LLMs And Everything (speedrun any%)

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We greet the dark.

Dianne di Prima

Intro / Outline / Core idea(s)

- "Everything" as a tendency of a set of endeavors
  - philosophy, information science, "information technology / infrastructure"
- Idea / artifact as key to this relation
- "everything drive" of certain activities / entities

General Remarks for The Histories

- unities and separations
  - the thought-language-logic complex
- work, make work, hypocrisy
- to inform vs to persuade

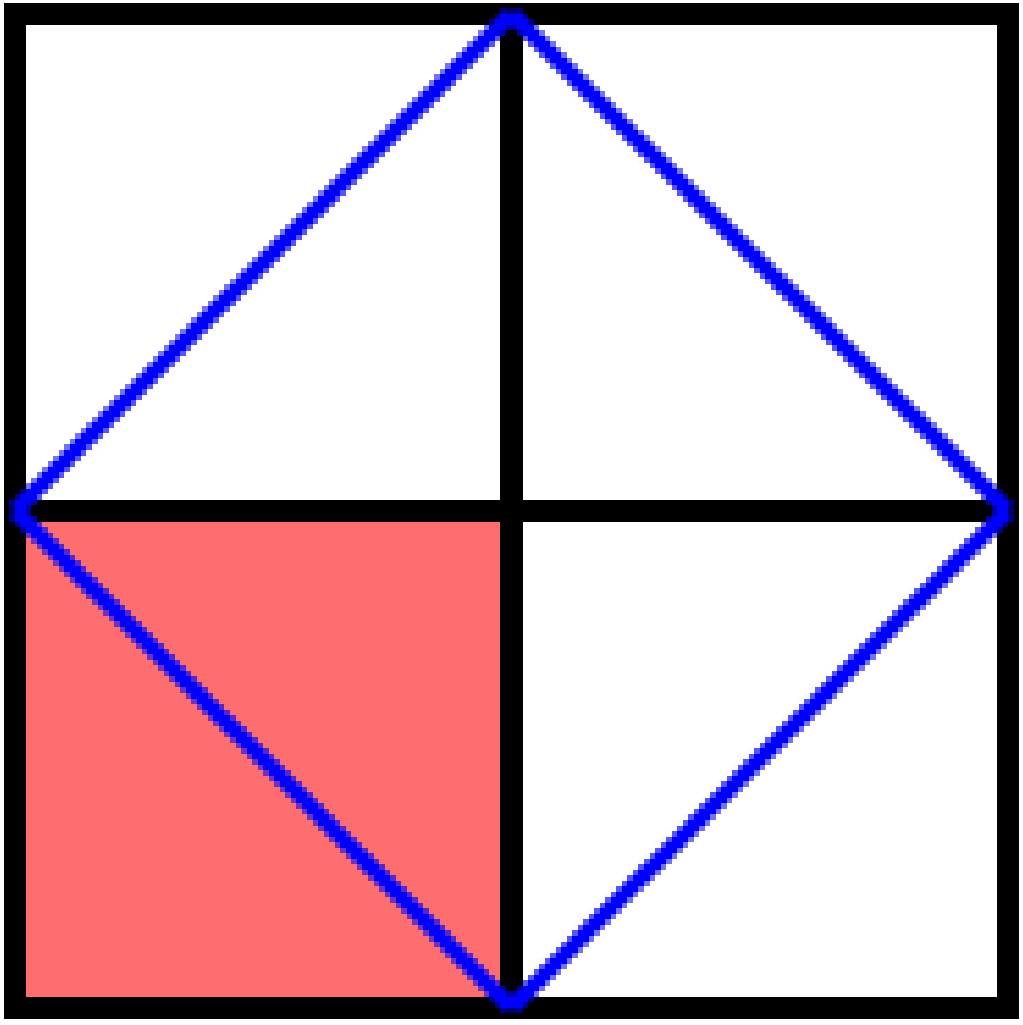
Plato

- geometry / diagrammatics
- analogy of the line (why analogize?)
- diaresis

I already bought the dream

Steely Dan - Deacon Blues

Plato - Meno



Plato - Diaresis

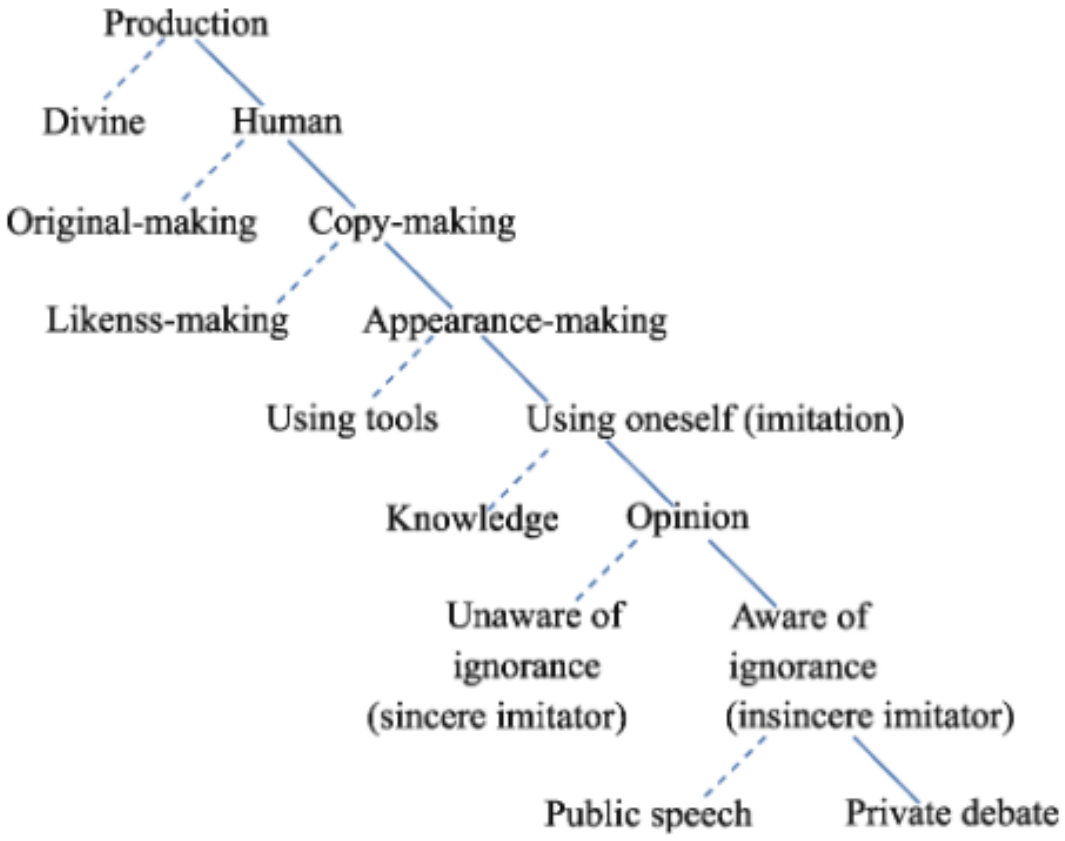


Diagram 8 Definition Seven

Aristotle

- syllogistic
- categories (locus of ordering)

Aristotle

- (formal) calculus for reasoning
- (semantic) ordering of concepts

Categories

Aristotle's Categories

1. Substance
2. Quantity
3. Quality
4. Relation
5. Place
6. Time
7. Position
8. State
9. Action
10. Affection

Libraries

- pragmatic & operative categories
- scope mismatch

Bibliography

Une étoile est-elle un document ? Un galet roulé par un torrent est-il un document ? Un animal vivant est-il un document ? Non. Mais sont des documents les photographies et les catalogues d'étoiles, les pierres d'un musée de mineralogie, les animaux catalogués et exposés dans un Zoo (Briet 1951, 7).

Is a star a document? Is a pebble rolled by a torrent a document? Is a living animal a document? No. But the photographs and the catalogues of stars, the stones in a museum of photography, and the animals that are catalogued and shown in a zoo, are documents (Briet 2006, 10).

Leibniz

- hypothetical language primitives as atoms over which to do calculations

Kant

- Thinks logic is completed (by Aristotle)
- Defamiliarization of the subjective
- Depsyhologization of logic
- Logicization of thinking

Kant's Categories (of Judgements)

Quantity
Universal
Particular

Quality
Affirmative
Negative

Relation
Categorical
Hypothetical
Disjunctive

Modality
Problematic
Assertoric
Apodictic

Frege

- Reads Kant and proceeds to revolutionize logic
- Diagrammatic syntax experiments
- Logic starts to move to mathematics

> This is the day of the
> expanding man
>
> — Steely Dan - Deacon Blues

Hume & Wittgenstein & Quine

Hume

- Critique of induction while clinging to scientia (even if by negation)

Wittgenstein

- Critique of formalization while clinging to Frege (even if by negation)
- Family resemblance

Quine

- holisticity

Probability and Statistics

- order of concepts - probabilistic connections
- categories - probabilistic classifications

Table 1

		formalism logic	
object	concept		sentence / judgement
		probability	

LLMs

- tokenizations
- embedding
- dimensionality is trade-off dependent
- but it is always a whole receptive of “everything” in principle

Table 2

philosophy	**information management**	**infrastructure**
Plato & co.	(logical) classification	library
Carnap / Wittgenstein	probabilistic c.	internet
Worklab2024	vector embedding	"AI"

Conclusion

- Can we learn from scope mismatch?
- Engineering as explication for concepts

The abstraction argument

1. abstraction of x (here conceptuality)
2. leads to a plane of implementation (design space)
3. leads to new requirements for normativity

Imperial nature of everything machines?

They got a name for the winners in the world I want a name when I lose

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Steely Dan - Deacon Blues

Imperial nature of everything machines?

- Ashurbanipal
- Library of Alexandria
- Charlemagne in Achen
- Vatican Library
- Bibliographical power (Patrick Wilson)
- ...
- LLMs

Antiarchival action by empires

- Shi Huangi (213BC) wanted to destroy all books in his empire
- Aztec destroy books of the empire they conquer
- Spanish destroy Aztec books
- Nazis destroy all, except interested in practical, scientific works and books on Judaism and freemasonry

Machine as automation

Learn to work the saxophone

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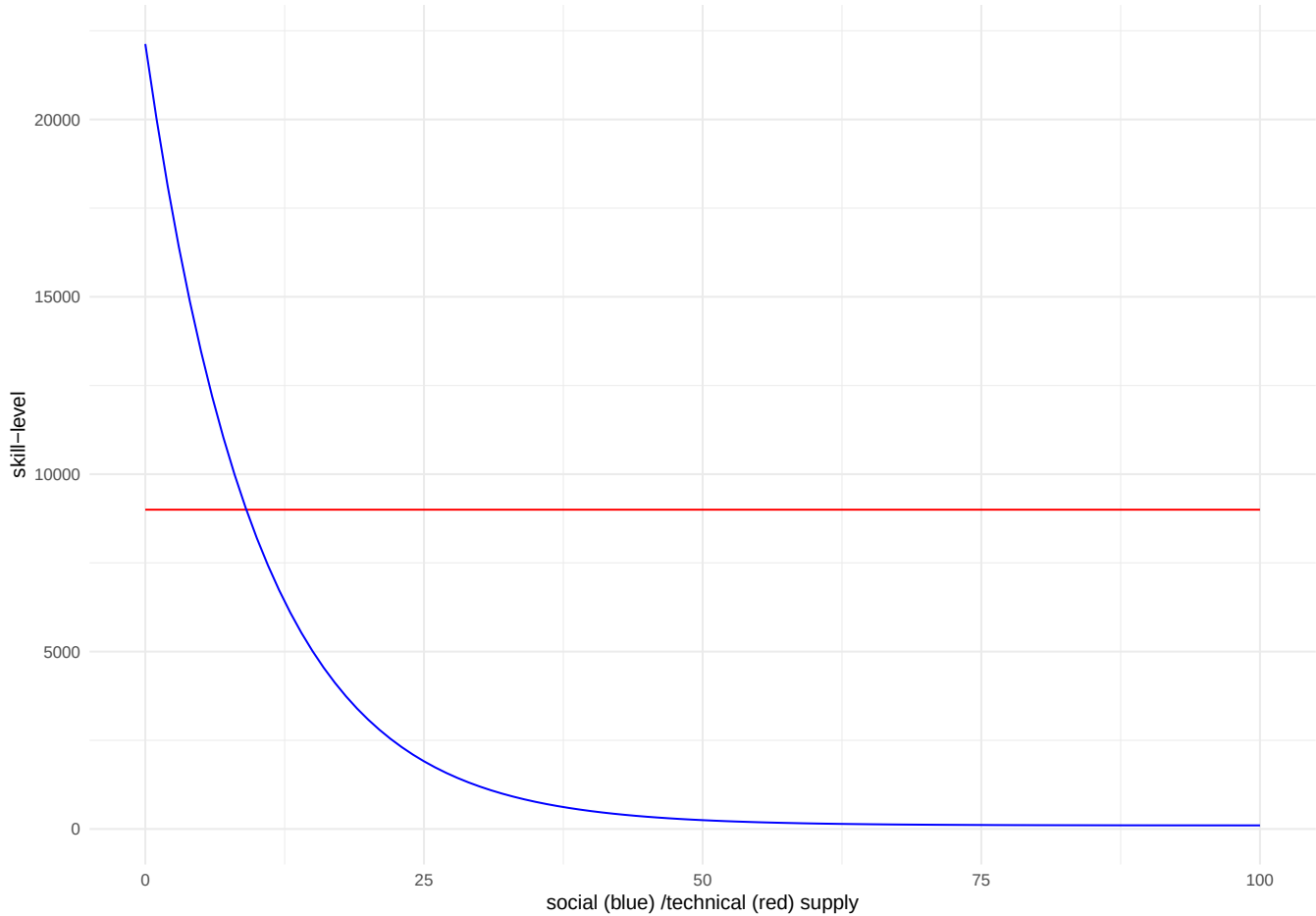
Machines


20000
15000
10000
5000
0
skill−level
0
25
50
75
100
social (blue) /technical (red) supply

Skill

Achim Leistner is an Australian optician of German origin.[1] During his retirement, he was asked to join the Avogadro project to craft a silicon sphere with high smoothness.[2][1]

Leistner studied optics at Optik Carl Zeiss in Jena, Germany, and in 1953 qualified as a precision optical craftsman. He moved to Australia in 1957, and worked in CSIRO on optical fabrication methods.[3]

In addition to precision instruments, Leistner uses his hands to feel for irregularities in the roundness of the sphere.[1] The research team has called his extraordinary sense of touch "atomic feeling".[4] As a result the sphere is the roundest man-made object ever. If it were scaled to the size of the Earth, it would have a high point of only 2.4 m (7 ft 10 in) above "sea level".[Note 1]

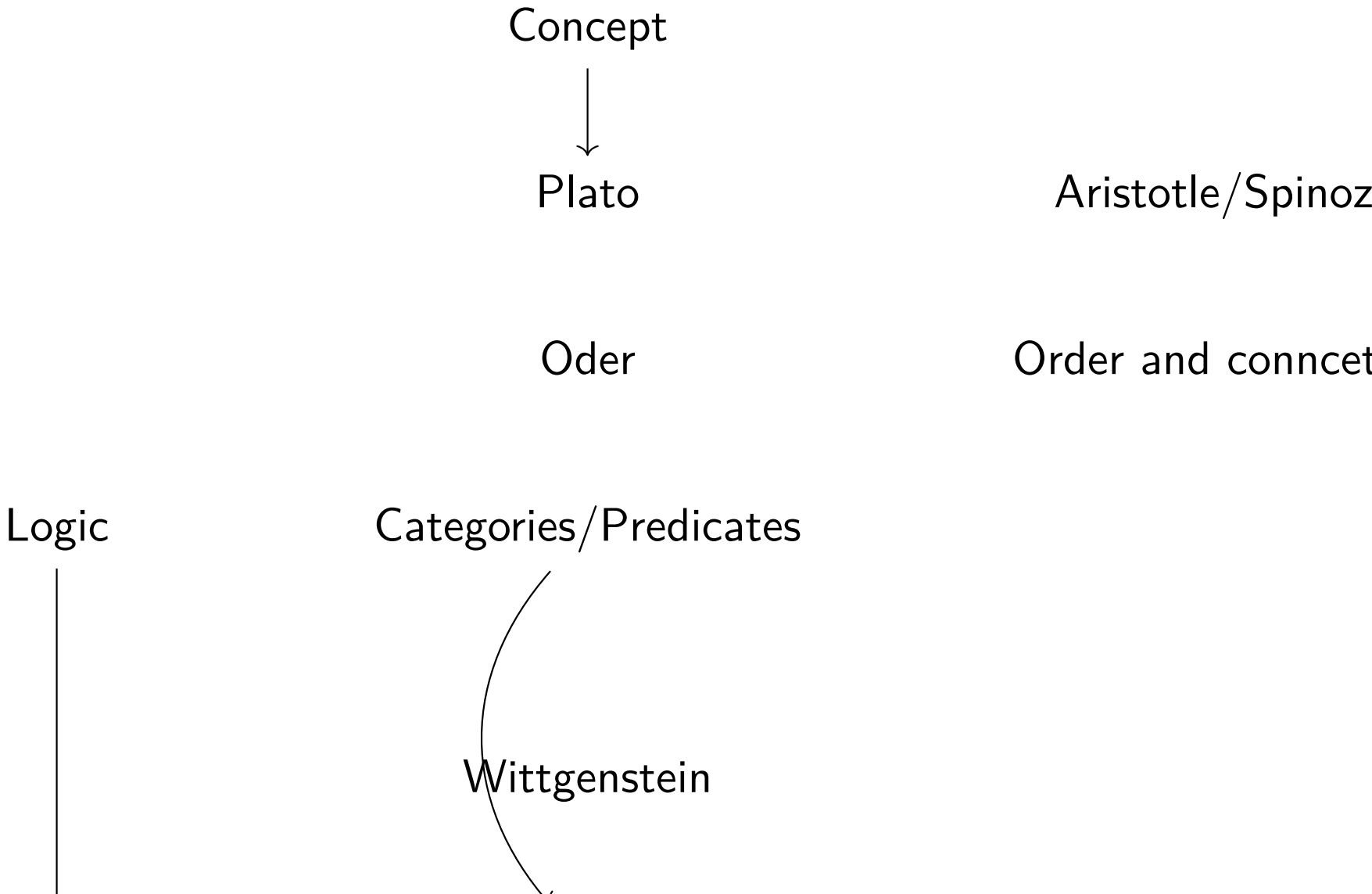
Achim Leistner

Achim Leistner at the Australian Centre for Precision Optics, holding a 1 kg (2.2 lb), single-crystal silicon sphere for the Avogadro project.

Known for Avogadro project

A

D


Concept
Plato
Aristotle/Spinoz
Oder
Order and conncet
Logic
Categories/Predicates
Wittgenstein

Minsky, 1967

WHY PROGRAMMING IS A GOOD MEDIUM FOR EXPRESSING POORLY UNDERSTOOD AND SLOPPILY-FORMULATED IDEAS

Marvin Minsky

MIT

This is a slightly revised version of a chapter published in *Design and Planning II -- Computers in Design and Communication*, (Martin Krampen and Peter Seitz, eds.), Visual Committee Books, Hastings House Publishers, New York, 1967.

There is a popular, widespread belief that computers can do only what they are programmed to do. This false belief is based on a confusion between form and content. A rigid grammar need not make for precision in describing processes. The programmer must be very precise in following the computer grammar, but the content he wants to be expressed remains free. The grammar is rigid because of the programmer who uses it, not because of the computer. The programmer does not even have to be exact in his own ideas-he may have a range of acceptable computer answers in mind and may be content if the computer's answers do not step out of this range. The programmer does not have to fixate the computer with particular processes. In a range of uncertainty he may ask the computer to generate new procedures, or he may recommend rules of selection and give the computer advice about which choices to make. Thus, computers do not have to be programmed with extremely clear and precise formulations of what is to be executed, or how to do it.

giga