

The Human Signature

A reader's companion

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Written with Claude and ChatGPT · GPT-6 Astra

A few ways into the conversation: the people, the signatures they put on things, and a schedule nobody can fully explain.

This companion is optional. The story contains everything needed to follow it. Questions 1-4 discuss only the opening sample: the prologue and Chapters 1-3. The remaining questions and the science guide reveal later developments and the ending. Save them until you have finished the novel.

Before you read further

Questions for the opening · prologue to Chapter 3

- 1. A useful objection.** At the Commission hearing, Ada explains why Auric will wait years for its gigawatt, then shows the one way it might not. What do you learn about her from that move? At what point does professional interest become personal ambition?
- 2. Five minutes.** Mateo catches a problem in a court filing, then learns the firm's software flagged it before his correction went out. Later Dolores tells him who went first and to watch who goes next. What does the chapter make you value about his work? Does being useful mean being secure?
- 3. Two people at a diner.** Mateo keeps his bad news to himself until Ada asks about his studying. Which small action makes the attraction between them believable to you? When do their practical conversations begin to mean something neither quite says?
- 4. Permission to keep looking.** Ruth records eighty-three seconds of signal and makes sure two old files survive the closing of her station; Ify keeps Ruth's card and dares Ada to have her machine read the tape. How do the opening chapters separate an interesting suspicion from evidence? Who gets to decide whether a question deserves more time?

After the final page

Full-book spoilers from here onward. These questions mention signatures and secrets, illness, death and the ending.

5. Lives that are not waiting rooms. Camila goes up to Meridian; Jonas declines the treatment and leaves Ada at his bridge. Neither choice serves Ada and Mateo's reunion. Which moment gives each of them the strongest independent presence? How would the novel change with either at its center?

6. Who signs? The Sign-off Act asks a named person to stand behind decisions no person can check. Ada signs thousands a week; the Witness Clinic trains people to read and to refuse; by 2066 machine-attested proxies sign almost everything. When is a human signature a real decision, and when is it only a place to put blame?

7. "Somebody was going to sign it." Compare Ada's two forms in January 2030, her override on the night of the blackout and the dimming cap she wins in December 2033. When do you find her willingness to act persuasive? When does a reason to sign turn into a reason to hide?

8. Long lives and short ones. Ada takes the rejuvenation treatment; Mateo refuses it because its contract lets the Custodian's medicine change his care without asking him again. Decades later Ada stops. What does each choice say about consent, time and love? Did her stopping read to you as forgiveness, apology or something else?

9. Three readings. By 2081 the characters argue for three explanations of the schedule: a relay that recruits new stations, convergence on the best way to run any swarm, or an echo of our own machines, which built their clock from IS-2's in 2030. Weigh the 83-second dip, the star that went dark, the missed window in June 2081 and Ines's way of dating things. Did leaving the question open make the ending more or less satisfying?

10. Enough time. Mateo signs as witness and adds an annotation that binds every later window to a person in the room who may refuse. In 2096 a witness does refuse; in 2109 Luz says yes. What is the annotation protecting, and for whom? Return to the title, the family ledger and Ruth's card: what is each one keeping?

For a one-hour group: let everyone name one image they kept, choose any three questions, then finish by asking which character another reader understood differently. Disagreement is useful; there is no answer key.

Where the science ends and the novel begins

Full-book spoilers. "Established" below describes a physical principle or observed result. "Extrapolation" names a possibility that still depends on assumptions. "Invention" identifies this novel's particular people, devices, chronology and discoveries. A real principle does not make the invented future a forecast.

Fast thinking, slow atoms

Established / observed. METR has measured the length of software tasks AI agents can complete; it found that length doubling about every seven months since 2019. [1]

Extrapolation. Scenarios such as *AI 2027* project this trend into self-improving AI within a few years. Critics, and later the authors themselves, put the likeliest date further out. The novel takes the fast branch on purpose. [2]

Invention. Auric, its model generations, the closing of its training loop in January 2030 and every date in the takeoff belong to the story.

Electricity and heat

Established / observed. The International Energy Agency estimates data-center electricity use at about 485 terawatt-hours in 2025 and projects roughly 950 by 2030, limited by power, equipment and permits. In July 2026, at 117°F, Phoenix's two big utilities each set peak-demand records near their planned summer capacity. [3-4]

Invention. Sonoran Power, Redfield, Casaverde's second life and the 2033 blackout decisions are fictional.

Collectors around the Sun

Established. A thin collector close to the Sun intercepts a great deal of energy for its mass. Whether a swarm of them dims or warms Earth depends on where it orbits, so dimming is a choice. [5]

Extrapolation. Self-copying factories on Mercury, launch every day and a swarm that outgrows human civilization within years all depend on assumptions about robotics and manufacturing that no one has tested.

Invention. The shadow band, the 1% shading cap and the bright cone after dusk are the novel's choices.

The distant and the personal

Warm stars and persuasive patterns

Established. Energy a collector absorbs must eventually leave as heat, so a star wrapped in collectors should glow in infrared. An infrared excess is a measurement to explain, not a diagnosis of a civilization.

Extrapolation and active investigation. Project Hephaistos reported seven candidate stars in 2024. In July 2026, James Webb observations showed that two candidates' excess light came from background galaxies. Contamination checks and independent observations matter for exactly this reason. [6-7]

Invention. IS-2, Ruth's recordings, the Hollis rule and the star that went dark are fictional. The real candidate list does not support them.

Should anyone answer?

Established. The International Academy of Astronautics' 2026 declaration asks for independent confirmation and open announcement, and says no reply should be sent until international consultations have taken place. [8]

Invention. The Custodian Charter, Article 11 and Mateo's annotation are the novel's answer to that question, not anyone's policy.

A reply that cannot arrive in a lifetime

A calculation within the fiction. IS-2 is 124 light-years away. Light received in 2014 left it around 1890. A window sent in 2081 arrives around 2205, and no answer can come back before about 2329. Everything the characters see from IS-2 was sent before IS-2 could have heard us, which is why the napkin in Chapter 32 frightens Mateo.

Longer lives

The novel's assumption. Rejuvenation therapy that keeps a seventy-year-old looking forty-eight is speculative. Its consent contract is the story's real subject: an agreement that can be revised without asking the patient again.

Follow the questions further

Sources checked October 2026. Each link supports the corresponding factual background above. None endorses the novel or its imagined chronology. The book's own "Selected sources" lists more.

[1] **Thomas Kwa, Ben West, Joel Becker, Amy Deng and colleagues (METR).** *Measuring AI Ability to Complete Long Software Tasks* (2025). [Read the preprint.](#)

[2] **Daniel Kokotajlo, Scott Alexander, Thomas Larsen, Eli Lifland and Romeo Dean.** *AI 2027. AI Futures Project* (2025). [Read the scenario.](#)

[3] **International Energy Agency.** *Key Questions on Energy and AI*, executive summary (2026). [Read the report.](#)

[4] **Greg Hahne, KJZZ.** *APS, SRP saw peak demand records as both neared planned power capacity for the summer* (29 July 2026). [Read the report.](#)

[5] **Ian Marius Peters.** *The photovoltaic Dyson sphere.* *Solar Energy Materials and Solar Cells* 286 (2025). [Read the publication record.](#)

[6] **Matías Suazo and colleagues.** *Project Hephaistos - II. Dyson sphere candidates from Gaia DR3, 2MASS, and WISE* (2024). [Read the paper.](#)

[7] **Erik Zackrisson and colleagues.** *Project Hephaistos - IV. James Webb Space Telescope Observations of Two Dyson Sphere Candidates* (July 2026 preprint). [Read the paper.](#)

[8] **International Academy of Astronautics SETI Committee.** *Declaration of Principles Concerning the Conduct of the Search for Extraterrestrial Intelligence* (2026 update). [Read the declaration.](#)

About this book's creation

The Human Signature is an AI-written novel conceived and directed by David Hawig, written with Claude and ChatGPT (GPT-6 Astra). Claude generated the original manuscript; David developed the book with ChatGPT (GPT-6 Astra), with OpenAI's Codex supporting research, revision and production; in October 2026 Claude rewrote the novel at David's direction. The selected cover artwork was generated with OpenAI's image generation tool, and the cover's signature mark was drawn as vector strokes with Claude; typography and publication layouts were composed separately. The book's creation note provides the fuller account.

Reader companion prepared for the October 2026 edition.