

The ἀρχή concerning technology

the 'how' in which all 'what' dissolves into dust. . . . Time is the 'how.'¹

In *The Big Picture* Sean Carroll writes,

"So Aristotle observes a world populated by countless changing things, and infers a cause [αἰτία] in each case. . . . It's reasonable to ask: What started it all? To what can we trace back this chain of motions and causes? He quickly rejects the notion that any motions are self-caused, or that the chain of causes goes back infinitely far. It needs to terminate somewhere, in something that causes motion but does not itself move: an unmoved mover. . . . he identifies the unmoved mover with God: not just an abstract principle but a being, immortal and benevolent."²

In a discussion of *Die Frage nach der Technik* Thomas Sheehan says,

"In Heidegger's view this mode of revealing things today in modern technology is not of our doing . . . this [technological] mode of revealing things, of having things present, is not something that we do . . . it's instead mysteriously visited upon us as our way of being in the 20th and 21st century . . . given to us from beyond ourselves. He calls this 'beyond' the essence of technology. In German it's a *Geschick*, a dispensation to us of our current fate . . . then he goes into why that's the case, that would be the causation, the etiology of that, and here we get to the real heart of the essay. He's talking about a supervenient dispensing power that has thrust modern technology upon us and he says it's intrinsically hidden from us, we cannot explain this [interrupted by interlocutor]."³

This *Geschick* is no one-off. As Sheehan says a little later in the discussion, "Heidegger's view of the history of philosophy, the history of Western culture, is divided into what he calls epochs, and these are frameworks of meaning . . . we did not produce them . . . he puts that causation entirely beyond our touch. It's hidden to us. It's intrinsically hidden and his whole history of being is a history of various epochs, including *Ge-Stell*, in which we've forgotten this dispensing power."⁴

¹ Martin Heidegger, "The Concept of Time" [1924] (tr. William McNeill): <https://www.beyng.com/pages/en/ConceptofTime/ConceptofTime.html> . *das Wie, in dem alles Was zerstäubt. . . . Die Zeit ist das Wie. Gesamtausgabe Band 64: 124:* <https://www.beyng.com/pages/de/GA64/GA64.124.html> .

² Sean Carroll, *The Big Picture: On the Origins of Life, Meaning, and the Universe Itself* (2016) 28.

³ "Thomas Sheehan on Heidegger and Technology" (podcast Entitled Opinions 2013): <https://www.youtube.com/watch?v=0aJtPTSU8> 20:19-23:18.

⁴ *Id.* 23:46-28:54.

So Heidegger observes a world history populated by various changes—epochs, *Geschicke*—and infers (or imagines) a power dispensing them. It's reasonable to wonder whether in his account of historical change Heidegger hits a single lick beyond what Aristotle had already done. The ἀρχή in both accounts is a transcendent intentionality having regard for human existence.⁵

But Heidegger does go beyond Aristotle in that Heidegger's ἀρχή, *Ereignis*, is much more of a needy user than is the unmoved mover. He writes, "It is granting that first conveys to man that share in revealing which the coming-to-pass [*das Ereignis*] of revealing needs. As the one so needed and used, man is given to belong to the coming-to-pass [*Ereignis*] of truth."⁶ "[T]he coming to presence of the essence of technology comes to pass [*ereignet*] in the granting that needs and uses man so that he may share in revealing."⁷

Each distinctive art (τέχνη), Aristotle says, needs the tools proper to it in order to get the job done. Same for the householder (οἰκονομικός). And implements (ὄργανα) come in two kinds, τὰ μὲν ἄψυχα τὰ δὲ ἔμψυχα.⁸ In Aristotle's terms *Ereignis* is the Homemaker of Being, so to speak, and requires and wields an ensouled instrument—ὄργανον ἔμψυχον, Dasein—to accomplish the work of revealing, of *Entbergen*, of *a-letheia*. Per Aristotle 'a helper is in the nature of utensil (ἐν ὀργάνου εἶδει) for the arts.'⁹ Hence, as the slave is for the householder, so for *Ereignis* Dasein is a living technology, the fieldhand of Being.¹⁰

Aristotle says ὁ δὲ βίος πρᾶξις, οὐ ποίησις, ἐστίν.¹¹ But in the (Heidegger-deplored) modern view of what Aristotle named ἐνέργεια one sees life as **both** doing and making, or rather, that strictly in terms of transforming energy there is no distinction. The same goes for Heidegger's bringing-forth, *Her-vor-bringen*, and challenging-forth, *Herausforderung*—no

⁵ For instance, Aristotle says εἰ οὖν ἡ φύσις μὴθὲν μήτε ἀτελὲς ποιεῖ μήτε μάτην, ἀναγκαῖον τῶν ἀνθρώπων ἔνεκεν αὐτὰ πάντα [i.e., τὰ ζῶα] πεποιηκέναι τὴν φύσιν. *Politics* 1256b.

⁶ "The Question Concerning Technology" (tr. William Lovitt 1977) 32: <https://www.beyng.com/docs/QCT.html> .
Denn dieses trägt dem Menschen erst jenen Anteil am Entbergen zu, den das Ereignis der Entbergung braucht. Als der so Gebrauchte ist der Mensch dem Ereignis der Wahrheit vereignet. GA 7: 33:
<https://www.beyng.com/gaselis/?vol=7&pg=33> .

⁷ QCT 32. *das Wesende des Wesens sich im Gewährenden ereignet, das den Menschen in den Anteil am Entbergen braucht.* GA 7: 33-34.

⁸ ὥσπερ δὲ ταῖς ὠρισμέναις τέχναις ἀναγκαῖον ἂν εἴη ὑπάρχειν τὰ οἰκεῖα ὄργανα, εἰ μέλλει ἀποτελεσθῆσθαι τὸ ἔργον, οὕτω καὶ τῷ οἰκονομικῷ. τῶν δ' ὀργάνων τὰ μὲν ἄψυχα τὰ δὲ ἔμψυχα . . . *Pol.* 1253b.

⁹ ὁ γὰρ ὑπηρέτης ἐν ὀργάνου εἶδει ταῖς τέχναις ἐστίν. *Ibid.*

¹⁰ "[W]e are not only *able* to make sense of things but also *cannot not be always* making sense of things." Thomas Sheehan, "Heidegger's Doctrine of Meaning, His Bedeutungslehre," <https://www.beyng.com/docs/TomSheehanDoctrineMeaning.html> 3. 'You got to jump down turn around and pick a bale o' cotton/ Got to jump down and turn around and pick a bale a day.'
https://www.youtube.com/watch?v=pd5ViH_5598 . Jump down from the wagon that carried you to the crop-rows.

¹¹ Aristotle, *Politics* 1254a.

Wesenhaft-distinction with respect to the transformation of energy. Both are entropy-increasing work (to say it by pleonasm). The net effect of energy transformation, of all πράξις/ποίησις, all bringing-forth/challenging-forth, is φθίσις: decay—of energy; *Zeitigung* as *Zerstäubung*. And that's the second law of thermodynamics.

Carroll takes the second law as the ἀρχή of complexity, of φύσις. He writes,

“The appearance of complexity isn’t just compatible with increasing entropy; it *relies* on it. . . . The only reason complex structures form at all is because the universe is undergoing a gradual evolution from very low entropy to very high entropy. . . . The increase of entropy over time literally brings the universe to life. . . . Complex structures can form, not despite the growth of entropy but *because* entropy is growing. Living organisms can maintain their structural integrity, not despite the second law but because of it.”¹²

Given the density of his subject matter it's no small mercy that Carroll has a self-deprecating sense of humor in lecture. He says, after an intricate exposition:

“There you go, that's the reason we have an arrow of time in the universe and that's what the arrow of time is. At least the thermodynamic arrow of time, as we call it the increasing-entropy arrow of time. I want to claim though much more. I want to claim that *all* of the arrows of time [he mentions physiological, evolutionary, psychological, causal, electromagnetic—“any tendency of things to behave differently in one direction of time as opposed to the other” (*The Big Picture* 235)] are due to the thermodynamic arrow of time. And this is again a contentious claim but it's correct. You should believe me on this one. Not everyone believes me [voice rising in mock crankhood] but they will sometime.”¹³

For Carroll the second law is indeed the ἀρχή of ἀρχαί of all forms of complexity.¹⁴ The ‘essence’ of complexity, the initiator and sustainer of all the arrows of time, is the second law. We might say the second law functions as *Ereignis*; and Dasein, the ὄργανον producing *Bedeutsamkeit*, is one more energy-dissipating complex structure precipitated from the thermodynamic arrow of time.

¹² *The Big Picture* 235, 240.

¹³ “The Biggest Ideas in the Universe 20. Entropy and Information”: <https://www.youtube.com/watch?v=rBPP0I5Ule0&t=751s> 57:10.

¹⁴ Of course Carroll is only one contributor to a research program with a distinguished heritage and lively contemporary interest. (My personal favorite from the archive is Harold Blum's 1937 depiction of life as essentially *Zerstäubung*, ‘making little ones out of big ones’: <https://www.science.org/doi/10.1126/science.86.2230.285.a> .) Carroll's *Grundfrage* however is new and, he says, little heeded: Why was the entropy of the early universe so low?

Carroll's work bears on the 'how' of time and of finitude, and thereby directly on "what matters," as Heidegger puts it, "in the question concerning time," i.e., "attaining an answer in terms of which the various ways of being temporal [*die verschiedenen Weisen des Zeitlichseins*] [finite structures generated by the various arrows of time] become comprehensible." But Heidegger immediately adds, "and what matters is allowing a possible connection between that which is in time and authentic temporality [*die eigentliche Zeitlichkeit*] to become visible from the very beginning."¹⁵ At 'authentic temporality' I am stumped; to me it means nothing.

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¹⁵ "The Concept of Time": <https://www.beyng.com/pages/en/ConceptofTime/ConceptofTime.html> ; GA 64: 112: <https://www.beyng.com/pages/de/GA64/GA64.112.html> .