Franziska Fischer

The Gate to Hell

Companion to Matthias-Johannes Fischer's novel on the Kola Superdeep Borehole

Plot · Characters · History of Technology · Historical Ruptures

Truth · Manipulation · Interpretation · Glossary



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A companion to the plot and its deeper political, scientific and literary layers.

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Note

This booklet explicitly reveals **the explanation of the hell legend and the outcome of the interrogations.** The interpretative sections can also be read independently of the chapter sequence.

Preface

Spoiler warning. This companion discusses the novel's entire plot, including its resolution. It is intended for revisiting the story, thinking further and discussing the novel, not as a substitute for reading it. It is based on the version of the novel dated 28 September 2026.

A Soviet deep borehole, two scientists from East Germany, an assignment known to only one of the two spouses, a Soviet intelligence officer, a technical accident and, later, mysterious sound recordings: on this surface, *The Gate to Hell* can be read as a historical novel of science and espionage. Beneath that surface lies a second text. It tells of the ways in which states, institutions and individuals turn facts into political realities. What counts as a secret? Who decides which information may be passed on? When does a gap in the files become evidence, and a noise become a voice?

The novel takes these questions to a place beyond the reach of any ideology: the ancient Earth's crust of the Kola Peninsula. Soviet researchers can extract rock there, measure temperatures and build machines. But they cannot determine what the Earth conceals from them. The political powers competing over the project eventually discover that they, too, are impermanent. The German Democratic Republic disappears. The Soviet Union breaks apart. The once unquestioned collaboration between Russian and Ukrainian specialists becomes a painful memory in the light of later history. The borehole outlasts the forms of government that made its exploration possible.

The novel does not, however, propose a simple equation in which all secrecy amounts to a lie. The technology used to manufacture the drill string is real; the loss of several kilometres of pipe is real; the knowledge of rocks and temperature has lasting value. What proves unreliable is the attribution of meaning, the suspicions and the interpretations layered over those facts. The most spectacular alleged discovery – the voices from hell – is precisely not a scientific discovery. It is the outcome of a chain of retellings in which conjecture, belief, editing and sensationalism drift ever further apart.

The discussion that follows therefore deliberately distinguishes three levels: **the fictional plot**, **the historical and technical foundations**, and **the possible interpretations**. These readings are suggestions. They do not claim that the novel has only one message for the reader to decipher.

1. Two Acts of Drilling – the Architecture of the Novel

The Earth's Crust as a Setting

The Soviet SG-3 project on Kola is more than a backdrop. A borehole over twelve kilometres deep is an undertaking whose visible scale bears no relation to its actual depth. Above ground stand buildings, pumps, pipes, workshops and a canteen. Below them is nothing more than a narrow hole. The project thus produces a fundamental shift in perception: its most important part remains invisible. People have to rely on measurements, calculations, drill cores and what others tell them.

This is precisely what makes Kola an apt setting for a story about knowledge. Political knowledge, too, is never entirely out in the open. Information travels through institutions, files, conversations and personal loyalties. An engineer sees a coupling; a security officer sees a potential secret; a ministry sees an economic advantage; a journalist sees a story. None of them sees everything.



Figure 1 The drilling rig stands north of the Arctic Circle on the Kola Peninsula

Two Periods, Two Procedures

The novel begins not at the drilling site in 1983, but in an interrogation room in East Berlin on 27 October 1989. From here, flashbacks lead to Anke and Jost's arrival on the Kola Peninsula, the background to the assignment, the Geological Congress in Moscow and the later emergence of the hell legend. The questioning in 1989 interrupts the chronological progression and changes our understanding of earlier scenes.

Two ways of working are intercut. On Kola, the scientists try to derive a sound explanation from traces in the rock. In the interrogation, the major tries to use traces in the files to prove a story he has already assumed to be true. One procedure must test its hypotheses against the evidence. The other risks making the evidence fit a hypothesis. This contrast runs through the novel to the very end.

Three Kinds of Depth

Geological depth is measurable: metres, pressure, temperature, time and material. *Historical depth* arises from older loyalties, political ruptures and the coexistence of different memories. A third kind, *epistemic depth*, concerns the limits of understanding: what actually constitutes proof? What remains a matter of interpretation? And what happens when an interpretation is no longer tested because it already sounds credible?

The title *The Gate to Hell* activates a fourth level of meaning: the religious and mythological. Yet the shaft leads neither into a visible underworld nor towards a definitive metaphysical answer. Above all, it opens up the possibility that people will read their hopes and fears into an unknown signal.

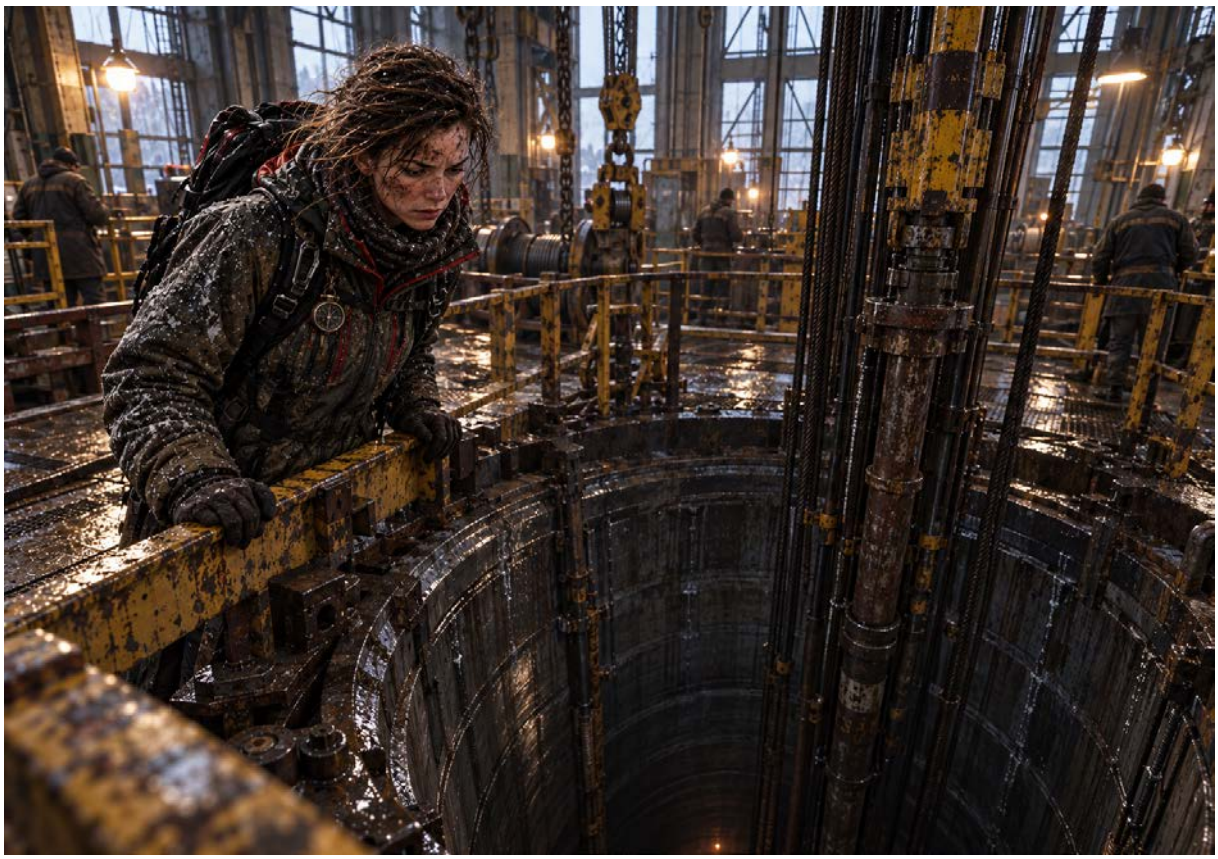


Figure 2 Anke Vogel at the open borehole

2. Detailed Plot Overview

The summary follows the sequence of the twenty-one chapters. It deliberately reveals developments that the novel initially withholds and shows how technical, personal and state narratives intertwine.

1. The Interrogation – East Berlin, October 1989

Anke Vogel is questioned by Major Klaus Renner. Even her correction of an apparently minor detail shows her resistance to the language of the files: she is a mineralogist, not simply a geologist, as the dossier claims. Renner is interested in her travels, her contacts in the West and her years on Kola. Again and again, he tries to reconstruct a connection to the Federal Intelligence Service, the BND, from individual details. The proceedings begin before readers know what Anke is even supposed to have done wrong. When the question of strange sound recordings arises, Anke says that they were not voices. In doing so, the novel establishes its central distinction: an actual sound and a subsequent claim about its meaning.



Figure 3 The Stasi interrogation in East Berlin

2. The Vodka – Arrival on Kola, August 1983

Anke and her husband Jost arrive at the Soviet drilling site. Jost, an engineer experienced in the problems of drilling at great depths, studies the machines, turbines and drill string with professional

enthusiasm. His Soviet colleagues welcome him; with Rudenko and the Ukrainian engineer Mykola Hryzenko in particular, he forms a pragmatic community built around work, jokes and technical problems. Anke looks more closely at people, responsibilities and the limits of what may be said. The place is open to scientific curiosity, yet tightly controlled. What Jost experiences as a professional exchange has a second meaning for Anke from the very beginning.

3. The Rock – Unexpected Findings

In the laboratory, Anke, Valentina and the geophysicist Anton Lebedev encounter samples that contradict simple assumptions about the subsurface. The discrepancy between the structure predicted by seismic data and the actual core findings is more than a technical detail: it shows that scientific models, however precise, remain interpretations. Anke is expected to submit regular reports on mineralogical investigations. At the same time, clues accumulate that are of interest outside the official report. In the evenings, Jost tells her about materials and drilling technology; he has no idea that these casual conversations may take on a further life in another chain of information.



Figure 4 At first, Valentina makes Anke Vogel's work on Kola difficult

4. The Assignment – East Berlin, April 1983

The backstory explains Anke's dual role. Her official posting concerns mineralogical analysis. A second, verbal assignment calls for information about material composition, pipe connections, service life, drill bits, thermal behaviour and measurement methods. Behind it stands State Security, represented by Major Falk. The GDR wants to acquire technical knowledge that its Soviet partners do not share in full, even with their allies. Jost is not to be told. Anke is caught in a trap of conflicting loyalties: she is expected to conduct scientific work while serving her state and using her husband's trust as a source of information.

5. Service Life – Routine Work and Material Wear

As the drilling equipment is pulled out and inspected, the stresses of great depth become tangible. Long strings of pipe, friction, vibration and different materials demand experience that cannot be gleaned from brochures. Jost learns in the workshop; Mykola shows him what works and what wears out. In the background, the Soviet forces' shooting down of the South Korean airliner KAL 007 in 1983 heightens political tension. While the superpowers distrust one another, people on Kola have to trust each other during hazardous operations. Anke writes an official report and, separately, a discreet communication.

6. Vienna – an Offer from the West

Before her posting to Kola, Anke travels to a specialist conference in Vienna. There she experiences everyday life in the West and meets Martin Heller from Munich. He has a surprisingly precise knowledge of the same technical questions that interest the GDR. The conversation is an initial approach: Heller offers not a fully established intelligence relationship but a possibility. Anke takes his business card. Years later, this small act will become more significant to State Security than any actual handover. Early on, the novel shows how an uncompleted decision can retrospectively be read as a settled course of action.



Figure 5 In Vienna, Anke Vogel meets the BND officer Heller

7. The Alloy – the Secret on the Workbench

Jost examines aluminium drill pipes and steel couplings. The familiar D16T alloy explains only part of the puzzle. What matters is the manufacture of the pipe ends, heat treatment, transition zones and the joining of different materials. When a workshop record card is removed, Jost understands the boundary between an accessible material designation and a manufacturing process kept secret. Anke observes

which findings might interest East Berlin. The material's political value differs from its engineering value; it is precisely this distinction that makes the scene a focal point of the novel.

8. Murmansk – a Message without Consequences

During a stay in Murmansk, Anke uses an encounter with a Finnish visitor to have a brief, coded signal passed on to Munich. In this way, she indicates her willingness to take up Heller's offer. Yet no actual collaboration follows, no documents are handed over and no second meeting is arranged. In the logic of espionage, this episode is incomplete, but it is crucial to the narrative: the later investigation can establish that contact was initiated, but not the event it suspects lay behind it. It is precisely what did not happen that becomes the centre of the files.



Figure 6 In Murmansk, Anke Vogel passes on a message for Heller

9. The Gap – East Berlin, October 1989

Renner confronts Anke with known facts: Vienna, Heller, technical reports, a suspected connection. He arranges them into a plausible suspicion. What he lacks is evidence of the alleged transfer of information to the West. For Anke, this gap is not a cover-up but the actual course of events. Renner cannot imagine that. The interrogation room thus becomes the counterpart of the geological laboratory: when the facts do not support a model, the model should be changed. Instead, Renner tries to fill in the facts until they fit his model. Jost is also detained.

10. Secrets – Kola, Summer 1984

The borehole has reached a spectacular depth and operations are suspended during preparations for the International Geological Congress in Moscow. The Soviet Union wants to display its scientific achievement publicly. At the same time, there is disagreement over which technical details may be

shown to foreign specialists. The project is simultaneously a research undertaking, a source of national prestige and a space controlled by the security apparatus. Morozov is supposed to control what leaves the site; now an order from above decrees that selected secrets are to be released for the international presentation.

11. The Release – Moscow, July 1984

Decisions on public relations and access to information are made at ministerial level. Soviet pride in the superdeep borehole competes with secrecy, international science and the foreign-policy tensions of the time. The categories "secret" and "released" change, even though the pipes, drill bits and rocks remain the same. The scene presents a particularly sober version of political truth: a document changes the status of information, not its factual content. Morozov must now guard what could not be shown yesterday and is to be explained to an international audience tomorrow.



Figure 7 Discussions of the Kola deep-drilling project in the Kremlin

12. A Statement – East Berlin, November 1989

Renner increases the pressure. He offers Anke a statement to sign: continued contact with the Federal Intelligence Service, the passing on of information about Kola, her husband's knowledge used without his consent. Anke writes only "no" instead. Her resistance is not an attempt to deny her earlier work for the GDR. She refuses to admit to an additional act she did not commit. The major responds by keeping Jost in detention. The search for truth becomes almost indistinguishable from the exercise of power.

13. The Congress – Moscow, August 1984

Kola becomes a scientific sensation at the XXVII International Geological Congress. Lectures, display panels and exhibits turn the depths into an international prestige project. Anke and Jost experience an unusually open professional exchange, while also hearing the omissions in the explanations. Peak loads, material damage and operating limits receive little attention. The American geologist Robert Hayes asks precisely the critical questions that concern Jost. Jost realises that conferences mainly showcase what has succeeded. Anke realises how powerfully the selection of what is shown can serve as a political instrument.



Figure 8 Anke Vogel at the XXVII International Geological Congress in Moscow

14. The Break – Kola, September 1984

When drilling resumes, the drill string breaks. Several kilometres of pipe remain at depth, and the progress achieved can now be exploited only to a limited extent. For Jost, this is a concrete problem of strength, connections and operational management. For the project leadership and the political authorities, it also means losing a symbol of prestige. The break shatters confidence in a system presented only shortly before as an international triumph. The event is the novel's hinge: a technical failure and the visible embodiment of a historical fault.



Figure 9 Anke and Jost Vogel examine fractures in the drill string

15. Deeper – Moscow, 1985

With Gorbachev as the new General Secretary, the language of politics changes. Decisions about the borehole's future are based not only on scientific findings but also on expenditure, prestige and institutional self-preservation. The project leadership wants to bypass the lost equipment and drill a new branch. The target of fifteen kilometres remains. This makes technical sense while also offering an image of political continuity: even after a break, the old target can be retained, provided a new route is drawn.

16. Onwards – East Berlin, 1986

The GDR receives the Soviet plan to continue work on SG-3. Anke and Jost are to return. The technical restart offers Falk and the other officials new opportunities to gather information. The assignment has shifted, however: what matters now is not only what the Soviets have mastered, but above all what they have changed since the drill-string failure. Asking what has changed is the political equivalent of taking a follow-up geological measurement. The state wants to learn from another country's experience, while also being drawn to its confidential nature.

17. The Gate to Hell – Kola, September 1986

On their return, Anke and Jost find a familiar installation, although everything beneath the buildings has changed. In the meantime, their Ukrainian colleague Mykola has been assigned to Krivoy Rog and to work connected with the Chernobyl disaster. A new character arrives: Jakob Rosenfeld, a geophysicist from Potsdam in the GDR. He studies signals from the depths, vibrations, their recording and their conversion into audible frequencies. His religious outlook raises the question of whether a measured sound might mean more than its physical origins can explain. For the first time, the novel's title becomes a suspicion voiced aloud.



Figure 10 Jakob Rosenfeld plays the "voices from the depths" to Anke Vogel

18. Voices – Kola, 1986 to 1988

Rosenfeld repeatedly examines signals, changes filters and playback speed, and hears something in them that reminds him of human voices. At the same time, he knows that the patterns may have a physical explanation. His cautious description gives rise to rumours: first screams, then women and children, finally extreme temperatures and thousands of the damned. Rosenfeld writes to the Californian religious publication *Jewels of Jericho*, warning in his own account against presenting the recordings as actual voices from hell. Morozov treats the correspondence as a security matter. For the listeners and in the rumours, the original observer's caution has long since been lost.

19. Quietly – Moscow, May 1988

Morozov reports on the project, Rosenfeld and his foreign contacts. In the files, religious statements, measurement data, rumours and letters are arranged in a sequence that can make them look like an intelligence connection. Meanwhile, the political leadership is also interested in the borehole's future usefulness and its international reception. The Soviet system is beginning to show visible signs of exhaustion; secrecy is losing its former unquestioned status. This is precisely why controlling an ever-growing story seems attractive. The wish to let nothing more escape reveals not strength, but the threatened loss of control over interpretation.

20. The Depths – Kola, June 1988

Rosenfeld disappears from the drilling site; what happens to him remains unclear. Jost, by contrast, continues undeterred to work on the borehole's mechanical and thermal behaviour. The rock does not undergo a dramatic, sudden change from hard to soft. Under pressure and high temperature, it changes shape over time. Here lies a quiet physical counterpart to political change, which does not always begin as a single event either. Anke and Jost are unexpectedly withdrawn. Jost is convinced that he has moved closer to a technical solution. The bus pulls away from the rig, which continues operating. The people leave; for the moment, the project remains.

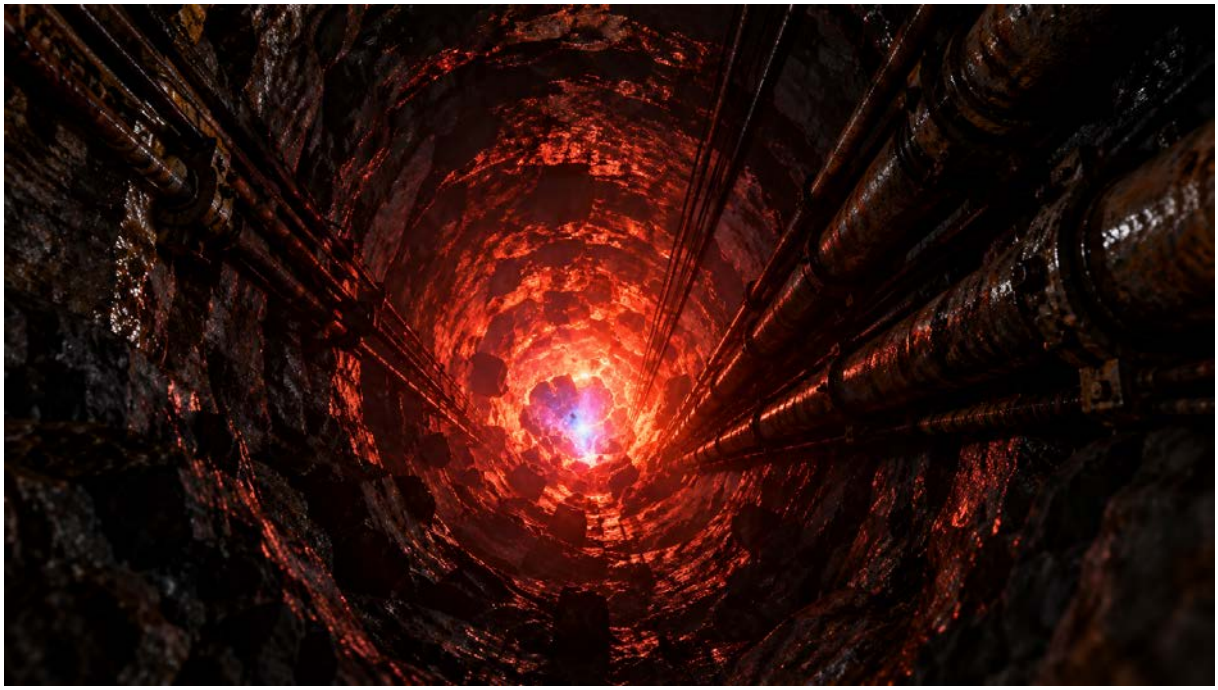


Figure 11 At a depth of over 12 km, the rock changes – but it does not glow

21. The Situation – East Berlin, 6 November 1989

Shortly before the fall of the Wall, Lieutenant Colonel Seifert takes over the questioning. He confronts Anke with a cassette circulating from abroad, full of alleged screams from hell. Anke recognises immediately that this is not the original, ambiguous measurement signal. Uncertainty has become an effective fabrication. At the same time, she gives a full account of the Heller contact. Her signal from Murmansk received no reply. No information was passed to the West. Seifert realises that precisely this relationship that never materialised might prove useful to the intelligence service in the future. The political situation is changing faster than the files can keep up. Jost is allowed to go home. The ending resolves the hell legend not through a grand revelation but through a simple contrast between story and reality: **The depths were the depths.**



Figure 12 The borehole is now sealed with a metal lid; the drilling rig is a ruin

3. The Characters and Their Roles in the Novel

The characters are not arranged according to a simple scheme of good and evil. They embody different ways of acquiring information, preserving it, making use of it or failing to grasp it. What often matters is not what they know, but what they do with that knowledge.

Anke Vogel – the Observer between the Fronts

Anke holds a university diploma in mineralogy. Her professional precision matters because, at one point, she herself insists on correcting the file's description of her as a "geologist". She examines actual samples, is not too readily reassured by explanations, and simultaneously observes the relationships between people. She has an official research assignment and a second, secret state assignment. When she is approached in the West, a third possible allegiance arises: one she considers but never turns into actual espionage for the West.

Anke is therefore neither simply a heroine of resistance nor merely an informer. She passes Soviet technical findings to the GDR without telling her husband. She bears responsibility for this, even if the interrogation later tries to turn her into the subject of a different story. Her strength lies in not confusing these two truths: she does not deny what happened, and she does not confess to what never happened. In the final chapter, she is equally firm in maintaining the distinction between the original tape and the manipulated horror cassette.



Figure 13 Anke and Jost Vogel in the canteen on Kola

Jost Vogel – the Engineer and the Innocence of the Technical Problem

Jost is an engineer with experience in East German deep-drilling technology. He understands connections, manufacturing, fatigue, heat and load limits. He becomes excited about a technical solution where others initially see a political danger. His bond with Rudenko and Mykola arises from working together, not from declarations of socialist brotherhood. This perspective is both a strength and a limitation. Jost hears what materials and machines reveal. He underestimates the ways political institutions can use his words against other people.

Nor is Jost a naive fool. At the congress, he recognises that presentations leave out damage and failed attempts. At first, however, he takes this to be a familiar principle of scientific and technical self-presentation. Where Anke suspects intent and surveillance, Jost often sees working routines. His tragedy lies in the project that cannot be brought to completion: even on his forced departure, he believes he has identified a way to reach greater depths.

Jakob Rosenfeld – the Scientist Who Cannot Escape His Measurement

Rosenfeld comes from the geophysical research milieu in Potsdam. He works with vibrations, paper strips, filters and magnetic tapes. He also inhabits a religious world of thought; his faith is not presented as evidence of a lack of intelligence. Rosenfeld knows the limits of his own interpretation with remarkable precision. He knows that filtering noises and altering playback speed can produce patterns that sound human. Yet he is shaken by the impression of hearing something in the depths that points beyond his measurement equations.

His conflict therefore goes deeper than the familiar opposition of "science versus religion". He can offer a physical explanation without being able to shake off the existential impression. In his first letter, he explicitly distinguishes between what the measurement permits him to say and what he does not wish to claim. The later legend cannot sustain this careful distinction. By the time the story circulates, its supposed originator has long since lost control of it.

Nikolai Andreyevich Rudenko – the Authority of the Workshop

Rudenko represents practical technical leadership. He knows the procedures, risks and people, and has to keep the project running under real conditions. In him, scientific pride and concern for people cannot always be separated. He and Jost share a respect that exists before any political declaration. Rudenko is not an abstract embodiment of the Soviet Union, but a man who has to pull a string of pipe out of the hole while politicians talk about record figures.

Mykola Hryzenko – a Historical Fault Embodied in One Person

The Ukrainian engineer Mykola is one of the novel's most vivid connecting figures. In the workshop scenes, often only a joke about origins or the weather distinguishes him from Rudenko. Both work on the same Soviet undertaking. Yet Mykola's postings – Kola, the new deep-drilling project near Krivoy Rog, and finally duties connected with the Chernobyl disaster – already take him through different regions of a Soviet Union that will later dissolve.

Seen from 2026, these scenes acquire an additional historical weight. The collaboration between Russian and Ukrainian engineers, apparently unproblematic at the time, can no longer be read without thinking of the national border that subsequently emerged and Russia's war against Ukraine. The novel does not thereby claim that any particular later fate befell these fictional characters. It shows how history retrospectively alters something once taken for granted.

Anton Lebedev and Valentina – the Objectivity of the Laboratory

Anton and Valentina anchor Anke's research in collaborative work. Their investigations lead not to grand ideological speeches but to samples, comparative data, sources of error and the contradiction between model and finding. This relative lack of spectacle is precisely what matters. Science appears here not as a series of heroic individual discoveries but as a collective, verifiable practice. At the same time, their relationship with Anke reminds us that "Soviet" is not a uniform character trait, nor is an installation a monolithic political bloc.

Major Falk – the Architect of the Unspoken Assignment

Falk ensures that Anke obtains technical findings outside the framework of official cooperation. His language is courteous but unmistakable. The secret assignment is to leave no written record; this is precisely what allows the institution to distance itself if necessary. To him, Anke's marriage becomes a transmission line. He shows how a state not only demands loyalty but, at a particular moment, plays one loyalty against another.



Figure 14 Anke Vogel talking to Major Morozov, a KGB officer

Major Morozov – the Guard against Ambiguity

The Soviet security officer Morozov controls technical documents, contacts and correspondence. In doing so, he himself comes under shifting political directives: at one moment he must prevent information from leaving the site, at another he must oversee its official release. In Rosenfeld's religious letters, he recognises possible patterns of intelligence influence. The fact that his interpretation cannot be proved does not make it irrelevant to his work. This is precisely his political function: uncertainty must be dealt with as a threat.

Martin Heller – the Western Offer

Heller appears professionally well informed and personally self-controlled. At first, he promises Anke little beyond an alternative to her existing state assignment. He is the concrete embodiment of Western interest in Soviet knowledge. What matters to the plot is less what he says than what he subsequently fails to do: the initial approach produces no verifiable transfer of information. Heller's absence becomes a lasting problem of proof for an apparatus intent on declaring a possibility to be an accomplished deed.

Renner and Seifert – Two Stages of the Same State Power

Major Renner believes the purpose of an interrogation is to reconstruct a concealed connection. He is looking not only for data but for confirmation of a pattern. Lieutenant Colonel Seifert is more pragmatic. In November 1989, he sees that the institution legitimising his position may change or disappear. Even an unused contact in the West can therefore acquire value. Renner wants to establish the past. Seifert wants to keep it usable for an uncertain future.

The two are not interchangeable villains. Through them, the novel shows how political systems treat truths in terms of their usefulness: what was incriminating evidence yesterday may become a resource tomorrow.

4. The Real Deep-Drilling Project: Technology as a Way of Knowing

Kola SG-3 and the Question of the Earth's Crust

The Soviet SG-3 superdeep drilling project began on the Kola Peninsula on 24 May 1970. The eventual maximum depth of 12,262 metres set a record for vertical drilling depth. The project's aim was not to gain access to an underground hell, but to investigate the continental crust scientifically: its composition, temperature, stress, fault zones and water, and to test geophysical models. The borehole was also a large-scale technological experiment. With every additional kilometre, materials, drive systems, measuring technology and operating methods had to be mastered anew.

One particularly important finding concerned the reflection of seismic waves. Measurements at the Earth's surface had led researchers to infer certain interfaces and changes in material. The actual drill cores and geophysical findings required more nuanced explanations: rocks, shear zones and fluid-filled fractures can generate seismic patterns different from those of a simple sequence of two rock types. A signal is therefore a physical fact; its interpretation remains a hypothesis requiring further testing. This very relationship between measurement and interpretation will recur in a different form in the later hell legend.



Figure 15 The former crew at the drilling rig

Why the Drill String Could Become a State Secret

At a depth of twelve kilometres, the drill bit is not the only crucial component. The entire long string has to withstand its own weight, tension, compression, torsion, temperature, friction and repeated loading. Lightweight aluminium alloys such as D16T reduce weight, but do not automatically solve the problems at the connections. The transitions to steel couplings are especially demanding: differences in thermal expansion, machining, preload and fatigue affect load-bearing capacity. The manufacturing processes – not merely the alloy's name – may be what provides the real advantage.

This contains one of the novel's precise insights. One can know *what* a pipe is made of without knowing *how* another engineer turns it into a drill string that will function reliably over time. Chemical analysis is no substitute for manufacturing knowledge, process control or experience gained from thousands of load cycles. An intelligence service can acquire a material designation. Mastery of the technology, however, resides in a chain of operations, test results and people. This is why Jost is more interested in the piece of pipe on the workbench than in a grand declaration of progress.

The Turbodrill and Distributed Knowledge

Drilling fluid and turbine drive are highly important in deep hard-rock drilling. The drive is located near the drill bit; fluid pumped under pressure can transmit energy, cool, lubricate and carry cuttings to the surface. Operating data are generated in many places: at the control station, in the laboratory, during maintenance and in the analysis of instrument readings. No individual possesses all this knowledge.

This technical circumstance acquires political significance. Because the knowledge is distributed, a state can obtain only fragments by selecting individual informants. Even an apparently successful information leak does not yet enable the complete reproduction of another country's process. Conversely, a specialist conference can disclose a surprising amount without transferring the full range of practical expertise.

The Break of 1984

In September 1984, after drilling resumed, the drill string broke at a depth of 12,066 metres. About five kilometres of pipe remained in the hole. Work continued by means of a new branch borehole. This event is central to the novel because it abruptly tears prestige, planning and technical reality apart.

The break is emphatically not a punishment inflicted by a supernatural power. The plausible technical explanation is far more interesting: even a highly advanced design can fail at a connection, under a local stress condition or through the cumulative effects of cyclic loading. A project built up over decades must then change direction without simply being able to undo its earlier results.

Temperature and the Limits of the Undertaking

Depth is more than a measurement of length. As it increases, so do the demands on materials, tools and measuring technology. The temperatures actually encountered at great depths exceeded many early expectations. Under sustained rock pressure, even crystalline rock can change in ways that make a borehole unstable over time. This is why Jost explains in the novel how an apparently open borehole can later narrow. This slow change is essential to the narrative: not every rupture arrives with a bang. Some forms of resistance arise through processes that are barely visible at first.

Despite all the political entanglements, the physical research remains a success. SG-3 produced real scientific data that did not become invalid when the Soviet Union ended. This is a prerequisite for interpretation: the novel does not confuse the unreliability of political readings with the impossibility of knowledge in the natural sciences.



Figure 16 The seismological measurement office at the borehole (this would have been Jakob Rosenfeld's actual workplace)

5. Historical Fault Zones: From 1974 to 2026

1974: Mirow and the GDR's Scientific Ambition

The GDR had accumulated experience of drilling to great depths of its own. The Mirow 1/74 borehole reached more than eight kilometres and was among the most ambitious explorations of its time. This background matters to the novel because Jost does not arrive as an uninformed visitor. East German technology had achievements to its credit; yet it encountered problems of materials, temperature and cost whose solutions were thought to lie in the Soviet Union. The political assignment thus also arises from a genuine technical need.

1983: Cooperation in the Shadow of the Cold War

In August 1983, Anke and Jost join a community of specialists from different Soviet republics. Officially, they are united by socialist cooperation. In practice, jurisdictions, secret manufacturing techniques and the interests of the security apparatus restrict the exchange. In September, the shooting down of KAL 007 intensifies international tension. These events show how unstable the environment is in which the scientists must organise their shared daily lives. Politics appears not only at summit meetings but on the canteen radio and in the rules governing official mail.

1984: Two Contradictory Public Arenas

In the summer of 1984, the Soviet Union and several allied states boycotted the Olympic Games in Los Angeles. In that same August, the International Geological Congress took place in Moscow, where Soviet researchers discussed their work with specialists from many countries. The novel does not present a harmonious science existing outside politics. Rather, it shows that political confrontation and professional exchange can take place simultaneously. An American is allowed to ask critical questions while diplomats and security services speak of the enemy camp.

The presentation of Kola becomes an object lesson in selection. The researchers announce genuine results and display real objects. Something absent from an exhibition is not therefore necessarily false. But visitors are offered a curated reality. A few weeks later, the drill-string failure puts an end to the image of an unbroken technical triumph.

1985 and 1986: Reform, Disaster, Continuation

From 1985 onwards, Gorbachev changes the conditions and the language of Soviet politics. The end of the old order is not yet a foregone conclusion. For the time being, planning at Kola focuses on continuation. In 1986, the Chernobyl reactor accident exposes the limits of another large-scale Soviet technological project. Through its connection to Mykola, the disaster becomes not merely a historical footnote in the novel but a possible turning point in a life.

The technical idea of a new branch borehole remains dependent on political change. Money, personnel, approval, prestige and the hope of scientific results must continue to be weighed against one another. It is in this situation that Anke and Jost return to Kola. Their route seems to lead to the same rig; in fact, the installation belongs to a different historical moment.

1989: The Political Model of the Subsurface Collapses

The interrogations take place in October and early November 1989. This is not an arbitrary point before the end of the GDR. Demonstrations, changes in leadership and public debate over travel regulations are already transforming the apparatus of power. On 6 November, the date of the novel's final chapter, none of the characters yet knows that the Berlin Wall will open three days later. The reader does. This dramatic irony casts doubt on every assertion the intelligence service makes about permanence, security and control.

Renner pursues a case dating from the early 1980s as though the categories of that period still held firm. Seifert is already asking how his service's knowledge and contacts might remain useful under different political conditions. What looks like a routine change of interrogator marks the transition from one historical order to the next.

After 1990: A German-Soviet Past without Its States

On 3 October 1990, the GDR ceased to exist as a separate state. At the end of 1991, the Soviet Union also dissolved. The novel does not narrate these events, since its action ends beforehand. Precisely for that reason, they retrospectively alter the reading. An assignment "for the GDR" cannot continue in the same political form only a few years later. A Soviet research project soon ceases to be Soviet. State secrets, career paths and bureaucratic language have shorter lives than the technical objects they sought to control.

2022 to 2026: The Russian-Ukrainian Fault

Russia's war of aggression against Ukraine, waged on a full scale since 2022, makes the shared Kola scenes especially moving. In the novel, Mykola the Ukrainian and Rudenko the Russian argue about temperatures and materials, not national enmity. They work within a state that incorporates their origins into a common institutional order. Later, Russia and independent Ukraine are at war with one another. This is not retrospective proof that their earlier friendship was false; rather, it reveals the fragility of political assumptions once taken for granted.

Historical hindsight must not fill these fictional biographies with invented later destinies. We do not know what would have become of them. It is precisely the open question that is productive: which relationships survive the breakup of a state? Which are strained under new structures of power? And how many people discover only afterwards that the country for which they worked together no longer exists politically?

Here the geological metaphor gains its edge. Beneath an apparently unbroken surface run tensions that scarcely reveal themselves in everyday experience. At some point, a fault becomes visible. It does not make all earlier experiences untrue. But it shifts their context.

6. Political Geology – Drilling Deep into German History

The Interests Are Younger than the Rock

The novel's most important analogy reaches beyond the familiar metaphors of "surface" and "depth". Rock forms, changes, is folded and fractured, and is overlain by new strata. Its present form is not the imprint of a single event. Different periods can be present simultaneously in one sample. In the same way, the political present consists of old decisions, institutions, suppressed conflicts, inherited expectations and new relations of power.

In 1983, Anke and Jost's world appears clearly ordered. The GDR belongs to the Soviet alliance. The West is the political opponent. Scientific cooperation between socialist states is taken for granted. Even within this order, the novel reveals fault lines: the GDR wants information its Soviet partner keeps secret; the Soviet leadership wants international recognition but does not wish to disclose every technical finding; at a congress, Western specialists can obtain knowledge that an ally seeks to acquire only through a secret assignment.

The political paradox is plain: **a state gathers intelligence against its own ally and later treats its own informer as a traitor because the West has also shown interest in the same knowledge.** At first, the scientific facts do not change. What changes is the political meaning assigned to their transmission. The same knowledge of materials can be called cooperation, disclosure of state secrets, scientific publication or publicly celebrated progress.

Faults Rather than a Straight Line of Progress

Geological strata do not always lie undisturbed on top of one another. Tectonic forces displace them, tilt them, thrust them over older deposits or break them into fragments. The novel can be read in a similar way. The story from 1983 to 1989 does not follow a straight line along which the GDR learns more and more about Kola. Rather, every political shift changes the meaning of the earlier information.

The Moscow congress is a first fault. The same Soviet Union that kept manufacturing details secret can publish some of its knowledge to gain international prestige. The drill-string failure is a second: a technical setback tears open the narrative of planned progress. The late 1980s produce a third: the institutions deciding what constitutes openness or betrayal enter an existential crisis of their own. The collapse of the Soviet Union and the Russian-Ukrainian antagonism that subsequently emerges are the retrospective faults the novel no longer narrates, but which accompany every reading today.

This method distinguishes the text from a conventional historical novel seeking to reconstruct a past world through carefully crafted settings. *The Gate to Hell* allows the past to be perceived both **within its own present** and **in the light of its later end**. For Jost, the next repair to the drill string is urgent. For today's readers, the workshop shared by Russians, Ukrainians and Germans has a historical resonance of which the characters can know nothing.

The GDR as a Stratum, Not the End of History

Anke's assignment derives its meaning from the GDR. The institutions that give it assume that their interests will endure. Yet it is precisely this supposed permanence that disappears. In 1989, State Security is still conducting interrogations about events in 1983 while its own future is uncertain. By moving between Kola and East Berlin, the novel makes this temporal dislocation visible. The interrogation seeks to close the past; the present is already removing the investigators' underlying premises.

The ending with Seifert is therefore more than a satirical twist about an opportunistic official. Seifert recognises that even the dissolution of a state order does not necessarily destroy all files, contacts and expertise. People can reassert the value of their knowledge under changed political conditions. The supposed case of betrayal becomes a Western contact that might prove useful in the future. Anke's behaviour does not have to change for this reversal to occur. It is enough to tell the story differently.

The "deep drilling into German history" thus leads not only to the organs of the East German state, but also to the question of which of its ways of thinking survive a change of system. Archives outlast those who commissioned them. Habits of secrecy can acquire new purposes. A suspicion constructed in the past is not undone simply because the authority that formulated it disappears.

The Soviet Union as a Surprisingly Transient Surface

Unlike a geological formation, the Soviet Union is a historically short-lived political order. In everyday work on Kola, it seems self-evident. Soviet engineers of many different backgrounds belong to a single project. Moscow decides on resources and the release of information; regional origins play a casual role in workshop conversations. Today's reader knows that the Soviet Union will cease to exist only a few years after the events described. Its dissolution lends the project a melancholy layer that could not have been contained in the files of the 1980s.

Mykola Hryzenko acquires particular weight in this respect. The novel does not need to invent his later life to evoke a historical tension. The question of how he and Rudenko would speak to one another today cannot be answered from their shared work. Their human bond was real; their political framework was changeable. It is harder to live with both truths at once than with the simple claim that their friendship was merely propaganda.

The Rock Resists Every Ultimate Claim to Ownership

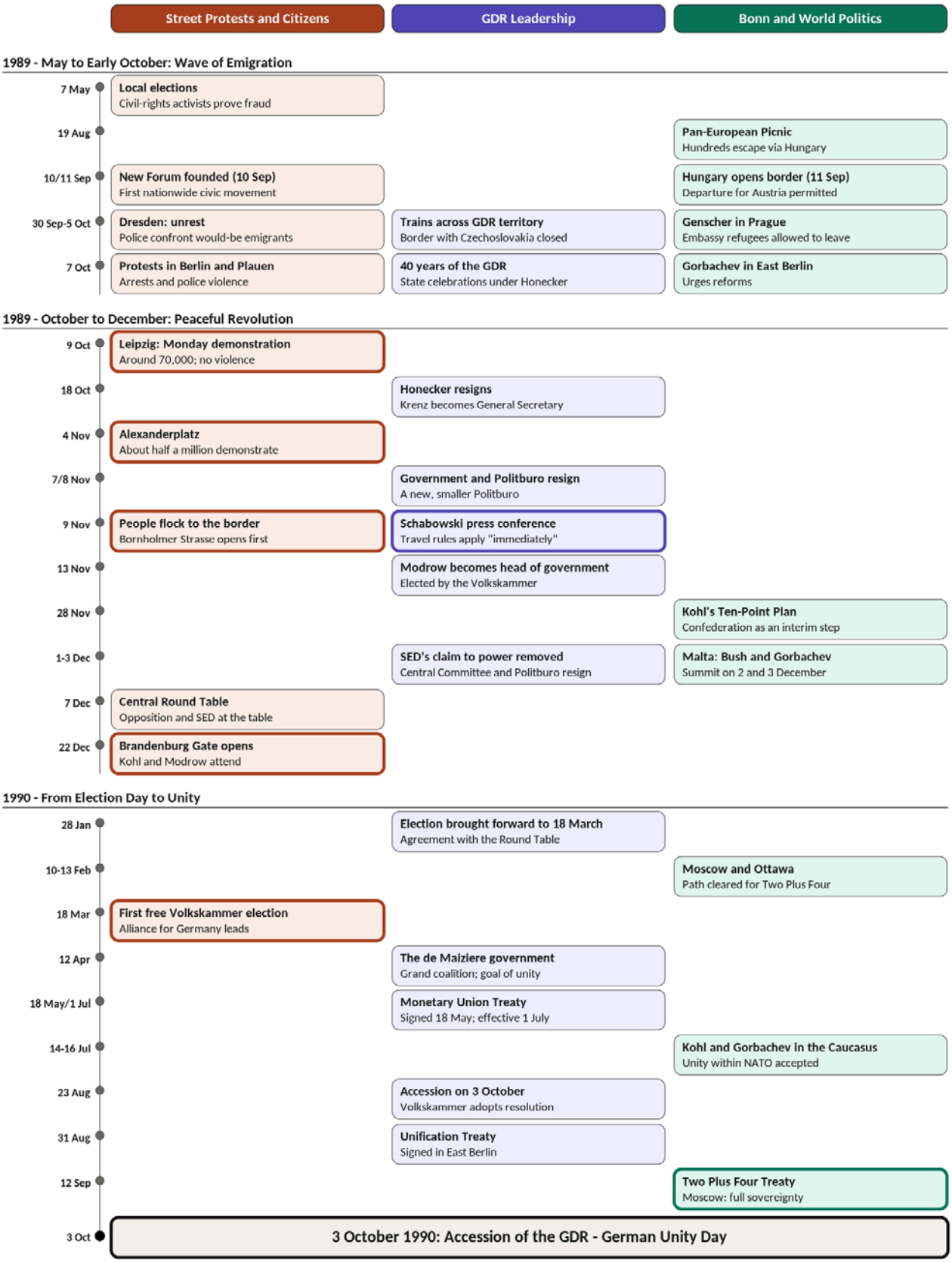
The Earth has no file numbers. Its samples carry no national labels until people mark them. Mineralogical structures were not created by a ministry discovering them. Nor do they change because the next minister has a different understanding of state secrets. The novel does not thereby assert a complete separation between nature and society: which samples are taken and which measurements are funded certainly depends on politics. But its crucial boundary remains: **political power can control access to findings, not determine their physical properties.**

There is no romantic elevation of mineralogy into a moral judge here. Rock does not say which government is right, which war may be fought or how people should live together. It offers no answers

to such questions. It is precisely this indifference that makes it resistant to all-encompassing political interpretations. The Earth is not loyal. It does not confirm a worldview merely because that worldview holds power.

The End of the GDR 1989-1990

Timeline in three tracks: civic movement, SED leadership and world politics



Thick borders mark turning points. Attendance figures are estimates and vary by source.

Reference basis: generally known dates

7. Secrets – Knowledge, Selection and Power

Five Different Forms of Secrecy

The word "secret" by no means always refers to the same thing in the novel. It is worth distinguishing five forms.

First: the technical manufacturing secret. This concerns manufacturing processes, materials, testing methods and operating limits. Here, genuine knowledge exists that is useful to others and can therefore be withheld. The question is who is given access.

Second: the political secret. Jost is to remain unaware of Anke's second assignment. Secrecy protects not so much a piece of physical information as the institutional channel through which it is obtained. The question is whose loyalty may be called upon.

Third: omitted knowledge. At the Moscow congress, genuine results are published without showing all the damage or operating limits. No lie needs to be spoken to create a distorted impression. The question is which parts of reality are declared representative.

Fourth: the constructed gap. Renner knows of the initial approach involving Heller and expects the usual continuation. Because that continuation is missing, he keeps looking for further possible evidence. The question is whether an event inferred from expectation ever actually took place.

Fifth: the sensational pseudo-secret. Ambiguous acoustic patterns give rise to the claim that human screams from hell have been recorded. Later, an effective cassette is circulated that does not even match the original signal. The question is no longer who owns a finding, but whether the alleged finding exists at all.

This distinction prevents a false shortcut. Not all secrets dissolve into fake news. Rather, the novel shows how a genuine technical secret, a covert state assignment, withheld information and a fabricated sensation can assume the same form in political perception: a file marked to indicate that something important lies hidden here.

Release Does Not Change the Object

One particularly incisive element lies in the Moscow preparations for the Geological Congress. Information Morozov was supposed to protect may now be used for international self-presentation. A secret's sudden disclosure does not mean it was previously unimportant. It does mean, however, that "secret" is a social and political property of the handling of knowledge, not a property of the material itself. The alloy knows no classification level.

This also sheds light on Anke's assignment. She is supposed to go to considerable trouble to obtain technical details that will later appear, at least in part, in publications and on display panels. There is, of course, still a gap between a congress presentation and complete manufacturing knowledge. But the political costs of covert acquisition can exceed the benefits once the public context changes. Secrecy yields no timeless return on information.

Facts Become a Story

In the interrogation, the details are very concrete facts: a business card, a journey, a name, a conversation, a message. No individual fact is necessarily false. The falsehood arises when an actual intelligence relationship is inferred from them. Renner sees the most plausible form of a familiar pattern and substitutes it for the actual course of events.

At the congress, the mechanism works differently. Genuine achievements are selected to present a success, while limitations and failures recede into the background. Here too, not every sentence has to be false. The effect is produced by context, sequence and omission.

This may be the novel's insight most directly relevant to the present. Modern manipulation does not have to begin with an invented fact. Sometimes it is enough to **arrange true information so that a false conclusion seems obvious**. The political interest then lies less in the individual piece of information than in the story it is meant to become.

8. Voices from the Depths – from Measurement to Legend

What the Instruments Actually Measure

Seismic and acoustic instruments produce vibration signals. Such signals can be recorded, amplified, filtered and played back at different speeds. This processing can make audible sounds originally outside the normal range of perception, or can alter them substantially. Human hearing searches for regularities and familiar forms even in ambiguous patterns. A supposed voice can be real as a perception without there being a speaking person at its source.

Rosenfeld knows this. He is not thoughtlessly looking for a miracle. His real problem begins where a physical explanation fails to dispel the subjective impression. For him, measurement and meaning do not coincide. He can explain how a signal might have arisen and still retain the feeling that it points to something else. This tension deserves to be taken seriously both existentially and scientifically, so long as a feeling is not turned into an unsupported factual assertion.

The Moment Caution Disappears

The novel allows us to observe the development of the hell legend in a striking sequence. First come measurement signals and repeated analyses. Then a personal remark by Rosenfeld: it sounded *like* human voices. In the retelling, the qualification disappears. Now it is said that screams were heard. Later come women, children, many thousands of people and ever higher temperatures. Each new detail makes the story more vivid while distancing it further from the original finding.

Rosenfeld contributes to this development because his religious image of the shaft of the abyss itself offers a possible interpretation. But he does not bear sole responsibility for what becomes of it. In his letter to a Californian religious community, he explicitly states that he has not recorded the voices of the damned. It is precisely this sentence that loses its force as the story passes through the media. A cautionary qualification is less suited to sensationalism than an unequivocal claim.

Rosenfeld's Real Hell

The religious shaft is the most conspicuous image. Rosenfeld's more personal fear, however, lies elsewhere. He is haunted by the thought that people want to hold on to what they cannot preserve: faith, order, work, relationships, buildings, perhaps entire societies. His vision of a decaying drilling installation belongs to this motif. It is not merely a prophecy of the supernatural, but an image of transience. Hell would then be not the Earth's interior, but the experience of seeing even what seemed secure fall apart.

Seen in this light, the legend becomes more tragic. A person speaks in a technical laboratory about a metaphysical fear. Later, the public turns his wavering, doubtful words into proof of a literal underworld. The result is the opposite of what originally concerned him: his uncertainty becomes an ostentatious certainty.

A Real Hoax and Its Literary Transformation

The story circulating outside the novel as the "Well to Hell" or "Gate to Hell" is not a confirmed discovery at Kola. Investigations of its transmission lead through religious publications and retellings; research into the historical chain of rumours mentions a Finnish publication called *Vaeltajat* from 1989 and an alleged earlier source called *Jewels of Jericho*. The original provenance of every element of the story has not been established beyond doubt in every detail. The widely circulated horror screams are not authentic recordings from a depth of twelve kilometres.

The novel uses such historical traces as material for fiction. **Jakob Rosenfeld's specific letters, his work and his disappearance belong to the novel's plot, not to an established biography behind the real hoax.** This boundary is crucial. A plausible literary account of origins does not automatically make a historical claim true. Conversely, the verifiable circulation of the rumour shows that the novel's premise rests on a real media phenomenon.

The Myth Becomes Stronger than the Place

One striking feature of the original legend is its frequent setting in "Siberia". The real Kola borehole, however, lies in Russia's far northwest, on a peninsula near the borders with Norway and Finland. Even the location becomes blurred in the popular myth. The further the story travels, the less it needs to have to do with the actual project. It requires only the appearance of science: an extreme depth, a mysterious research site, Soviet secrecy, hot rock and supposed microphones.

This produces the ideal material for a sensational story. Technical vocabulary lends it credibility. Religious expectation supplies the image. The Cold War supplies an atmosphere of secret experiments. The cassette supplies emotional proof that takes effect more quickly than any sober investigation. It is precisely the combination of individual real elements that makes the fiction effective.

Fake News as a Process, Not Just a Forgery

The now familiar term "fake news" is a retrospective label for the events of the 1980s. The phenomenon itself is older. Two different kinds of falsehood emerge in the novel: a story grows out of an

unsubstantiated interpretation, and later an acoustically processed or otherwise assembled recording circulates as supposedly authentic evidence. An important step separates the two. An unproven claim may initially arise from an honest mistake; a fabricated evidential recording may actively reinforce the subsequent deception.

Notably, state secrecy does not necessarily weaken the legend. When official bodies remain silent or confiscate recordings, this can be interpreted as confirmation that something immensely important is being concealed. The absence of verifiable information creates no proof, but it does create fertile ground for speculation. Morozov's attempt at control thus threatens to enhance the very story he wants to suppress.

At the end, the novel denies the legend its final satisfaction. Anke immediately recognises the circulating cassette as something different from the material Rosenfeld heard. She does not need to reconstruct every stage of the fabrication to be entitled to say: *This is not the recording we had back then.* Her certainty is limited but precise. Therein lies the alternative to the grand assertion.

9. The Interrogation Room as Counter-Drilling

Two Tapes, Two Procedures for Establishing Truth

The novel begins with a tape recorder running and ends with one switched off. Between them lie Rosenfeld's tapes. In both cases, machines are meant to document reality. But a recording is not identical with its meaning. The interrogation tape preserves statements without guaranteeing their truth. The measurement tape preserves vibrations without unambiguously revealing their origin. The later horror cassette even falsifies the provenance of what it lets us hear.

This parallel is not decorative. It connects the two narrative spaces at their core. At the drilling site, an ambiguous signal is overinterpreted. In the interrogation, an ambiguous history of contact is overinterpreted. The procedures serve different interests but share a related error: the desire for certainty produces a result that reality does not support.



Figure 17 The tape recorder that captures voices

The Handover That Never Happened

Renner's mistake would be less interesting if Anke were entirely innocent. She is not. She has passed confidential information from the Soviet partners to East Berlin. She has deliberately refrained from immediately breaking off a Western contact and has signalled her willingness through an intermediary.

Anyone who knows these two facts can easily imagine a third: that she later also handed material to the BND.

Yet this is precisely what does not happen. Renner founders on a gap that he himself regards as the hiding place of the act he is seeking. He refuses to allow that a story might stop midway through its apparently plausible development. In this way, the investigator turns the probability of a familiar pattern into a false certainty. This is an epistemological failure and a political one: the state can use coercion to impose its expectations against a person's memory.

"No" as a Complete Sentence

When Anke writes only "no" on the proposed statement, it amounts to almost nothing in formal terms. The sentence contains neither a speech in her defence nor a counter-accusation. Its meaning arises from her refusal to complete a false story. She insists on the distinction between what might be inferred from known circumstances and what actually happened. This small objection sets a different ideal of truth against the institutional narrative: one need not offer a more comprehensive story in order to reject a false assertion.

The Apparatus Begins to Lose Its Own Depth

At first, the machinery of interrogation appears powerful: files, dates and times, records, a typewriter and a hierarchy. In November 1989, disturbances increasingly enter the room from outside. Telephones ring, orders change, superiors are replaced. Events beyond the basement windows shift the political foundation on which all the questions rest.

Seifert embodies this revaluation most clearly. Instead of seeing the possible BND contact solely as betrayal, he considers how he might use it in the future. What Renner wanted to prove as guilt now appears as a potential resource. State power has not suddenly recognised the truth. It has changed its interest. That is a considerably more uncomfortable finding.

10. Three Forms of Rationality: Anke, Jost and Rosenfeld

Jost trusts that a problem can be solved through careful observation, experiment and correction. This attitude leads to genuine technical progress. Its limit becomes apparent when he underestimates the political use of his knowledge. It is not always enough for an insight to be correct; what matters may be whose hands it falls into.

Anke knows more about power and motives. This better protects her against simplistic interpretations during the interrogation. At the same time, she becomes entangled in a conflict of loyalties that she cannot undo. She has used her husband without revealing the role his conversations played in her reports. Her capacity for understanding is therefore not the same as moral innocence. This is precisely what gives her a realistic ambiguity.

Rosenfeld, in turn, carefully checks what his instruments produce but reaches the boundary between a measurable cause and a personal experience of meaning. His faith does not automatically invalidate the measurements; his doubts do not make the claim about hell true. He embodies the temptation to give a genuinely disturbing impression an overlarge explanation. Yet his cautious letter also contains an intellectual honesty that the later rumours no longer possess.

The three characters therefore do not represent reason, politics and superstition as fixed camps. Each has a form of rationality and a blind spot of their own. The novel becomes interesting precisely because nobody has a secure grasp of the whole picture.

11. The Paradox of the Gate – an Overall View

The title *The Gate to Hell* promises a crossing of boundaries. People penetrate so deeply into the Earth that they might reach a place that ought to be inaccessible to them. This is an old literary motif. The novel's Jules Verne epigraph already frames the scientific journey in terms of the explorer forgetting the familiar world above in the midst of discovery. The technological world of the twentieth century transforms this motif: instead of a fantastic journey into the Earth's interior, the foreground is occupied by drill strings, turbines, material fatigue, measurement curves and official regulations.

The real crossing of boundaries, however, does not occur at twelve kilometres. It occurs where a measured value loses its meaning and becomes the bearer of other people's stories. A noise first becomes a voice, then a scream, then proof of hell. The hole is real; the supposed passage is not. The very fact of an extraordinary research achievement does not protect the story from being transformed into a myth.

In parallel, State Security conducts its own drilling into Anke's past. It digs up data, uncovers journeys, checks names and searches for hidden connections. Here too, there is a desire to find a particular truth in the depths. The investigation is not groundless from the outset. Anke really was in contact with a Western intelligence officer; after returning from Vienna, she had signalled her willingness. But the central event being sought – betrayal in favour of the West – is absent. The apparatus cannot find a deed that never took place. Nevertheless, it produces ever more elaborate hypotheses about why and how it might have happened.

The technical project and the interrogation thus become mirrors of one another. Both enter a domain initially unknown. Both require instruments and procedures. Both depend on interpretation. Yet they differ at the point where hypotheses fail. The engineers must change their drilling concept when a string breaks. State Security would rather change Anke's statement when its theory does not work. In this way, the novel defends the revisability of knowledge rather than expressing a general scepticism about truth.

This revisability is also the moral alternative to the hell legend. Anyone genuinely seeking causes must accept that an attractive explanation may be unfounded. Rosenfeld's earliest records contain precisely this caution. The later story removes it because certainty is more successfully disseminated than uncertainty. The sensational myth claims complete knowledge precisely where scientific work permits only limited, testable statements.

Political history intensifies the problem. The Soviet Union makes Kola a symbol of scientific greatness. The GDR wants to share in this knowledge while demanding a loyalty that strains Anke's personal relationships. The West is also interested in the technology. In 1984, some previously withheld findings become public. In 1989, the GDR loses its stability during the very weeks in which its security officers are adjudicating supposed espionage from 1983. A state may thus already have outlived its own political purposes while still policing the legitimacy of earlier secrets.

From here, the perspective on Russia and Ukraine acquires its full significance. The Kola crew works within a shared state reality that later disappears. The Russian-Ukrainian war makes this especially painful in retrospect. What is exposed as illusory is not the people of that time but the permanence of

their political order. Even shared work does not protect them from later historical ruptures. The novel therefore holds technical collaboration and political transience together in a single image without seeking to derive one from the other.

One might now claim that, in the end, everything is mere appearance. Yet precisely this reading would fail to do the novel justice. The rock remains, whether a ministry releases it or prohibits access to it. A broken drill string is not merely a story. The heat that limits deep drilling is not propaganda. Anke's decisions, Jost's trust and Rosenfeld's disappearance are equally real. What is unreliable is not the facts themselves but the stories people construct from them – and the means of power by which they compel others to treat those stories as facts.

Thus *The Gate to Hell* is neither a novel about a triumphant spy nor proof of the supernatural. It is a story about the human tendency to fill every unknown depth with one's own expectations: the scientist with a model, the intelligence service with a suspicion, the politician with a report of success, the believer with a religious image, the public with a sensation. Such expectations can be productive as long as they remain open to testing. They become dangerous when an interpretation is made immune to the evidence of its object.

At the end, Anke walks through a Berlin whose political order is only days away from a historic turning point. The tape recorder in the interrogation room is silent. The story of the screams from hell is already travelling far and wide, independently of its real causes. Seifert is still trying to preserve a possible intelligence connection for the future. Jost is waiting at home. Beneath Kola lies the borehole.

The depths were the depths.

This sentence is not a surrender of thought. It says that there is a world outside the stories we tell about it. That world can be investigated, but not arbitrarily altered by desire, fear or political decree. The fact that people can understand only limited portions of it is no invitation to arbitrariness. It is the reason they must distinguish more carefully between finding and claim.

12. Elements of Interpretation – Twelve Readings

The following observations are not an answer key. They open up additional perspectives on scenes, characters and motifs.

1. The Borehole Is Not an Entrance but a Question

The title asserts a "gate", yet the installation contains no walk-in entrance to the underworld. The narrow hole provides access for measurement. The idea of a door arises only through human interpretation. The novel thus demonstrates how a technically defined object becomes the bearer of religious and political expectations.

2. Greater Depth Does Not Automatically Produce Greater Certainty

Each new drilling depth increases the amount of data and changes previous assumptions. The gain in knowledge is real, but it does not remove all uncertainty. If anything, the distinction between reliably measured conditions and unsubstantiated explanations becomes more visible. This scientific experience provides the standard against which the novel's political strand can be judged.

3. Controlling Information Does Not Mean Controlling Facts

Falk, Morozov and the Soviet ministries can determine who reads a report. They can prevent or authorise publication. But they cannot prohibit material fatigue or decree the return of a lost drill string. What can be controlled is the channel of communication, not physical truth.

4. The Real Secret Is Often Unspectacular

A familiar material and an inconspicuous steel coupling may contain a greater technical achievement than any miraculous message from the depths. The novel sets attention to processes against the yearning for spectacular revelations. Knowledge often consists in making something reliably, not in saying something dramatic about it.

5. The Most Dangerous Lie May Be a Conclusion

Renner's files contain many accurate details. What is false is the alleged connection meant to bring them into a definitive order. The novel thereby reveals a form of manipulation that needs no wholesale invention: people are deceived through a plausible but unproven overall story.

6. A State Can Become the Object of Its Own Deception

The GDR tries to acquire an ally's technical secrets. Later, it persecutes the very woman who served that interest. The contradiction lies not merely in an inconsistent protagonist, but in the ability of institutions to redefine the meaning of the same action according to their own needs.

7. The Map Is Not the Territory

The geophysical model describes what can be expected from surface signals under plausible assumptions. The drill core contradicts it at particular points. Similarly, the intelligence file is a model-

like map of the past. Both maps are useful when they can be corrected; they become dangerous when they are confused with reality.

8. The Scientific Congress Is Also a Stage

Genuine results are presented in Moscow. The speakers have reasons to be proud. Yet the presentation structures what others see and keeps certain limits in the background. The scene therefore supports not the thesis that science is merely propaganda, but the more precise question of how institutions publicly frame true research findings.



Figure 18 The Moscow congress of 1984 as fiction



Figure 19 The Moscow Geological Congress reconstructed from historical black-and-white photographs

9. Rosenfeld's Doubt Is More Honest than His Listeners' Certainty

He knows that the signals can be interpreted but are not unambiguous. His religious language expands the range of possibilities without initially claiming to have proved the incomprehensible. The community spreading the rumours adopts the image and removes the qualifications. The more certain the story becomes, the less it corresponds to the original finding.

10. A Technical Community Is Not the Same as a Political Community

Rudenko, Mykola and Jost find a common language at the workbench. Their collaboration rests on procedures, experience and mutual reliability. States can encourage, control or later divide this shared practice. The dissolution of their political order does not prove that their work was inauthentic.

11. The Future Changes the Meaning of the Past

A reader in 2026 knows about the fall of the Wall, the end of the Soviet Union and the Russian-Ukrainian war. The characters living between 1983 and 1989 do not know this future. Dramatic irony arises from that difference: the characters' political certainty appears fragile, even though it may have seemed reasonable at the time. Historical understanding is never entirely timeless.

12. The Ending Defends the Distinction between World and Story

"The depths were the depths" is neither anti-religious nor an expression of naive faith in science. The sentence insists that the object of an investigation is more than what an intelligence service, a newspaper or a believer says about it. It rejects the equation of interpretation with reality.

13. Questions for Reading Groups and the Classroom

1. Why does the novel begin in autumn 1989 rather than with the arrival at the drilling site in 1983? How do the interrogations change our view of the flashbacks?
2. Is Anke primarily a perpetrator, a victim or a character for whom these categories are inadequate? How does her actual transfer of Soviet information to the GDR affect our judgement of her refusal to sign the story demanded by the BND?
3. What makes Jost's engineering perspective a strength? Where does it limit him? At which points does Anke understand a political situation that Jost sees as an ordinary work problem?
4. What are the differences between a technical secret, a personal secret and an unproven claim? Are there scenes in which these levels are deliberately conflated?
5. What does the Moscow congress teach us about the public presentation of scientific findings? Can an account be accurate in every individual sentence yet still misleading in its overall impression?
6. Why can Renner not accept that an initial approach to the West might end without further activity? In what sense is his investigative method the opposite of scientific testing?
7. Does Rosenfeld's religious interpretation necessarily belong to the realm of error and unreason? Where does the novel distinguish between an experience of faith and a claim to scientific proof?
8. How does a processed measurement signal become a news story? What roles are played by repetition, emotional impact, unclear sources and the silence of official bodies?
9. Why do the encounters between Rudenko and Mykola feel different today from the way they would have appeared in 1983? How can we avoid attributing knowledge of later history to the characters of that time?
10. What does the sentence "The depths were the depths" mean? Is it resigned, or does it open up the possibility of a more modest, more precise concept of truth?
11. What role does the tape motif play? What can recordings preserve – and what can they never prove by themselves?
12. In the end, is the novel an espionage thriller, a history of science, the story of a marriage or an investigation into how truth is handled? What changes when all four perspectives are allowed to coexist?

14. Alphabetical Glossary

Acoustic pareidolia: The perception of supposedly familiar sound patterns, such as human voices, in non-linguistic noise. It can explain why processed measurement signals seem like speech.

Branch / branch borehole: A new course of a borehole branching off from an existing section. After the drill-string failure at Kola, a new branch provides a technical way forward.

Coupling: A mechanical connection between drill-pipe sections. With aluminium pipes and steel connections, differences in material behaviour pose demanding design problems.

D16T: A Soviet aluminium-copper-magnesium alloy. In the novel, an example of how knowing the alloy does not yet reveal the secret of its special processing and joining techniques.

Discontinuity, seismic: A boundary or transition zone indicated by changes in the properties of seismic waves. Its geological cause need not be unambiguously apparent from the signal alone.

Drill core: A cylindrical rock sample obtained from a borehole. Unlike a subsurface model calculated from surface measurements, it can be examined mineralogically at first hand.

Drill string: A string assembled from many pipe sections that guides tools in the borehole, transmits forces and, depending on the system, performs additional functions. Its weight and connections are critical in superdeep drilling.

Fault: A tectonic fracture structure involving relative displacement of blocks of rock. In the interpretative sections, also an image of historical upheaval, which must not be confused with a natural-scientific explanation of political events.

Fretting / fretting fatigue: Wear caused by very small relative movements at contact surfaces under repeated loading; it can promote fatigue in loaded connections.

GDR / DDR: The German Democratic Republic (1949-1990), the East German state. Anke's official and secret assignments are rooted in its scientific and state-security institutions.

Glasnost: A key political term for the greater openness and public debate pursued in the Soviet Union under Gorbachev. It also affects the handling of state knowledge and public presentation.

Hoax: A deliberately circulated deception or fabricated report. The story of the "screams from hell", in its widely disseminated sensational form, is an example.

IGC / International Geological Congress: The international congress of geologists. The XXVII Congress took place in Moscow from 4 to 14 August 1984 and provides a central scene in the novel.

KAL 007: A South Korean airliner shot down by Soviet forces on 1 September 1983. The event intensified Cold War tensions.

KGB: The Soviet state intelligence and security service. In the novel, Major Morozov controls, among other things, technical information and foreign contacts at the Kola installation.

Kola Peninsula: A region in Russia's far northwest, on the Barents Sea, near Finland and Norway. Not to be confused with Siberia, where the popular hell legend is often mistakenly located.

Kola SG-3: A Soviet scientific superdeep drilling project begun in 1970, which reached a record vertical depth of 12,262 metres in 1989.

Material fatigue: Damage to a material under repeated loading that can lead to failure even at loads below the maximum it can withstand on a single occasion.

MfS / State Security: The GDR's Ministry for State Security. In the novel, it organises Anke's covert assignment and later her questioning over supposed Western contacts.

Mineralogy: The science of minerals and their properties, structures, formation conditions and compositions. Anke explicitly insists on her professional designation as a "mineralogist".

Mirow 1/74: An East German exploratory borehole in Mecklenburg with a final depth of 8,008.6 metres. It provides a factual background to Jost's technical experience.

Perestroika: The term for the reform efforts associated with Gorbachev in the Soviet Union from the second half of the 1980s onwards.

Seismic surveying: Investigation of the subsurface using elastic waves, their travel times, reflections and other properties. Measurements must be interpreted through models and, wherever possible, checked against drilling findings.

Service life: The period or operating duration during which a technical component or tool remains functional. In deep drilling, service life depends on wear, loading and operational management.

SG-8 / Krivoy Rog: A Soviet superdeep drilling project in the area of present-day Kryvyi Rih, Ukraine. In the novel, one of the postings of the engineer Mykola Hryzenko.

Turbodrill: A drilling tool with a downhole turbine that can be powered by the drilling fluid; it allows the drill bit to rotate without necessarily rotating the entire string extending for kilometres.

Well to Hell: An internationally circulated legend claiming that screams from hell were recorded in an exceptionally deep Soviet borehole. No such authentic recording from SG-3 has been established; the sensational story is regarded as a hoax.

15. Historical Context, Fiction and Sources

The novel combines genuine historical events and a real research project with fictional characters, conversations, interrogations and intelligence relationships. The historical existence of Kola SG-3, the Moscow Geological Congress, the drill-string failure, the GDR, the change of political system in 1989-90 and the development of the Well-to-Hell legend provide points of reference. Anke's specific secret assignment, her contacts with Heller, the interrogation situations and Rosenfeld's individual story are constructions of the novel. They should be read as literary interpretations of historical possibilities, not as an account of facts documented in archives.

The literature on the real Kola project documents its record depth and research into the Earth's crust. Scientific studies of temperature and seismic behaviour show why findings from great depths were often unexpected. The hell legend requires a further distinction based on source criticism: the real research site does not substantiate the sensational story. Parts of the story's transmission can be traced without the authorship of every embellished detail being conclusively established.

Selected Further Reading

- Matthias-Johannes Fischer: *Das Tor zur Hölle* [*The Gate to Hell*]. Novel. 1st edition, 2026, ISBN 978-3-6967-0101-7. Primary text and the historical explanations included in the novel.
- Ye. A. Kozlovsky: "The World's Deepest Well". *Scientific American*, December 1984, vol. 251, no. 6, pp. 98 ff. DOI: https://doi.org/10.1038/scientificamerican1284-98. A contemporary account of the 12,000-metre project.
- Yu. A. Popov et al.: "New geothermal data from the Kola superdeep well SG-3". *Tectonophysics* (1999). DOI: https://doi.org/10.1016/S0040-1951(99)00065-7. On geothermal measurements and the depth of 12,262 metres.
- Y. V. Ganchin et al.: "Seismic studies around the Kola Superdeep Borehole, Russia". *Tectonophysics* (1998). DOI: https://doi.org/10.1016/S0040-1951(97)00280-1. On seismic reflections, shear zones and the influence of fluids.
- Mecklenburg-Western Pomerania State Office for the Environment, Nature Conservation and Geology: "Geologische Landessammlung M-V in Sternberg" ["State Geological Collection of Mecklenburg-Western Pomerania in Sternberg"]. https://www.lung.mv-regierung.de/fachinformationen/geologie/geowissen/geologische-landessammlung-mv-in-sternberg. On the drill-core archive and Mirow 1/74.
- Russian State Library: catalogue information on the XXVII International Geological Congress, Moscow, 4-14 August 1984. https://search.rsl.ru/ru/record/01001206450.
- German Federal Archives: "November 1989 – Massendemonstration, Maueröffnung, Regierungswechsel und innere Krise des MfS" ["November 1989 – Mass Demonstration, Opening of the Wall, Change of Government and Internal Crisis of the MfS"]. https://www.bundesarchiv.de/themen-entdecken/online-entdecken/storys/die-stasi-im-jahr-1989/november-1989/.

- German Federal Archives: "Oktober 1990 – Wiedervereinigung" ["October 1990 – Reunification"]. https://www.bundesarchiv.de/themen-entdecken/online-entdecken/storys/der-weg-zur-deutschen-einheit/oktober-1990/.
- United Nations: General Assembly, statement on the fourth anniversary of Russia's full-scale attack on Ukraine, 24 February 2026. https://www.un.org/pga/80/2026/02/24/pga-remarks-at-the-general-assembly-eleventh-emergency-special-session-resumed-the-situation-in-temporarily-occupied-ukraine-delivered-by-vice-president/.
- Rich Buhler: investigation into the transmission of the "Drilling to Hell" story, documented by *Truth or Fiction*. https://www.truthorfiction.com/drilltohellfacts/. To be read critically: the reconstruction reports alleged earlier sources but does not prove every stage in the original formation of the rumour.

This companion is an invitation to interpretation. It distinguishes verifiable historical and technical points of reference from fictional events and the literary readings developed from them.



Companion to the novel **The Gate to Hell** (2026).



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