

Krakatit

Roman.

“A novel about explosives and dreaming, about human passions and about God”

Karel Čapek

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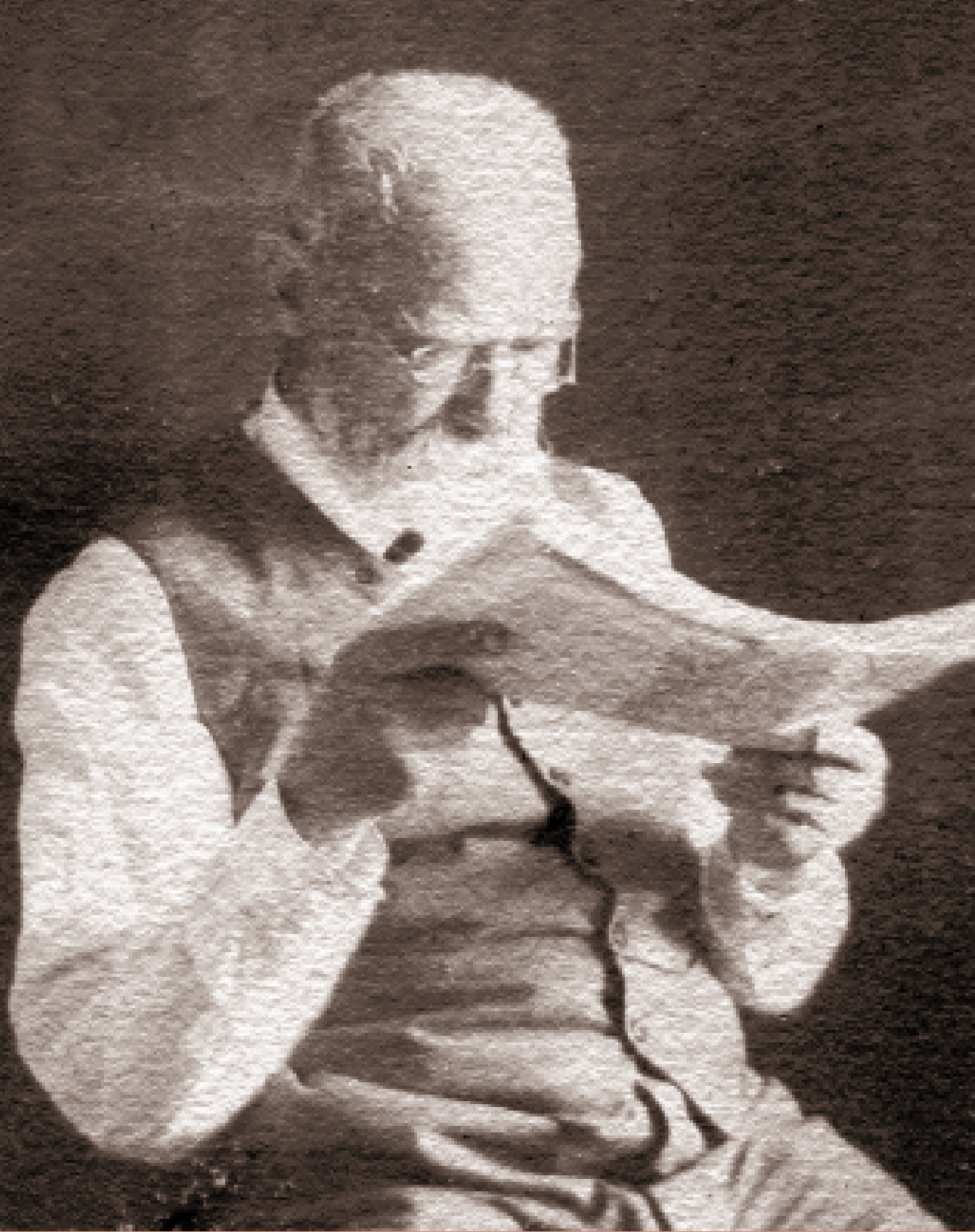


The visual materials used in the exhibition come from the archives of the Karel Čapek Memorial, the Museum of Czech Literature, the National Film Archive, and the University of Chemistry and Technology in Prague, as well as from Kateřina Dostálová, and the Chvojka and Palivec families, to whom we extend our thanks.

The first readers devoured the thrilling work serialized in Lidové noviny; the author kept them in suspense for three and a half months.

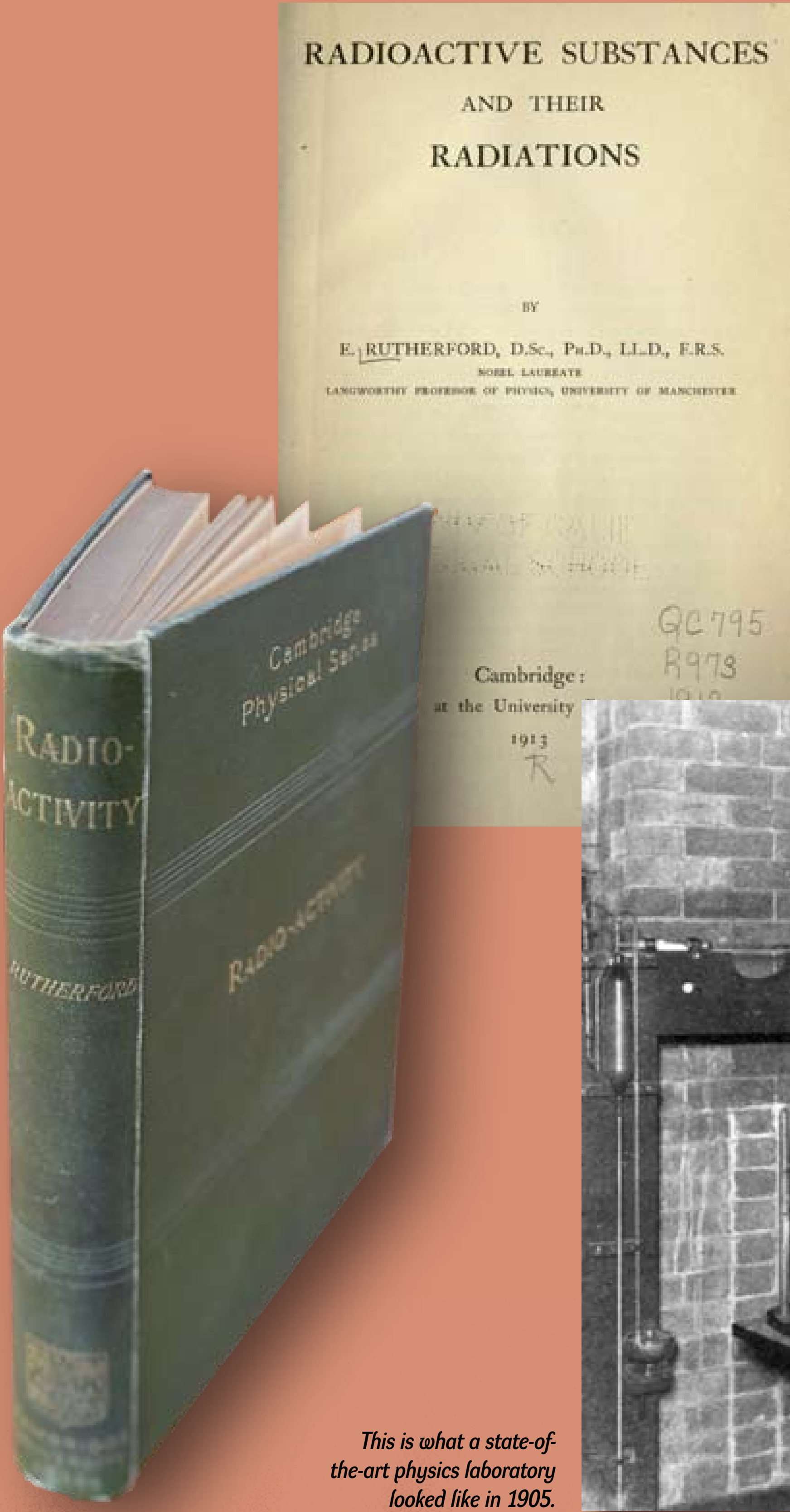
Karel Čapek: An erudite layman

It would be utterly wrong to describe *Krakatit* as mere plagiarism of Wells’ dystopian work *The World Set Free*. Karel Čapek took a keen and lasting interest in the latest scientific discoveries and their potential. He made the most of opportunities to study them at the source – from consulting with the rector of the Czech Technical University in Prague to visiting nuclear physicists at the Cavendish Laboratory of Trinity College, Cambridge.



Prof. František Wald (1861–1930) was a respected authority, but he rejected atomic theory.

When preparing to write *Krakatit*, Čapek not only undertook extensive reading of both Czech and foreign, specialist and popular science literature – he even attended the lectures of František Wald. Wald was a renowned professor of theoretical and physical chemistry and chemical metallurgy, and a former rector of the Czech Technical University in Prague. We can recall the novel’s opening dreamlike scene, the train of thought of the author’s alter ego, engineer Prokop: “Explosives, explosives,” Prokop begins nervously, “their force depends on the fact that-that-that a large volume of gas suddenly develops from a much smaller volume of explosive mass... I’m sorry, that’s not correct.” “How so?” Wald asks sternly. “I-I have discovered alpha-explosions. The explosion occurs through the disintegration of the atom. The particles of the atom fly apart – fly apart...”

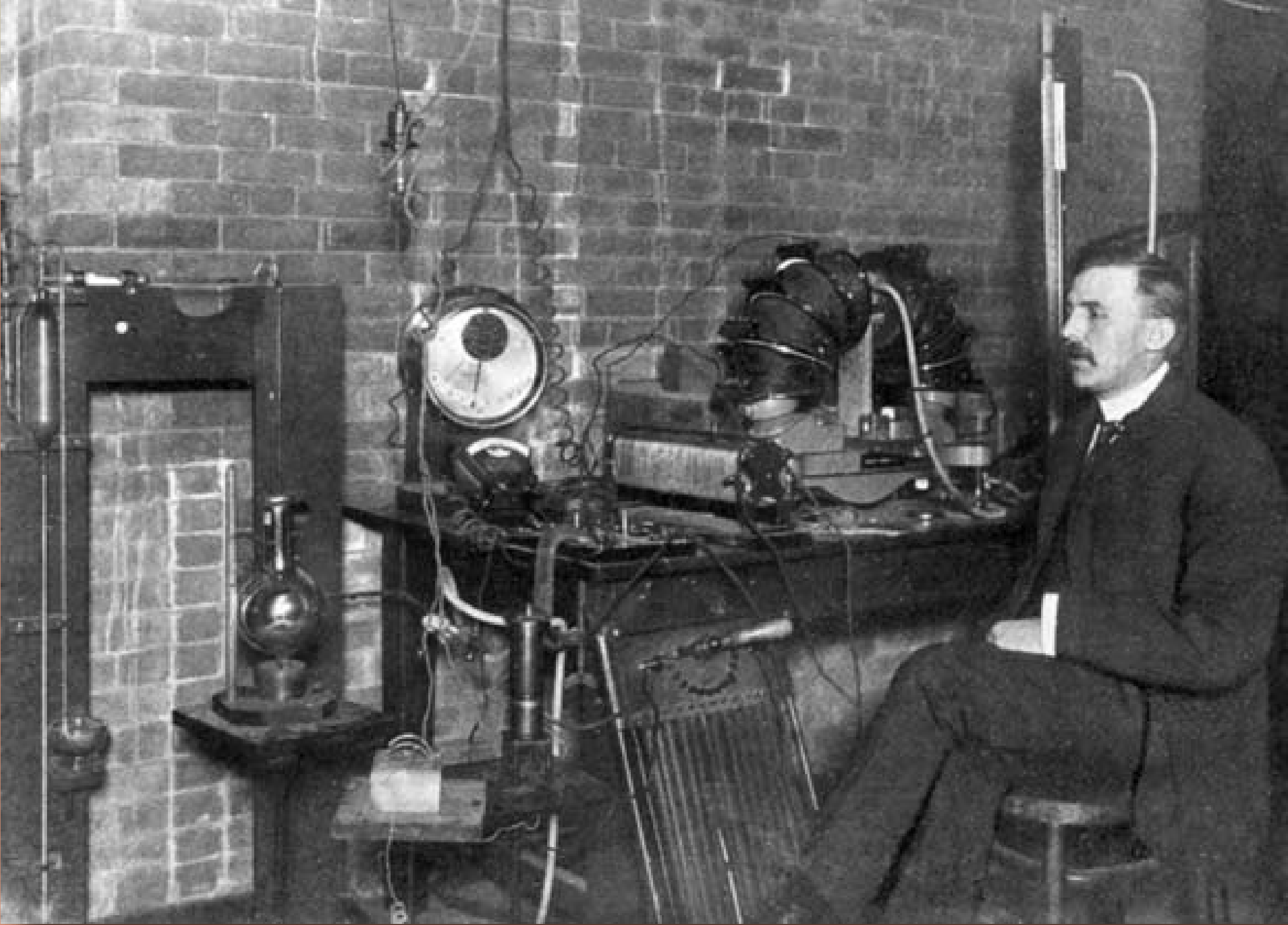


This is what a state-of-the-art physics laboratory looked like in 1905.

Chemists have pointed out that the composition of the fictional explosive Krakatit was supposed to be tetra-argon of lead. Argon is a noble gas, however, chemically inert and not given to reactions. The same is true of lead. This is why the novel’s protagonist activates his invention using high-frequency oscillations from a powerful transmitter. According to Czech astrophysicist Jiří Grygar, it was reading *Krakatit* that first drew him to science: at the age of eleven, he learned from it about Lorentz transformations and Einstein’s theory of relativity. The novel alludes to that theory not only in its references to the immense energy contained in each particle of matter, but also in its mention of Lorentz-Fitzgerald contraction – the flattening of a body moving through space at great speed, here applied to the body of the fevered inventor Prokop. It would not be Čapek if he did not allow himself a pun or two, as when engineer Prokop is bewildered by a strange molecule labelled “AnCi” – until he realizes he is only hallucinating about Anči, the charming sister of his fellow student Tomeš.



Illustration by Pavel Brázda for the 1963 edition



New Zealander Ernest Rutherford (1871–1937), founder of nuclear physics



In Cambridge Karel Čapek was more interested in physics than in the Trinity College library’s 14th century Chronicle of Dalimil, the first chronicle written in Czech.

“The novel got stuck on chapter eleven and a half. Just imagine, I had to revise a great deal of it. I had been studying a learned book on explosives and discovered that I had gotten everything about them wrong.”

— Karel Čapek in a letter to his friend Věra Hružová, December 1922



Věra Hružová, probably 1922

The essential point is this: The key to this iconic novel’s success lies in Čapek’s tried-and-true creative method, which is his ability to combine inspiration from the latest scientific knowledge with his own lively imagination and intellectual background, and his university education in Prague, crowned in 1915 with a doctorate in philosophy.

In *Krakatit* the author employed relevant technical terms, such as “alpha-explosions.” These refer to alpha particles, with which the famous New Zealand physicist Ernest Rutherford bombarded atoms so successfully that it earned him the Nobel Prize in Chemistry (1908). In 1919 he was the first in the world to transform one chemical element into another – nitrogen into oxygen – through a nuclear reaction. He opened a gateway to a new world.

Caught in the throes of passion

In the erotic, romantic dimension too, we can trace several sources of inspiration, the artist’s specific muses. Karel Čapek’s wife Olga Scheinpflugová claimed to have been the model for the sensual Princess Wille in *Krakatit*. After her death, however, letters surfaced showing clearly that the “Amazon” was in fact Olga’s rival – the alluring Věra Hrůzová.



Actress Olga Scheinpflugová



...and her rival, student Věra Hrůzová

In 1920 Karel Čapek was in his early thirties, a bachelor who kept his distance from women, partly because of health problems caused by Bechterew’s disease, at first misdiagnosed as spinal tuberculosis. In February that year he met a spirited actress at Prague’s Švanda Theatre: Olga, the seventeen-year-old daughter of Čapek’s journalist colleague Karel Scheinpflug. At the end of that year, when Čapek took her to a discussion circle hosted by the writer Anna Lauermannová in her literary salon in Prague’s Jungmann Square, his attention was caught by a tall student, Věra Hrůzová. The sensuality of this dark-haired, blue-eyed woman from the city of Brno dazzled the shy writer – inspiring him, but also paralyzing him.



Věra Hrůzová at the time of her first meeting with Karel Čapek

This marked the start of a parallel relationship with Olga and Věra, which we can trace through their surviving correspondence – and through the text of *Krakatit* itself. Čapek wrote the first chapter in October 1922 while visiting his older sister Helena Koželuhová in Brno. Besides attending to business at the Brno headquarters of the newspaper *Lidové noviny*, he naturally seized the chance to meet Věra as well.

He drafted the second and third chapters in October at Trenčianske Teplice in Slovakia, where his father Antonín worked as a spa physician. His work on *Krakatit* continued after he returned to Prague, where he was still living in a dark apartment near the river Vltava.



Florence Marly as Princess Vilemina in the film (called Wille in the novel)

It was in the autumn of 1922, while he was writing with his favorite simple dipping pen about the passionate Princess Wille while thinking of the “Amazon” or “black-haired enchantress” Věra, that Olga Scheinpflugová began to express hopes for marriage. Čapek responded by breaking up with Olga, saying he would give her her freedom while following her acting career from a distance. But the relationship did not end entirely; Čapek felt torn, and dealt with his inner turmoil by literally fleeing. From January to June 1923 *Krakatit* lay unfinished while the writer travelled in Italy to straighten out his thoughts. He returned no less torn than when he had left. All the while, unaware readers were enjoying his charming travel sketches, *Letters from Italy*, in the pages of *Lidové noviny*.

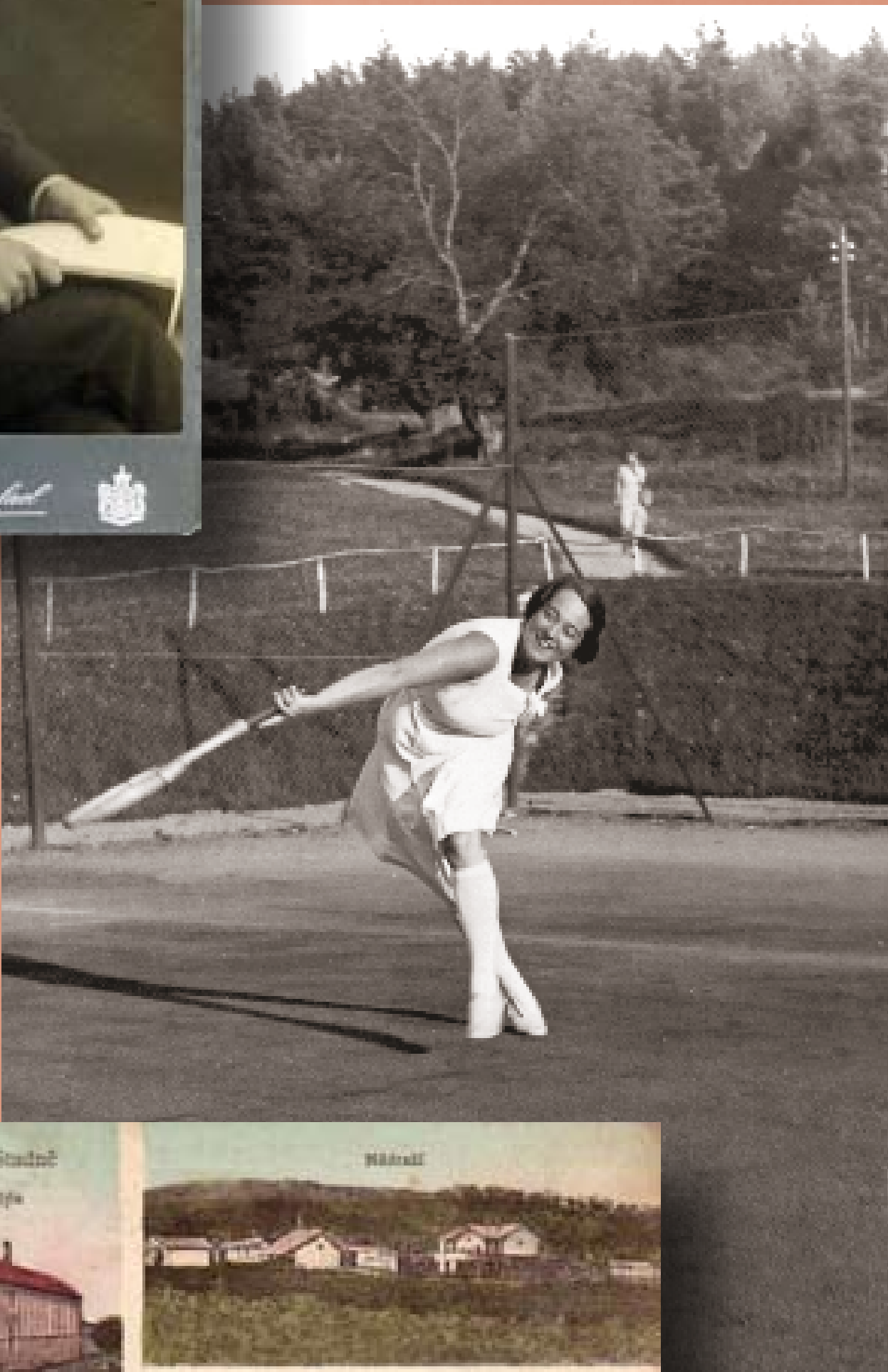


Karel and Olga on vacation in Špindlerův Mlýn (1921)

On returning, the author reported to Věra Hrůzová: “I am back in Prague; whether happily or unhappily I don’t know, and once again I am working on *Krakatit*. The poor thing lay dormant for six months and lost much of its explosive force; it will take a lot of work before I can get back into it.” Incidentally, he worked Věra’s surname (Hrůzová, from *hrůza*, “horror”) into the novel as the mysterious word “Zahur”.



Věra Hrůzová’s husband, Josef Skoupil



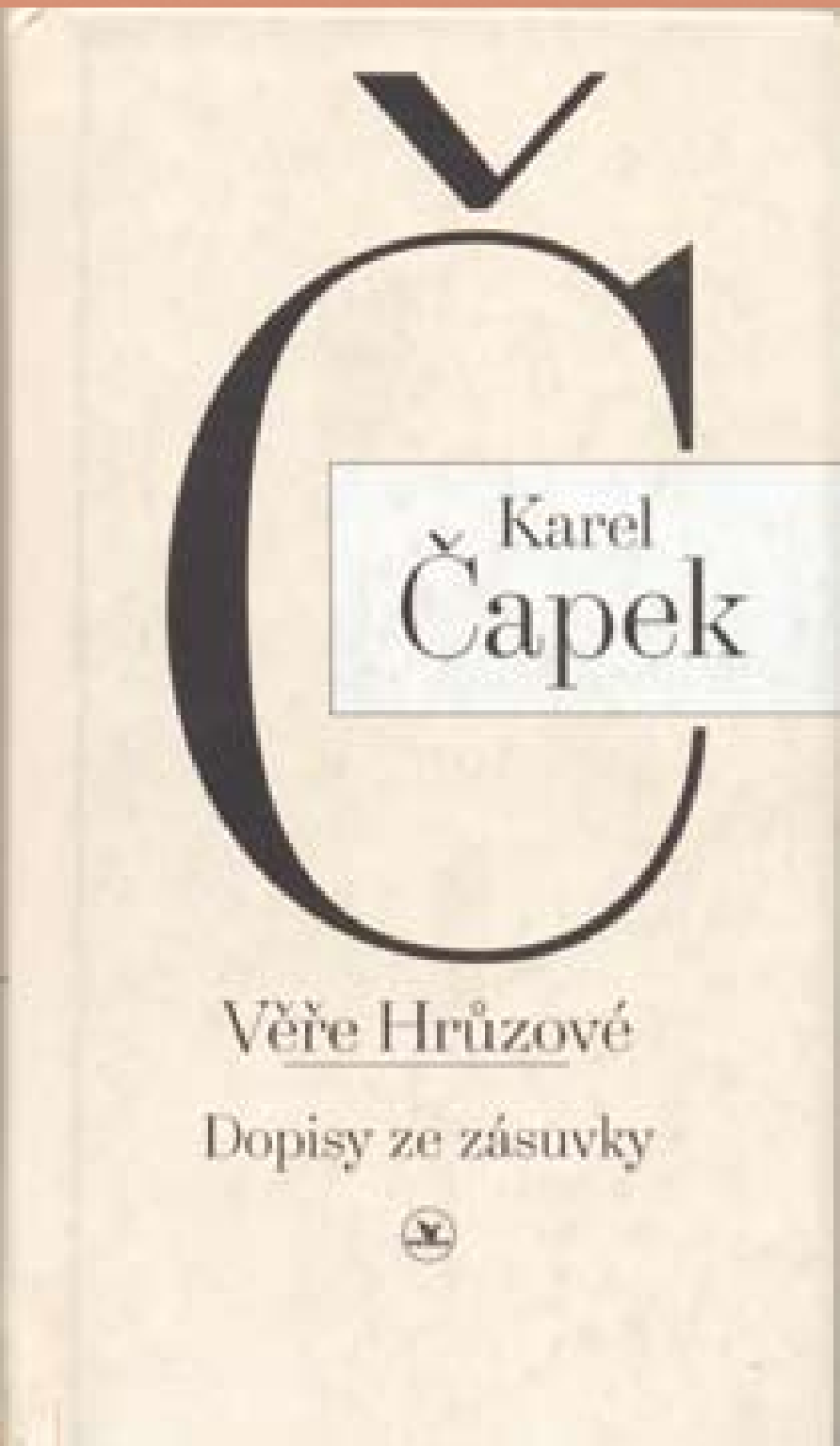
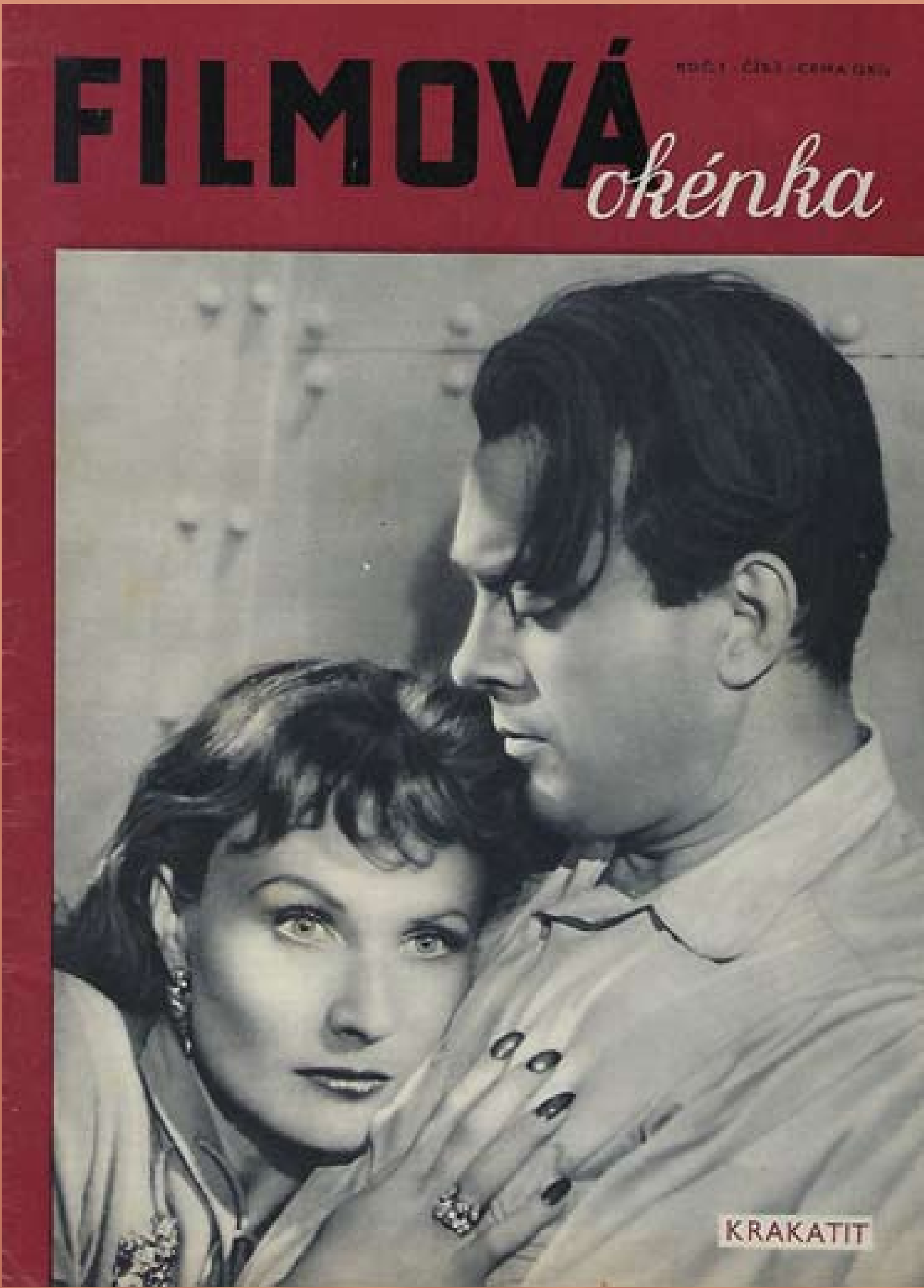
On honeymoon in the Slovak spa town of Sliač. Below: Věra’s new home



The artist’s dilemma, his oscillation between two women, was ultimately resolved by Věra herself. At the beginning of July 1923 she wrote to her admirer that she was to marry businessman Josef Skoupil. The couple moved into a mill in a village called Skalce nad Svitavou. She had harbored higher ambitions, but her plans for marriage with Count František Bořek-Dohalský fell through. She had had her eye on the future diplomat since childhood, when her father was the steward on the Dohalský estate in South Bohemia.



Olga, star of the Švanda and Vinohrady theatres and finally the National Theatre in Prague

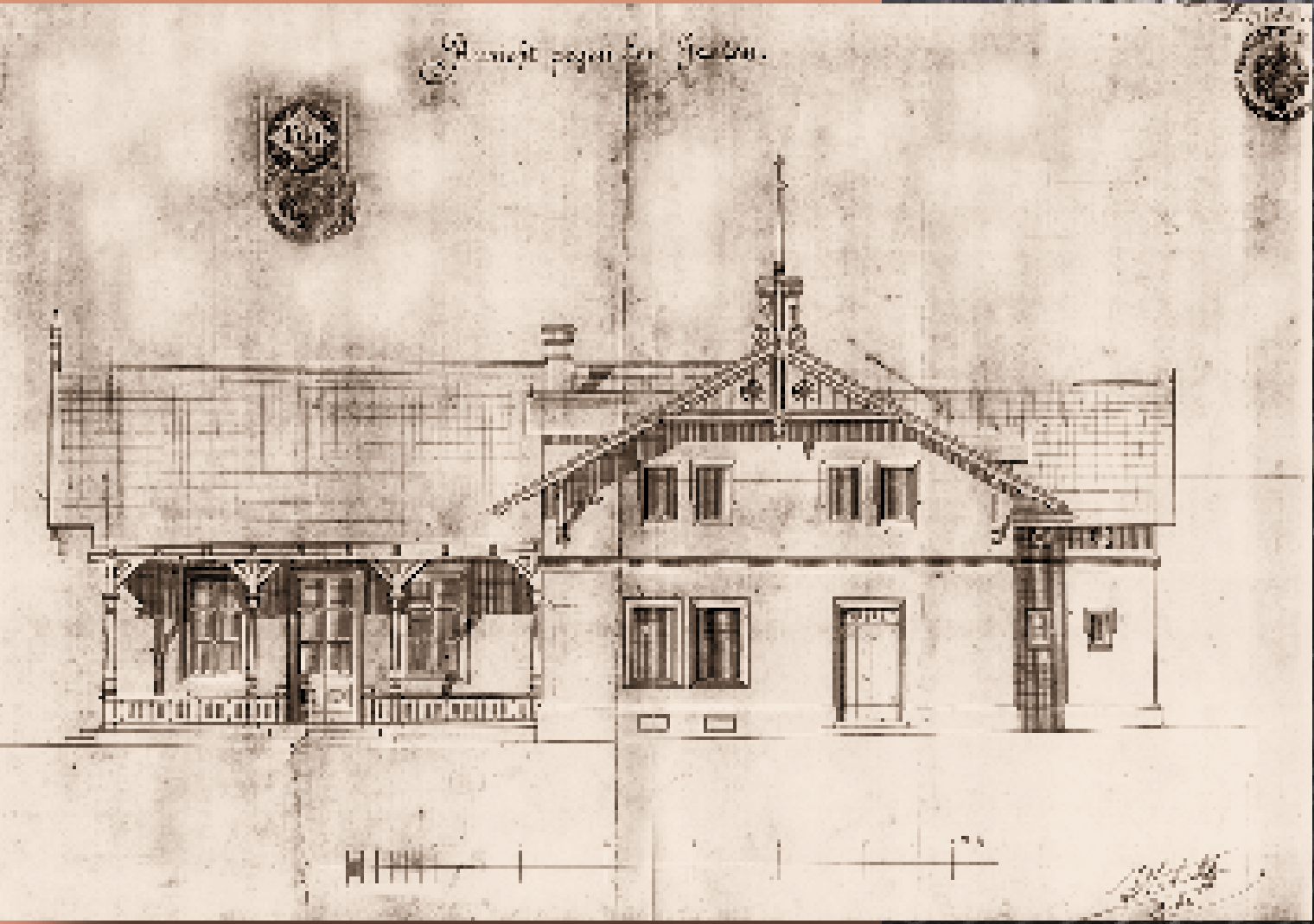


It was only after a fifteen-year relationship that Čapek anchored himself in the safe harbor of marriage with Olga Scheinpflugová, in August 1935. Věra outlived him by more than forty years, and her rival Olga by eleven. Toward the end of her life she gave permission for their love letters to be published in the still-inspiring book *Letters from the Drawer* (1980).

Finale in Rudolfov

On Wednesday, July 25, 1923, Karel Čapek boarded a train in Prague bound for Jindřichův Hradec in South Bohemia, where he planned to clear his head during a summer stay with his older brother Josef, sister-in-law Jarmila, and three-month-old niece Alenka – not to mention their fox terrier Honzík. Josef and his family had already been there for nearly a month, having fallen in love with the picturesque region the year before. It was here, at the start of September, that Karel completed *Krakatit*.

Rudolfov inn, founded 1862



The pleasant summer lodging consisted of smallish rooms on the first floor of the Rudolfov inn. Built 61 years earlier to a design by Josef Zitek, later the architect of Prague’s National Theatre, it was in a village about half an hour’s walk from the center of Jindřichův Hradec, near a road but still in a quiet location. In the adjoining rooms lived not only Josef but also the family of five of František Zelenka, the tenant of the Rudolfov inn. There is no indication that the families disturbed one another. From his window Karel looked out onto the woods; he appreciated the fresh air and the pleasant coolness. He would reportedly rise at seven and go to bed at ten. He went on excursions into the surrounding countryside, for instance taking great pleasure in a nearby pond fringed with reeds and a water meadow.



Josef in contemporary walking attire

In Rudolfov the brothers were visited by their sister Helena, and Karel was also joined by American journalist Frederic Kubr. Excitement was added by some army reservists. Karel Čapek, who had once avoided conscription on account of his spinal illness, wrote to Olga: “Life here is curious: there are military exercises and an entire company is quartered in our inn. I live as if in a military camp; I watch it and enjoy myself greatly, playing at soldiering. I’ll know it through and through, and I didn’t even have to serve in the army.”



Snapshots from Josef Čapek’s family vacations in Jindřichův Hradec

Even while at their summer retreat, the Čapek brothers’ newspaper columns – written in advance and kept “in reserve” – continued to appear on the front page of *Lidové noviny*. Karel, meanwhile, could go mushroom picking. His first outing yielded only a modest haul, but he claimed that this had at least meant he had walked further. To Olga Scheinpflugová, who remained in Prague and reproached him for lapses in correspondence, he insisted that she was the only person he wrote to apart from his agent, František Kohl of the Centrum agency. In reality, he wrote at length about his resumed work on *Krakatit* to the writer Jaroslav Durych, to Anna Lauermannová (in whose salon he had first met Věra Hružová), and to the Amazon herself – though he addressed her simply as “dear Věra.” At the beginning of August he boasted to her that he had written Chapter XXX, an erotic one. Yet only the day before he had written to Olga saying that his legs ached from walking so much that he envied little Alenka her buggy.



Helena Koželuhová, sister of the Čapek brothers



The Čapek brothers, probably 1922. Notice the modern wallpaper pattern.



He most likely finished the novel on September 3, 1923, and four days later he announced to Věra that he was back in Prague: “I have finished *Krakatit*, but unfortunately it is not the celebratory feeling I had imagined; on the contrary, I feel somehow empty, as if gutted (...) I get nothing more out of it, nothing of that fever and intoxication, joy and love.” Their correspondence then cooled through the rest of the 1920s.

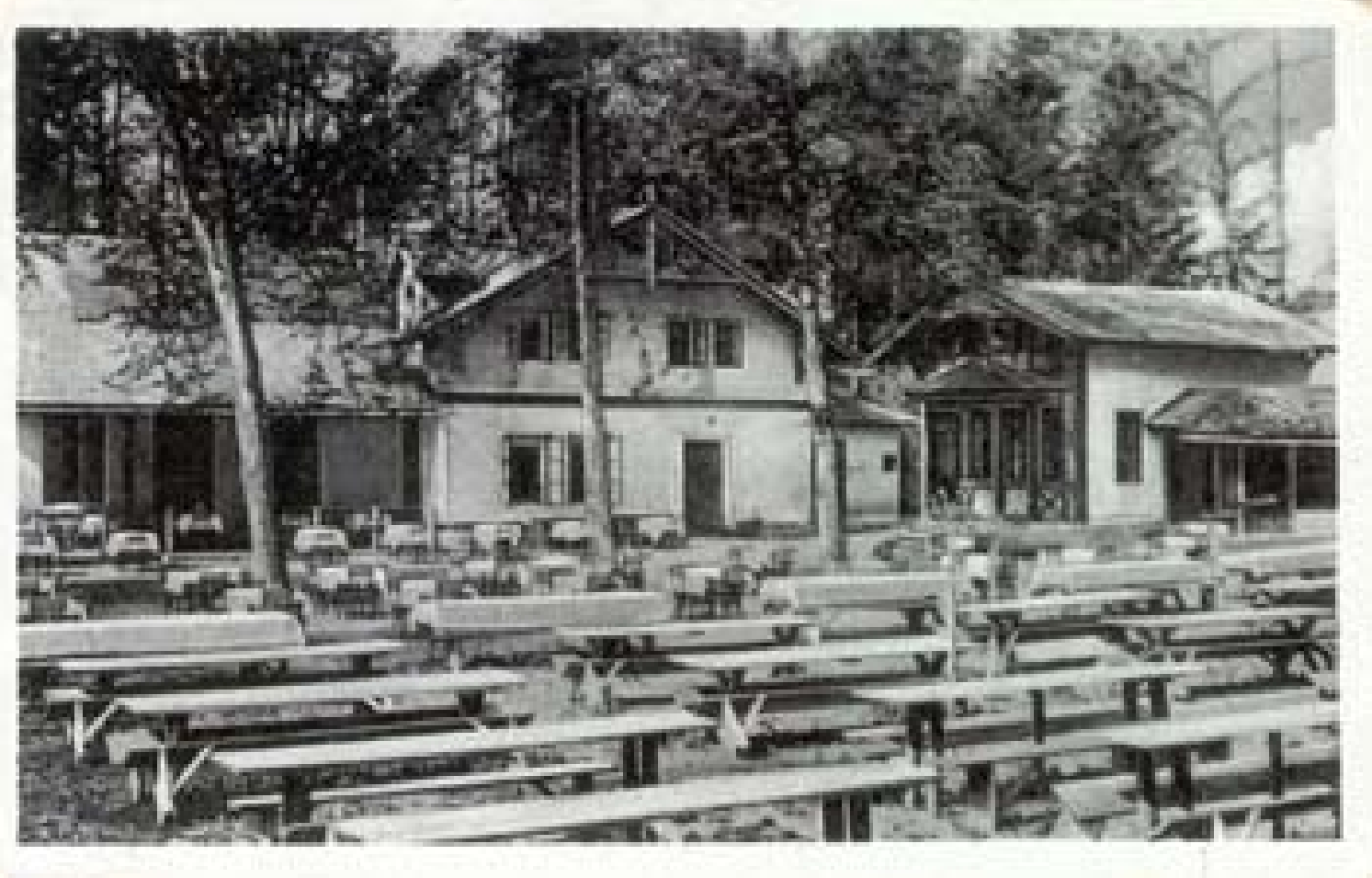


The Čapek brothers wrote their newspaper columns in advance before going on vacation.



Jindřichův Hradec

Promotional postcard of a popular destination for romantic trysts and family excursions (early 20th century)



Chemistry, women – and in the end, God

Čapek sent the English translation of *Krakatit* to his literary inspiration, H. G. Wells, with the following succinct characterization – arguably the most fitting description of *Krakatit* written in the past hundred years: “*It is a novel about explosives and dreaming, about human passions and about God; but God appears at the end of it all – which is his natural place.*”



Closing scene of Váňa's film Krakatit

As was customary then, especially for “in-house” authors of *Lidové noviny* newspaper, the new novel first appeared in serial form – in the case of *Krakatit*, from December 25, 1923, to April 15, 1924. The author then reworked the manuscript for a book edition. He complained to his friend Otakar Vočadlo, then working at the University of London: “*Krakatit*: my dear fellow, it doesn’t seem so when you read it, but it’s a fat book; I know how I cursed it during the proofs stage.”



Dust jacket of the first edition

Foreign readers did not have to wait long: by 1925 it had come out abroad, thanks chiefly to publishers in Great Britain, the United States, and Germany. From English and German many translators then worked it into what we might call more “exotic” languages. By that time Čapek had already completed a triumphant tour of Britain in the summer of 1924, where the author of *R.U.R.* and *The Insect Play* (written with his brother Josef) was warmly welcomed, including by his favorite colleagues H. G. Wells and G. K. Chesterton.

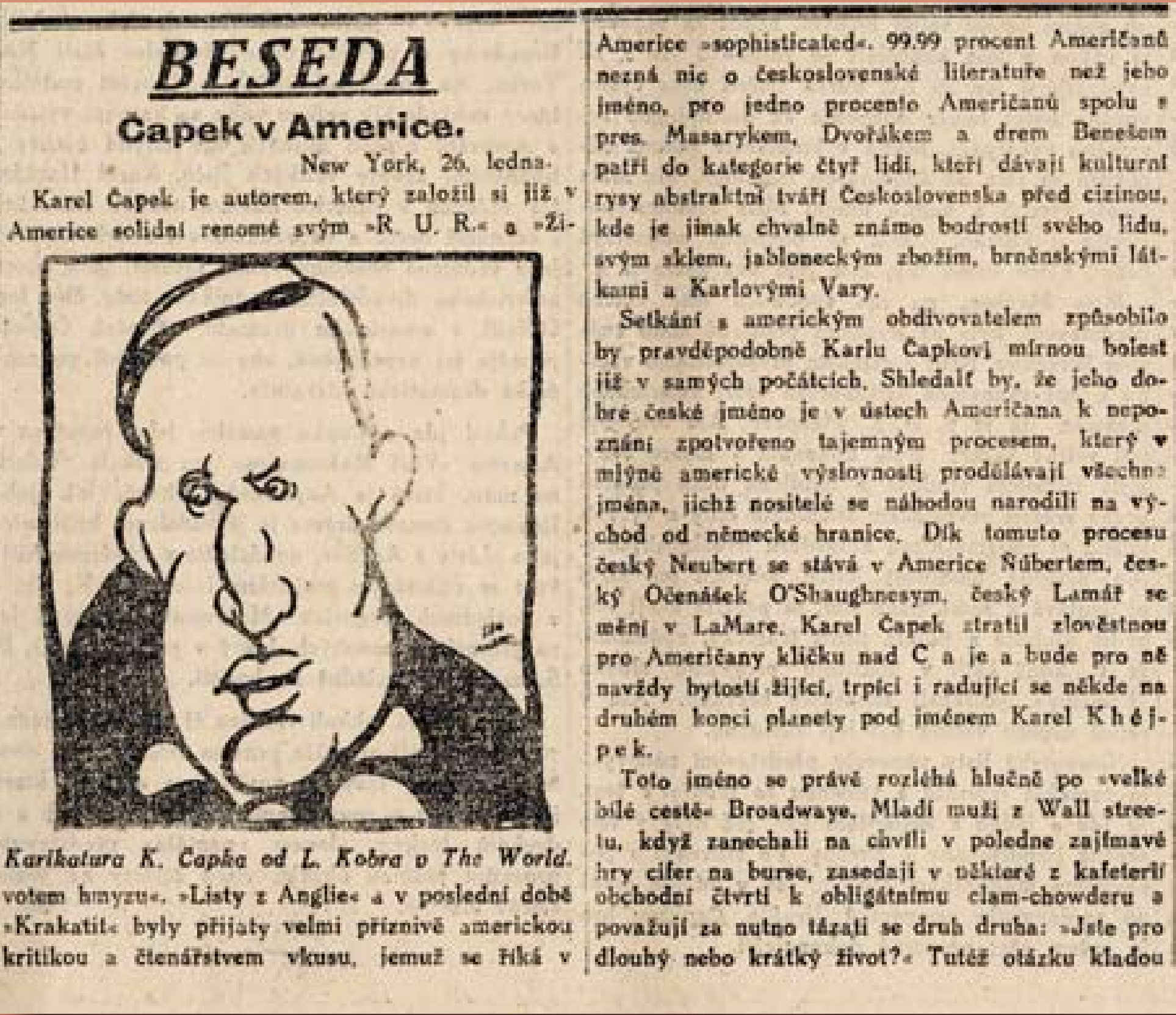


Dust jacket of the first English edition (1925)

If the former impressed Čapek with his imagination, vision, and charisma, one thing that drew him to Chesterton was their shared fondness for the “lowbrow” genre of detective fiction. Chesterton wrote fifty-three mystery stories featuring an unorthodox sleuth, Father Brown. This was no gimmick: in his day Chesterton was regarded as an eminent Christian thinker and a defender of Catholicism.



Promotional design by Josef Čapek



By then, the author of *Krakatit* already ranked among world-famous writers



H. G. Wells (right) visited Czechoslovakia in the summer of 1938

One of the foremost Czech literary critics, Professor Arne Novák, did not fail to notice the spiritual dimension of *Krakatit*: “The (...) novel closes with a scene that has both a folk simplicity and deep symbolism. A strange old countryman, the owner of a traveling sideshow, a childlike, anthropomorphized figure of God the Father from the Christian tradition, instructs and consoles the technical inventor, engineer Prokop, who in superhuman pride and self-satisfaction wanted to threaten all humankind with his destructive *krakatit*... This humbly offered counsel, which, like the shell of a nut, also holds a firm resolve, is not only the end of the novel, a work whose bold imagination leaps to the airy vault of utopia; in compressed and suggestive form, the entire life, thought, and poetic program of the author unfolds in this counsel; (...) a practical cult of everyday heroism, where will is governed by purpose, and is set against unbridled voluntarism that would tear down the old world so that a new one might rise from the ruins.”



Wayside shrine – Karel Čapek's grave at Vyšehrad Cemetery

Decades later, during the Covid pandemic, Czech professor Martin C. Putna returned to the question of spirituality in Čapek’s work in a slim volume titled *Quasi-Prayers*. He says he was inspired to write it by a visit to Čapek’s country house at Strž, where he also presented the book to readers: “Karel Čapek speaks in many voices. Some pray, some blaspheme, some deal with matters that seem wholly profane (...) Many books could be assembled from those voices. *Quasi-Prayers* are collected from the full spectrum of voices, genres, and stages of development so that those who do not pray might pray with them, and those who do not go to church might turn to them for comfort.”



Krakatit as filmed by Otakar Vávra (1948)

On Thursday, April 8, 1948, audiences at the Bio Helios cinema in Benešov, Central Bohemia, could hardly believe their eyes. Having bought tickets for Sidney Gilliat’s British film *Green for Danger*, they were instead confronted with the dramatic story of *Krakatit*.



Karel Höger as chemical engineer Prokop in the film Krakatit



Practical lab skills also came in handy when measuring out medications.



Director Otakar Vávra

By then already a classic novel, Karel Čapek’s *Krakatit* was brought to the screen by director Otakar Vávra together with his brother Jaroslav Raimund Vávra, co-author of the screenplay. The result was billed as “a Czech science-fiction film with a political parallel to today’s world situation.” This referred to the Cold War, in which the United States still held a monopoly on the atomic bomb – the modern-day Krakatit – though just a year later it would lose this strategic advantage because of efforts by Soviet spies and scientists.

The mood of the time was evident in the suspicious reaction of the Benešov audience. Six weeks after the Communist coup, only four of the 420 grudging movie-goers completed a questionnaire rating the new release. The official premiere the following day in Prague, at the Lucerna cinema on Wenceslas Square, also struck an odd note. Despite their binding commitments, not a single star of the movie turned up, even though its production had cost the nationalized film industry 12,818,000 crowns (then ca 256,000 US Dollars). Incidentally, director Vávra overshot the budget by three-quarters of a million.

No expense was spared. The fever-dream atmosphere of engineer Prokop was conjured by large-scale sets built to designs by architect Jan Zázvorka in the Barrandov studios in Prague. The spectacular explosion of Krakatit was created in the special-effects department using an aquarium six-foot long. Technicians pumped various colored liquids into it under pressure, and when filmed in slow motion together with a blinding flash, the result was so convincing that many viewers took it for an authentic nuclear mushroom cloud from a U.S. Army test site.



Governments and corporations alike show keen interest in krakatit.



Remote detonation is triggered by a powerful transmitter.



Prokop also astounded the princess by releasing the energy hidden in a powder compact.



Elder brother Jaroslav Raimund Vávra: co-author of the screenplay, traveler in Africa and Asia

In the movie theatre, however, only one actor bowed to the audience alongside the beaming director Vávra: Eduard Linkers, a journeyman actor who played the agent Carson. Linkers, a native of what is now Chernivtsi in Ukraine, later worked in Munich as a journalist for Radio Free Europe. The famous Czech actor Karel Höger, who excelled in the role of chemist engineer Prokop, was grappling with existential problems at that time. Höger had used the words “a meeting of demagogues” to describe the Communist demonstration of February 25, 1948, in Prague’s Old Town Square, where the crowd cheered Communist Prime Minister Klement Gottwald even as he was blackmailing the democratic President Beneš with the threat of civil war and Soviet intervention. The Communist-controlled National Front Action Committee established in the National Theatre shortly after the coup did not expel Höger from the ensemble during its lightning-quick vetting, but as a warning to others it banned him from filming and performing at other theatres for two years and cut his salary by a quarter.



VIDEO – TRAILER
Kratatit (1948)

Cosmopolitan Florence Marly

Karel Höger’s screen partner Florence Marly – the mesmerizing Princess Wille – was also absent from the premiere in the Lucerna cinema. A Czech by birth (her real name was Hana Smékalová), by then she was already the wife of French director Pierre Chenal and the star of *Rats*, the winning film at Cannes in 1946. She gave her fee for *Krakatit* to her sister and brother, while she herself went back across the Iron Curtain to safety.



Florence Marly and Humphrey Bogart (1949)



A year later, Marly was no longer seducing Karel Höger but Humphrey Bogart in Tokyo Joe. Movies in which she fell into the arms of other major-league Hollywood tough guys, such as Ray Milland, were playing on big screens at about the same time that Vávra’s *Krakatit* made occasional appearances in American and Canadian arthouse theatres. Export ambitions had helped secure the film’s production in the first place, but the high hopes for big takings abroad were never fulfilled.



Rats (1946), a drama about Nazis escaping by submarine



A femme fatale among gangsters



Who would have guessed that a quarter of a century later, at Cannes in 1973, a six-minute sci-fi short called *Space Boy* about an astronaut lost in space, with screenplay and even music by Florence Marly, would win in the art film category? Incidentally, the soundtrack recording involved not only the pioneers of electronic music, Bebe and Louis Barron, but also Frank Zappa!



AUDIO – SOUNDTRACK
Space Boy (1973)



VIDEO – FULL MOVIE
Tokyo File 212 (1951)
Marly e.g. at the 7:30 mark



With Ray Milland, six months after the premiere of *Krakatit*

Did you know...

... Florence Marly, real name Hana Smékalová (probably 1918–1978), came from the Olomouc region of what was then Czechoslovakia, and first dreamed of becoming an opera singer rather than an actress.

... At eighteen she moved to Paris, where she met her future husband, French film director Pierre Chenal, fifteen years her senior.

... She made her debut in *Alibi* (1937), starring alongside Erich von Stroheim, the celebrated actor and director. The movie was also shown in Czechoslovakia, though few suspected that the “typically French” femme fatale was in fact Czech.

... After the German occupation of France in 1940, Florence Marly reached Argentina by way of Bolivia and Paraguay. There she continued her movie career, this time in Spanish.

... In the 1950s, after several moderately successful Hollywood films in English, she was sidelined for years after being wrongly blacklisted as a Communist sympathizer. The pseudonym “Marly” backfired: the authorities confused her with the suspect Russian singer-songwriter Anna Marly. That would never have happened to Hana Smékalová...

... Princess Vilemína from the movie *Krakatit* briefly became a real countess, through one of Marly’s marriages. She wed Austrian aristocrat Degenhart von Wurmbrand-Stuppach.

Florence Marly’s final role, in the sci-fi horror *Queen of Blood* (1966)



Dark Sun in the Darkness of Normalization

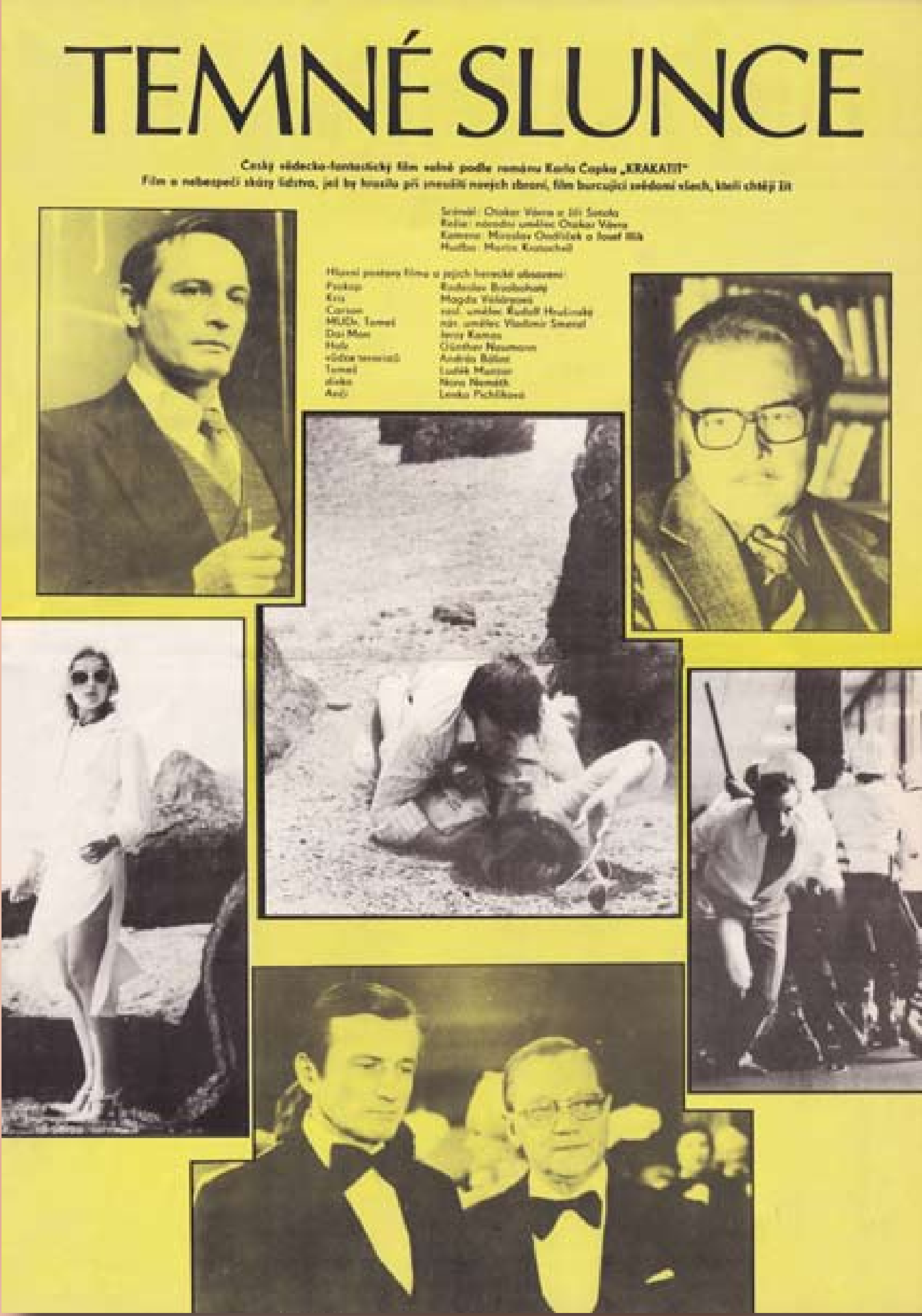
With his evocative 1948 movie adaptation, Otakar Vávra built himself a monument that he later toppled with his own remake, *Temné slunce / Dark Sun* (1980). In it, chemical engineer Prokop joins the hippies, while the sensual princess is replaced by the terrorist Kris. It was no coincidence that the new “heroine” was the neutron bomb – a technology unknown at the time of the original *Krakatit*.



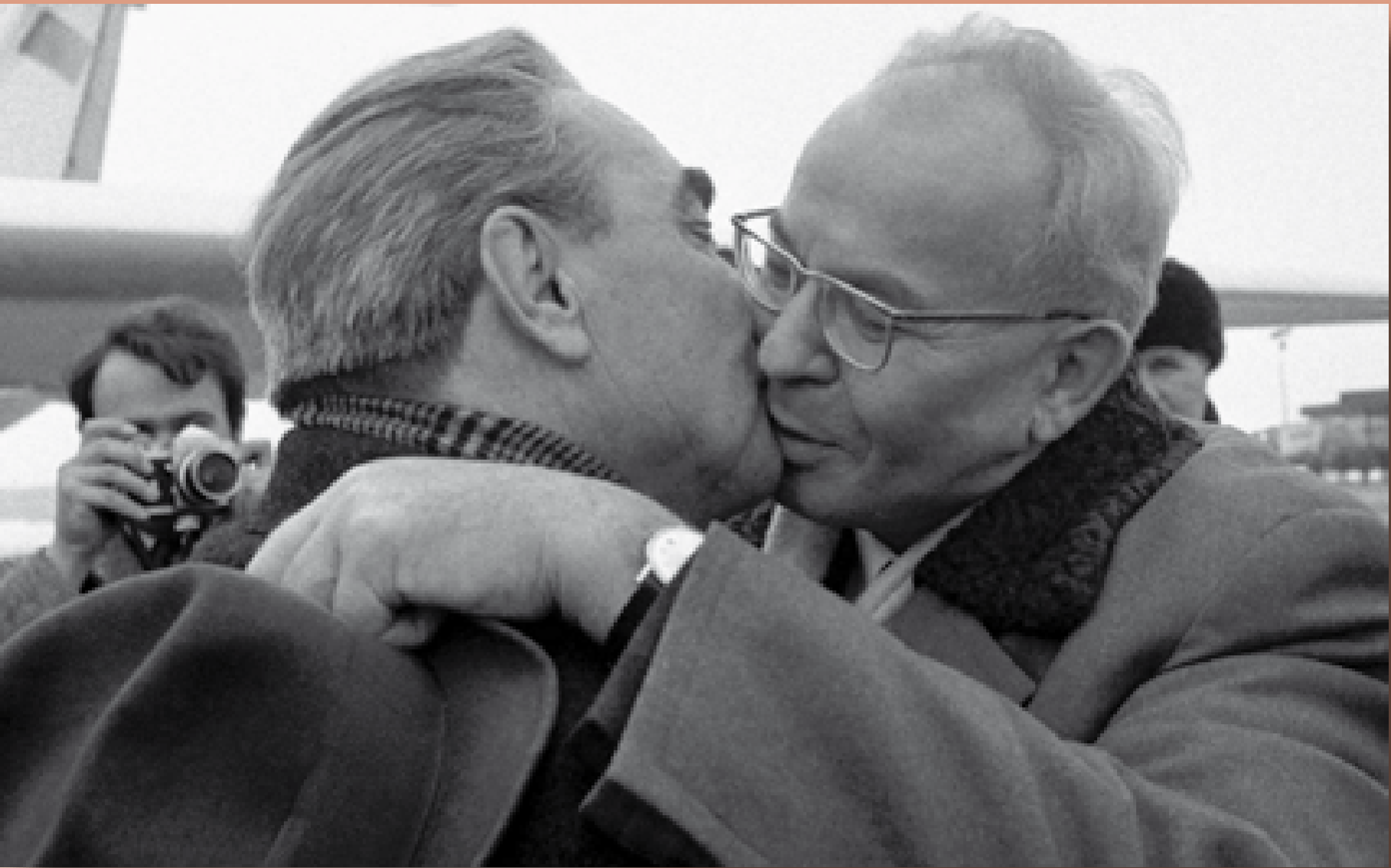
Florence Marly did not live to see Vávra’s own remake of good old Krakatit. Picking up the theme of Čapek’s work, Dark Sun (1980) was made two years after the death of the original Princess Wille. It has a jazz-rock score by Martin Kratochvíl, who had recently returned from studying in the United States, and he used the sounds of analog synthesizers in the then-fashionable space-rock style to evoke the atmosphere of the technological Cold War and the period’s psychosis over the neutron bomb – which in the film kills all living things while leaving buildings untouched.



A period movie poster touts the cast of leading Czech actors: Brzobohatý, Vášáryová, Hrušínský, Munzar...



By then nearly seventy, Otakar Vávra definitively broke away from Čapek’s original and reshaped Krakatit into an indictment of American imperialists that delighted Communist ideologues. The transposition into an Anglo-Saxon setting called “Southland” featured demonstrations by hippies, joined by the Czech engineer Prokop (Radoslav Brzobohatý). After Florence Marly, it was the turn of Magda Vášáryová to play the terrorist Kris, who hijacks a plane with a submachine gun in hand. The film met with neither audience nor critical success, despite its star-studded cast, in which Rudolf Hrušínský took over the role taken by Eduard Linkers in the original Krakatit. Even the cinematography could not save the movie – director of photography Miroslav Ondříček (of Miloš Forman’s Amadeus fame) suffered a burns injury during the shooting and had to be replaced by another legendary



The passion of old Communists: Soviet leader Leonid Ilyich Brezhnev and Czechoslovak President Gustáv Husák (1972)

Czech cameraman, Josef Illík. Appropriately to the theme, Dark Sun bombed completely as a piece of moviemaking art.

An ordinary atomic explosion no longer seemed apocalyptic enough to the screenwriter, who therefore resorted to the neutron bomb, a thermonuclear weapon much discussed at the time. In a neutron bomb, up to half of the energy is released as ionizing radiation, mostly neutrons. The thermal and blast effects are not the main point: its purpose is not to destroy objects, but solely to kill living organisms. With its radiation, the neutron bomb kills at distances several times greater than the radius of ruined buildings might suggest.

First created in the United States in 1963 and brought back into focus in the late 1970s after a pause in development, the neutron bomb was a thorn in the side of the Eastern Bloc and its hegemon the Soviet Union – not least because of the economic cost of production, and because ionizing radiation could not be stopped by the armor of military vehicles.



Dark Sun thus fit neatly into the propaganda of the time, which condemned the “imperialist” neutron bomb as barbaric and inhumane. Soviet leader Leonid Ilyich Brezhnev tried in November 1978 to downplay the economic difficulties linked to its production, claiming that the USSR had already tested the weapon long before but had never put it into mass production. Incidentally, at the very time of Vávra’s film premiere, France also tested a neutron bomb, and it is assumed that China later built one as well. After the end of the Cold War, the Americans removed neutron bombs from their arsenal, with the last ones reportedly dismantled in 2003.



VIDEO – TRAILER
Temné slunce (1980)