The 1960s and 1970s were characterized by a vast outpouring of narrations and discourses about the nuclear threat in Italy. During these years, the nuclear theme became an excellent observatory, a synecdoche, we might say, of the relationship between Italian intellectuals and techno-science.²⁷

Let us start with a famous, paradigmatic example of non-fiction: the public speech “Pro o contro la bomba atomica” (“For or Against the Atom Bomb”) presented on various occasions and published by the (non-science fiction) writer Elsa Morante in 1965. The pamphlet is worth quoting, for it is a brilliant example of many of the crucial issues of Italian culture of that time:

There is no doubt that the most important element in our present – the thing that nobody can ignore, is this: that we, inhabitants of the *civilized* twentieth-century nations, live in the age of the atomic bomb. And in fact, everybody knows this: the adjective *atomic* is repeated on every occasion, even in jokes and in popular magazines. ...

The Italianist 33, no. 1 (February 2013): 89-119, esp. 92-93. The series includes: U. Maraldi, “Avventura nello spazio e nel tempo”, *Pirelli* 4 (1952): 16-17 (portrait of Fantappiè); G. De Chiara, “Un pioniere delle esperienze nucleari”, *Pirelli* 3 (1951): 8-11 (portrait of Amaldi); Amaldi, “Fisica e ingegneria nucleare”, *Pirelli* 3 (1951): 10-11; Vittoria Notari, “Via Panisperna culla dell’atomica”, *Civiltà delle Macchine* 2 (1953): 40-42; Aldo Persano, “Ancora tre anni per la pila atomica italiana?”, *Civiltà delle Macchine* 3 (1953): 12-14; L. De Broglie, “Conseguenze biofisiche delle esplosioni atomiche”, *Civiltà delle Macchine* 1 (1955): 51; V. Razzi, “Via Panisperna e la preistoria dell’atomica”, *Civiltà delle Macchine* 5 (1956): 40-47.

²⁶ See the fundamental Antonello “How I Learned”, esp. 92 and *passim*, for the idea of a “nuclear” or “apocalyptic reductionism” (*riduttivismo apocalittico*) in relation to Sinisgalli’s *Civiltà delle Macchine* of these years, and coeval short stories by Pietro Calamandrei and Dino Buzzati; see esp. 96-97 on Enrico Baj and Sergio Dangelo’s *pittura nucleare* (nuclear painting).

²⁷ On the Atomic bomb as an object of cultural *transfer* see Antonello “How I Learned”.



Elsa Morante, *Pro e contro la bomba atomica e altri scritti* (Milano: Adelphi, 1987).
Graphic design elaborated on 1895 maquette by Aubrey Beardsley.

But why is it that a fundamental secret of nature (perhaps *the* secret of nature), already intuited by man since ancient times in different places and ages, by advanced civilizations eager for knowledge, has only in the present day and age been verified, been physically rediscovered? It is not enough to say that during the great adventure of the human mind, the seduction of science has replaced that of the imagination: while this might sound like an answer, it is actually more of a question, which makes the problem even more demanding. But nobody is going to believe that this was a coincidence; that the human world reached this crucial crisis simply because at a certain point, human intelligence, always in search of new adventures, followed one dark path among other dark paths, and that along the way, its sorcerer-scientists just happened to discover the secret.²⁸

The mention of nuclear power is noteworthy as *the* supreme secret of nature, but only in reference to the atom bomb threat (with no mention of the civilian uses of nuclear technology in the rest of the essay either), as well as the sharp distinction and contraposition with clear axiological implications of *imagination* and *science*. What is more, the term “sorcerer-scientists” (“stregoni-scientziati” in Italian) effectively conveys an idea of radical strangeness and lack of understanding, as well as – together with the reference to the “dark paths” of scientific enquiry – throwing an ominous, negative light on the very idea of scientific research, rhetorically but also conceptually flattened on the possible destructive uses of certain technical discoveries. Thus, nuclear technology, identified with *the bomb*, becomes a symbol of the nihilism of the contemporary age whose destructive power was prefigured in the concentration camps: “the atomic bomb is the flower, the natural expression of our society, just as Plato’s dialogues were that of Greek civilization, and the Colosseum that of imperial Rome’s ... and the concentration camps that of a petty bourgeois, bureaucratic culture already infected by the anger of atomic suicide”.²⁹

It is also interesting how during these years (as I will return to later on) the theme of nuclear catastrophe often becomes the vehicle for writers’ reflections on their social role, function and engagement. It therefore comes as no surprise, a few pages further on, to hear Morante saying: “And at times the writer will feel like telling everyone to go to the devil, with their cheap magazines, their singer-songwriters, and their cyclotron”,³⁰ in a very revealing simultaneous condemnation of the technology used to accelerate subatomic particles and those new expressions of mass culture ever more common in Italy after the economic miracle.

28 Elsa Morante, “Pro e contro la bomba atomica” (1965), in Morante, *Pro e contro la bomba atomica e altri scritti* (Milano: Adelphi, 1987), 97-117, qt. 97, 98.

29 Morante, “Pro e contro”, 99.

30 Morante, “Pro e contro”, 105.

A similar association between novels treating the nuclear catastrophe and reflections on contemporary society is found in cases such as Guido Morselli's *Dissipatio HG* (1977), Antonio Porta (Leo Paolazzi)'s *Il re del magazzino* (The King of the Storeroom, 1978), and Paolo Volponi's *Il pianeta irritabile* (Irritable Planet, 1978). In the texts and para-texts of these novels (within the narration or in the authors' introductions, auto-comments, interviews) we find significant statements, on the part of the authors, distancing their works from the science fiction genre, such as can also be found in the writings of Primo Levi and Italo Calvino.³¹ In these authors, at one and the same time, the "discomfort of modernity" takes the form of the nuclear bomb threat as a theme (or, in Morselli's case, the idea of a disappearance of the human race not explicitly nuclear but still ascribable to the terror of a nuclear world war) and the disapproval of science fiction as a popular, cheap genre.

We can read in a similar sense the dissemination of nuclear threats in many other narratives written during the years of the economic boom:³² from the atomic bombs that in Dino Buzzati's short stories (e.g. "Pusillanime" – Coward, 1950; "Rigoletto", 1954; "All'idrogeno" – With hydrogen, 1954) threaten individual characters, as a metaphorical incarnation of man's uncertain destiny and of death itself; to the moral and moralistic use of the atomic catastrophe in Carlo Cassola's *Il superstite* (The survivor, 1978); to the obsession appointed on physical mutation of the protagonist in Paolo Volponi's *Corporale* (Corporal, 1974).³³ In all these narratives the nuclear catastrophe is never directly the object of the representation (or we find it only in distant, marginal, fleeting visions): we are always on the verge of the explosion, or we see the world right after. Quite far from any spectacularization, the main interest of these authors is located in a moral or

31 For a close reading of these *loci* see Florian Mussgnug, "Finire il mondo. Per un'analisi del romanzo apocalittico italiano degli anni settanta", *Contemporanea* 1 (2003): 19-32, esp. 22-23; for the relationship of Calvino's work with science fiction and the scholarship attitude within and outside Italy see Elio Baldi, "Science Fiction and the Canon: the Case of Italo Calvino", *ReadingItaly* 3 (June 2014), <https://readingitaly.wordpress.com/2014/06/03/science-fiction-voices/>, last accessed May 23, 2016; Baldi, "Italo Calvino and Science Fiction: A Little Explored Reading", in *Calvino's Combinational Creativity*, ed. Elizabeth Scheiber (Newcastle upon Tyne: Cambridge Scholars Publishing, 2016), 41-61. On Morselli's *Dissipation HG*, Volponi's *Pianeta irritabile* and Cassola's "nuclear trilogy" (*Il superstite*, *Ferragosto di morte*, *Il mondo senza nessuno*) see Bruno Pischedda, *La grande sera del mondo. Romanzi apocalittici nell'Italia del benessere* (Torino: Aragno, 2004).

32 Stefano Lazzarin, "Atomiche all'italiana. Il tema della catastrofe nucleare nella fantascienza italiana d'autore (1950-1978)", *Testo* 31, no. 59 (2010): 97-115.

33 The presence of mutants in Italian science fiction narratives of this period would require an essay for itself. We can point out here that the theme of physical mutation, of corporal deformity became an effective metaphor for (and extrapolative prosecution of) real discriminations of another kind, in effective works such as Vittorio Curtoni's "Ritratto del figlio" ("Portrait of the Son"), 1970, and *Dove stiamo volando* (Where Are We Flying), 1972.

existentialist dimension of critical reflection, hence also the emphasis on the stories of single individuals, and the obliteration of the collective dimension of the catastrophe: the masses are a great absence here, a void left by the nuclear holocaust. Especially *Corporale*, with a quote from “Pro o contro la bomba atomica” as an epigraph, and a mutation that actually takes place *before* any bomb and nuclear fallout, aptly exemplifies how the atomic theme has been almost “naturally” employed as the correlative object of an anthropological mutation, of the socio-economic and cultural changes that the Italy of those years was undergoing³⁴ and of a pronounced mistrust and estrangement toward the new centrality that techno-science was acquiring in society and culture, of which the bomb was, for these writers, the epitome.

Along with others, Antonello reads nuclear anxiety as a reaction to the effects of the economic miracle (among which we shall include the appearance and success of popular publications and the translation of Anglo-American science fiction): in Italy during these years, the thematization of the nuclear catastrophe neatly overlaps with the thematization of the neurosis, and with a resulting “literature of a ‘projective’ nature, not so much interested in examining the issues and questions raised by the Cold War or the nuclear threat by looking at the facts, as in using them as negative fetishes, around which collective fears can be made to converge, along with conceptual oversimplifications of an ideological nature”.³⁵

Another interesting case, appearing exactly ten years after Morante’s essay, is Leonardo Sciascia’s novel *La scomparsa di Majorana* (The Disappearance of Majorana, 1975): a reconstruction and narration of the last years of Ettore Majorana, an Italian physicist who disappeared mysteriously. The novel takes the form of an inquiry (*romanzo inchiesta*) which, while using various sources, including Fermi’s *Atomi in famiglia* (Atoms in the Family, 1954) and Amaldi’s *Nota biografica di Ettore Majorana* (Ettore Majorana biographical note, 1966), essentially leaves us with the idea of a scientist who by disappearing has abdicated his role and responsibilities toward society.³⁶

34 Emanuele Zinato, “Commenti e apparati critico-filologici”, in Paolo Volponi, *Romanzi e prose*, vol. 1 (Torino: Einaudi, 2000), 1157; and Lazzarin, “Atomiche all’italiana”; cf. also Antonello, *Contro il materialismo*, 233-34; Romano Luperini, *Il Novecento* (Torino: Loescher, 1981), 815.

35 Pierpaolo Antonello, “Letteratura e scienza”, in *Storia d’Italia*, annali 26, *Scienze e cultura dell’Italia unita*, ed. Francesco Cassata and Claudio Pogliano (Torino: Einaudi, 2011), 923-48, qt. 941.

36 Antonello, “Letteratura e scienza”, 942; Arnaldo Bruni, “La scomparsa di Majorana”, *Sciascia, scrittore europeo: Atti del Convegno internazionale di Ascona*, ed. Michelangelo Picone, Pietro DeMarchi, and Tatiana Crivelli (Basel: Birkhäuser, 1994), 181-207.

I would like to conclude on a more playful note by returning to the issue of condemnation of science fiction as a symptom of Italian intellectuals' "malaise of modernity": the following quote is taken from an article by Giorgio Manganelli, written to mark the 1977 release of George Lucas' blockbuster movie, *Star Wars*:

I would like to pay a tribute to that third-rate, childish, noisy, and demented genre called *fantascienza* [science fiction], with a nearly-Italian expression. Science fiction has – correctly – been said to be a symptom of schizophrenia, a never-ending, rubbishy proliferation of maniacal sewage, that satisfies our thirst for madness. True, quite true, and that is precisely why I would like to pay tribute to it. Rough, primitive, repetitive, just like dementia, and – we might add – like death itself. [... *Star Wars*] I know, it's a movie that children like: those little monsters that are already practicing at pushing the good buttons of Megadeath.³⁷

A "review" highly indicative of the extent to which the visual media, together with literature, were influencing how the genre was received (as well as its success) and also the degree to which Italian intellectuals' attitude toward the genre was characterized by a sense of alienation from techno-science, which was ultimately to become another example of widespread nuclear psychosis.

³⁷ Giorgio Manganelli, "L'oroscopo? No, meglio 'Guerre stellari'", *Corriere della Sera* November 10, 1977: 3.

OMAGGIO ALLA FANTASCIENZA, LETTERATURA ANALFABETA

L'oroscopo? No, meglio «Guerre stellari»

Vorrei rendere omaggio a quel genere letterario infante, infantile, immenso e demone che in quasi italiano si chiama fantascienza. E' stato detto, del tutto a ragione, che la fantascienza è sistema di auto-defesa, che è una tentata ed infame proliferazione di legami mortali, che siamo in questa fase di follia, ipno, carisma; ed appunto per questo intendo rendere omaggio. Senza, elementare, ripetitiva, appunto come la demenza e, possiamo aggiungere, come la morte. In un tempo in cui l'ottimismo riposa su un ingenuo sistema di legami, sistemi, dimissioni ed omicidi, la fantascienza parla di qualcosa che tutti gli esseri umani mediamente ragionevoli hanno in mente: parla delle Apocalisse.

Questa brutta letteratura mi parla alla mente quegli spauriti figli e cadaveri che al tempo della Siberia parlavano agli incerti della fine del mondo, quell'istinto gladio, dei nazionati. Dimenticate la paura è sottile, esita, maliziata; e tuttavia vuole essere detta. Se dentro di noi esiste un modo di paura impazzita, vuole urlare in una presa, in una fantasia spaziale e terrificata. La fantascienza nasce da una brutta sofferenza, dalla coscienza che mai come adesso noi siamo stati attratti a noi



stessi, che noi viviamo in un tempo in cui generali ingordi, che non leggono fantascienza, hanno cominciato la bella — costosa bella — guerra Magadeth, Magadeth, per coprire di un lieve velo di gloria un milione di morti, un milione di noi, di io.

Non dimentichiamo che la fantascienza parla di stelle; è, dunque, questa letteratura maliziata, quella che parla, e quel che l'argomento si ha recitato, di senso del cosmo. Si possono preferire gli esempi scientifici che presen-

tano inaudite imprese spaziali e brevi disegni orwell ai miti in storia. Preferisco la scienza delle arti che sembra di accumulare i tesori del cosmo del mondo, di Principi del Male che pilotano astronavi nell'ipotesi.

Non credo che il successo attuale di un film come «Guerre stellari» derivi dal fatto che si tratta di un successo levale, di foga, di evasione. Incolossalmente, la letteratura di evasione allude alla galera, «Guerre stellari» è rosso e raffinato, fantascienza e monoteo, sottile ed elementare; quell'incredibile miscela di mirabili mostri, modelli a scuri, e sublimari messaggi tra mediocri ed oroscopi, ne fanno un film rapidamente costoso, che fa fuggire di tutto, come un mostro che ha assorbito ad un debito ed è il sole che se non non può dire.

Lo sci è un film che piace ai bambini, questi mostri oroscopi che già si affacciano a provare i buoni istinti della megamorte. E' probabile che faccia progresso la pace del cosmo ai nomi che si collocano in vigilanza degli spazionati. E tuttavia, prima e divergita, questo film, in qualche modo agito. Dimenticato, degradato, appena riconoscibile nella sua deformità, esso nasconde sotto il fango della macchina un accento alla scienza

in pace del filo con l'arco, perfino dei bambini di ieri.

Sarebbe temerario affermare che tutto ciò rappresenti un omaggio all'America e comunque intellettualmente. Ma questa invenzione, che tanto spesso la scienza frena, letteratura fantascientifica allude in modo infante e modesto, disonestamente omili. Lo so, in America c'è la California, ci sono tutte le astronavi e le spionaggiamenti monumentali che sappiamo ma non dire che in fatto di spionaggiamenti non abbiamo più che da imparare, e che senza vero che, mentali deformata e sfuggita, certe immagini del mondo riescono a pervenire. Il momento in cui tutto che vuol vedere il battaglio deve rinunciare a sapere dove si trova, dove è non, può essere in moto, scivola il fascino fantascienza e irruente del paradosso.

Grandi schemi dell'etico, per parlare il linguaggio stellare, difendono il nostro cervello dall'infamia arcaica del paradosso, di quell'attimo in cui il linguaggio presenta a noi il sapere del mondo rivela i nomi che prevedono ai suoi disegni più oscuri, frastuono, saggi, ma anche «Guerre stellari» reagisce, e non sempre a torto.

Giorgio Manganelli

Giorgio Manganelli, "L'oroscopo? No, meglio 'Guerre stellari'", Corriere della Sera November 10, 1977: 3.