

**THE ARGUMENT
AGAINST HIMSELF**

PART TWO – THEAETETUS

Aris Skliros

**PLATO'S ACADEMY IN
THE ORCHARD**

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HIMSELF**

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Full text with interleaved Euclid correspondences

London, 2026

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PART TWO – THEAETETUS**

Author: Aris Skliros

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Abstract

Complete novel text of *The Argument Against Himself* (Cratylus · Theaetetus · Sophist · Statesman · Parmenides), with green **EUCLID** boxes and amber **NOTE** boxes interleaved wherever number, geometry, measure, part–whole, contact, or continuum is invoked. Every El. marker is a scholarly **correspondence**: the dialogues predate Euclid. For the Clay / powers scene, only Books **VII** and **X** are Referenced.

Preface

Chronology. Plato's Academy dialogues predate Euclid's *Elements*. Markers El.B.Def. N / El.B.Prop. N record correspondences, not citations by Plato or the novelist.

Cite-first (Theaetetus Clay / powers).

- El.VII.Def.16 — plane / oblong number
- El.VII.Def.18 — square number
- El.VII.Defs.17 & 19 — solid / cube *numbers* (not XI–XIII)
- El.X.Def.1 — commensurable / incommensurable
- El.X.Def.2 — commensurable in square
- El.X.Prop.9 — conceptual twin only

Do **not** cite as Referenced for Clay: I–VI, VIII, IX, XI–XIII.

Cite-first (Statesman due measure). El.V.Defs.1–7 (part, multiple, ratio, same ratio, proportional, greater ratio). Due measure itself is normative, not identical to geometric mean (VI.Def.2 soft only).

How to read. Continuous novel from Prologue through Part Five. At annotated loci a green Euclid box (Referenced) or amber note (light) interrupts briefly. Greek is transliterated or omitted for pdf_{latex}.

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Part II

Theaetetus

Chapter 18

EIGHTEEN. The Man From Megara



A visitor from Megara arrives
with a strong claim about knowledge.
Socrates welcomes every earnest searcher.



The Man From Megara — opening scene.

“Before I put this one down,” said Sophia, “I want to say something about the rule, because it matters here and it will matter much more in about six weeks. “You remember that I can only show you what somebody carried.” “Yes.” “Some chains are long and bad. This one is the shortest and best I have ever found. “A man heard this conversation reported, in person, by one of the two people who had it. He went home the same day and made notes. Then he wrote it out properly at his leisure. And then, every single time he went to Athens afterwards, for years, he went and found the man who had been there and asked him about the bits he wasn’t sure of, and came home and corrected it. “There is nothing else like that from the whole ancient world. Nothing. “So what you are about to see will be sharper than anything I have shown you. Look at it while you have it.”

. . .

The picture opened on a street, in a small town, in the middle of the day. Two men were meeting. One was dusty and had plainly come in from a farm. The other was older and thinner and had the look of somebody who had just put something heavy down. "Are you only just in from the country, Terpsion? Or have you been here some time?"

. . .

Lela was on her feet. She did it so fast that Danae flinched, and she stood there in the grass with both hands in her hair and said, in a completely different voice: "Sophia." "Yes." "That's — those are —" "Yes," said the owl. "They were in the room." She turned round; she could not keep still. "They were in the room. Danae, they were in the room. When Phaedo said who was there — he said Simmias and Cebes and Phaedondes, and then he said and from Megara, Euclides and Terpsion. That's them. That's the two of them. They were sitting on the floor of that cell with us."

2



He says knowledge is simply perception:
“Nothing else is needed.
To perceive is to know.”



The Man From Megara — the chapter's central dialogue.

. . .

Danae had gone very still, looking at the picture. “The one on the left was crying,” she said. “At the end. When Apollodorus started. He was on the left by the door and he put his cloak over his face.” “I don’t remember that.” “I do,” said Danae.

. . .

“I’ve been here a good while,” Terpsion was saying. “I was looking for you in the market and wondering I couldn’t find you.” “You couldn’t, because I wasn’t in the city.” “Where were you, then?” “I went down to the harbour. And on the way I met Theaetetus, being brought to Athens from the camp at Corinth.”

. . .

“Alive or dead?”

. . .

“Alive,” said Euclides. “But that’s about all one could say. Badly wounded, for one thing. But the real trouble is this sickness that has broken out in the army.” “Dysentery?” “Yes.” “What a man to lose.”

. . .

The three of them in the grove did not say anything. Somewhere down the hill a dog started and then thought better of it.

. . .

“Yes. A fine man, Terpsion. Only just now I was listening to some people singing his praises for the way he behaved in the battle.” “Well, there’s nothing extraordinary in that. It would be much more to be wondered at if he hadn’t distinguished himself. But why didn’t he stop here in Megara?” “He was in a hurry to get home. I kept asking him myself, and advising him. He wouldn’t. So I saw him on his way.”



3

Socrates listens carefully
and asks questions
that test the bold definition.



The Man From Megara — the central concept made visible.

. . .

“And coming back,” said Euclides, “I thought about Socrates, and what a remarkably good prophet he was — as usual — about Theaetetus. “It was not long before his death, if I remember rightly, that he came across him. Theaetetus was a boy at the time. Socrates met him and had a talk with him and was very much struck with his ability; and when I went to Athens he repeated the whole discussion to me, and it was well worth hearing. “And he said to me then that we should inevitably hear more of Theaetetus, if he lived to grow up.”

. . .

“Well,” said Terpsion. “He appears to have been right enough.”

. . .

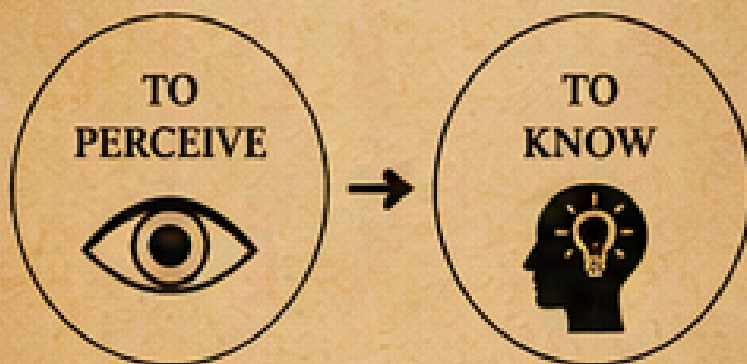
Lela sat down again slowly. “Sophia.” “Yes.” “How long before his death?” “Read the book you read in November,” said the owl, “and count. Theodorus and Socrates make an appointment at the end of this conversation to meet again the next morning. And the last thing Socrates says, before he stands up and leaves that room, is where he is going now.” “Where is he going?” “You know where he is going,” said Sophia.

. . .

“But what was this discussion? Could you tell it to me?” “Good Lord, no. Not from memory. “But I made notes of it at the time, as soon as I got home. Then afterwards I recalled it at my leisure and wrote it out. And whenever I went to Athens I used to ask Socrates about the points I couldn’t remember, and correct my version when I got home. “The result is that I have got pretty well the whole discussion in writing.”

4

A BOLD DEFINITION



Perception is knowledge.
So nothing more is required.



The Man From Megara — the guiding analogy.

. . .

“Yes, of course,” said Terpsion. “I’ve heard you say that before, and I’ve always meant to ask you to show it to me, though I’ve been so long about it. “Is there any reason we shouldn’t go through it now? I want a rest, in any case, after coming in from the country.” “I shouldn’t mind sitting down either. I saw Theaetetus as far as Erineum. Come along. We’ll get the boy to read it to us while we rest.” “Right.”

. . .

“This is the book, Terpsion. “You see, I’ve written it out like this. I haven’t made Socrates relate the conversation, as he related it to me. I’ve put him speaking directly to the people he had it with — Theodorus the geometer, and Theaetetus. “I wanted, in the written version, to get rid of

the bother of the bits of narrative in between the speeches. I mean when Socrates mentions his own part and says and I maintained, or I said; or, of the person answering, he agreed, or he wouldn't admit this. "That's why I've made him talk to them directly and left all that out." "That's quite in order, Euclides."

. . .

"Now, boy. Let us have it."

. . .



Socrates asks: Do we know
everything we perceive?
Or do we sometimes fall into error?



The Man From Megara — the argument unfolding step by step.

And in the garden of the Academy, under the plane trees, Aristotle said: “He tells you how he did it.” “He does.” “In the book. On the second page. Before a word of the conversation. He stops and explains his own method, and the reason for it, which is that the he saids were a nuisance.” “Yes.” “Nobody does that.” “No,” said Plato. “Nobody does that. I have never done it and I never will. Euclides of Megara was a man of almost no imagination and complete honesty, and he was so worried that somebody would think he had invented the neatness that he put the explanation at the front where it would spoil the opening. “And because he did, we know exactly how much of it is his and how much is Socrates’. Which we do not know about a single line I have ever written.”

. . .

The picture changed. It went from a room in Megara to an open colonnade with a great deal of light in it, and

from two old men to a group of them, and there in the middle of it, on a bench with his feet apart and his hands on his knees, was —

. . .

“He’s old,” said Danae. “Yes.” “He’s old again. He’s the old one.” “He is about four weeks from the end of his life,” said Sophia. “Take that with you into everything you are going to hear for the next three days.”

. . .



We perceive many things
that are not as they seem.
Perception alone is not enough.



The Man From Megara — the competing interpretation.

“If Cyrene came first in my affections, Theodorus,” Socrates was saying, “I should be asking you how things are there — whether any of your young people are taking up geometry, or any other branch of philosophy. “But as it is, I love Athens better than Cyrene, so I’m more anxious to know which of our young men show signs of turning out well. “That’s what I’m always trying to find out for myself, as best I can, and I keep asking other people too — anybody the young men seem to gather round. And you, of course, are very much sought after, and with good reason. Your geometry alone would entitle you to it, and that isn’t your only claim. “So if you’ve come across anybody worth mentioning, I’d be glad to hear.”

. . .

“Well, Socrates, I think you ought to be told, and I think I ought to be the one to tell you, about a remarkable boy I’ve met here. One of your own countrymen. “And if he

were beautiful, I should be extremely nervous of speaking about him with enthusiasm, in case anybody suspected me of being in love with him. “But as a matter of fact — if you’ll excuse my saying such a thing — he isn’t beautiful at all. He is rather like you. Snub-nosed, with eyes that stick out. Though these features aren’t quite so pronounced in him.”

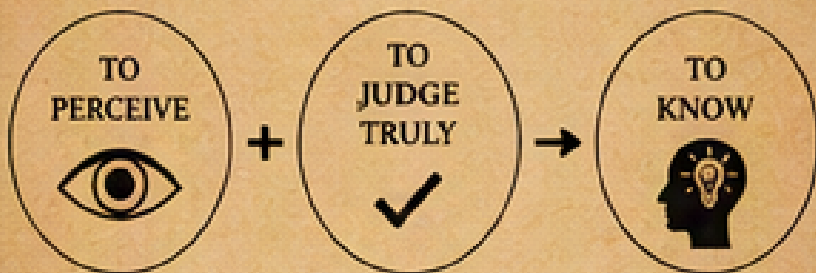
. . .

Lela made a small noise. “They’re laughing at him.” “They are,” said Sophia. “To his face. About his face. In front of his students. It happens in nearly every book he is in and he never once minds, and that is not nothing either.”

. . .

7

PERCEPTION WITH TRUE JUDGMENT



We need perception
together with true judgment
about what is perceived.



The Man From Megara — Lela and Danae reconstruct the idea.

“I speak without any qualms,” Theodorus went on, “and I assure you that out of everybody I have ever met — and I have got to know a good many in my time — I have never seen anybody so amazingly gifted. “Along with a quickness beyond most people’s capacity, he has an unusually gentle temper. And, to crown it, he is as manly a boy as any of them. “I never thought such a combination could exist. I don’t see it arising anywhere else. “People as sharp and as keen and as retentive as he is are usually very unbalanced. They get swept along with a rush, like ships without ballast; what passes for courage in them is a sort of mad excitement. “And the steadier sort come to their work with minds that are somehow sluggish — loaded down with a bad memory. “But this boy goes at his studies in a smooth, sure, effective way, and with great good temper. It’s like watching the quiet flow of a stream of oil. It’s astonishing how much he gets through, at his age.”

. . .

“He’s dead,” said Lela. “Not yet.” “No, but he is.” She had her arms round her knees again. “We just watched a man come back from the harbour and say what a man to lose. And now somebody’s describing him at fourteen and saying he’s never seen anything like him. And the only reason anybody wrote a word of it down is that he turned out to be worth writing down, and he’s about to die of dysentery in a cart.” Sophia said nothing. “That’s the second time,” said Lela.

. . .

“That’s good news,” said Socrates. “And he’s an Athenian — whose son is he?” “I’ve heard the name and I don’t remember it. But he’s the middle one of the group coming towards us. They were oiling themselves outside just now; it looks as though they’ve finished and are coming in. Look and see if you know him.”

8



The Megarian agrees:
“Yes, true judgment must be added.”
The definition must go deeper.



The Man From Megara — the historical layer.

. . .

They came in, four or five of them, with their hair wet. The one in the middle was about fifteen. He was not beautiful. He had a nose that went up at the end and eyes set wide and prominent in his face, and he came in half-listening to something the boy beside him was saying, and he had the settled, unhurried look of somebody who has never in his life had to hurry to keep up.

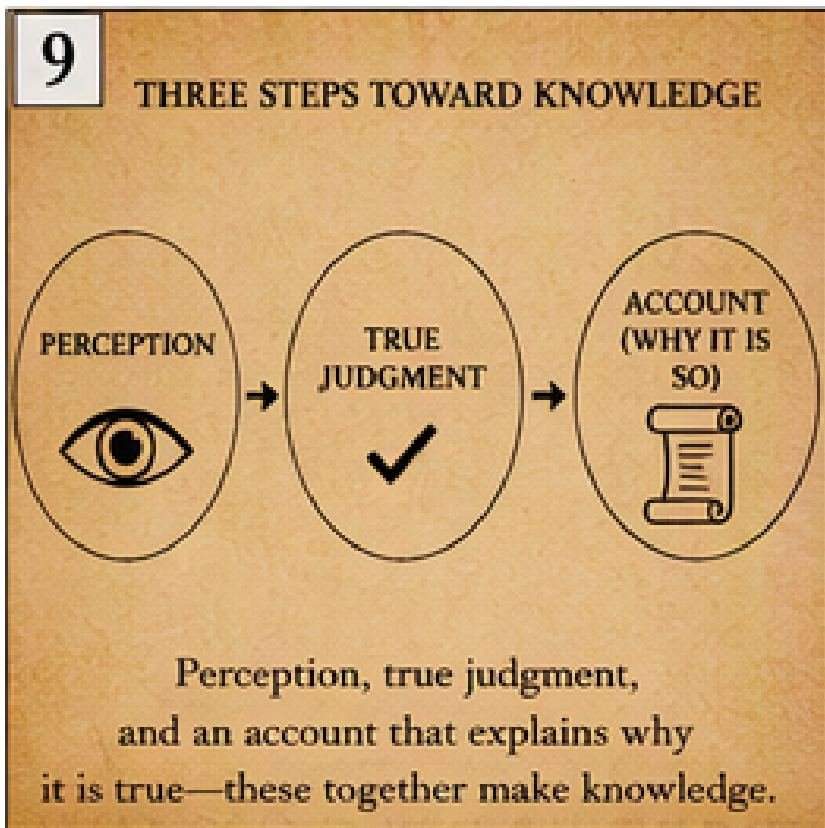
. . .

Danae said: "Oh." "Yes," said Lela. "He does look like him." "I know." "He looks exactly like him. He looks like him when he was —" Danae stopped, because there was no end to that sentence that either of them wanted.

. . .

“Yes, I know him,” said Socrates. “He’s the son of Euphronius of Sunium. Very much the kind of man, my friend, that you say his son is. Distinguished in a good many ways; he left a considerable property too. But I don’t know the boy’s name.” “His name is Theaetetus. As for the property — that, I think, has been made away with by the trustees. All the same, he’s wonderfully open-handed about money, Socrates.” “A thoroughbred, evidently. I wish you’d ask him to come and sit over here with us.” “All right. Theaetetus, come here, beside Socrates.”

. . .





The Man From Megara — a wordless conceptual plate.

“Yes, come along, Theaetetus,” said Socrates. “I want to see for myself what sort of a face I have. Theodorus says I’m like you. “But look. Suppose you and I had each had a lyre, and Theodorus had told us the two were tuned the same. Should we have taken his word for it straightaway? Or should we have tried to find out whether he was speaking with any expert knowledge of music?” “Oh — we should have looked into that.” “And if we’d found he was a musician, we’d have believed him; and if we found he wasn’t, we shouldn’t have.” “Yes, that’s true.”

. . .

“And now, I suppose, if we’re interested in this question of our faces being alike, we ought to consider whether he’s speaking with any knowledge of drawing?” “Yes, I should think so.” “Then is Theodorus an artist?” “No, not so far as I know.” “Nor a geometer either?” “Oh — there’s no doubt about his being that, Socrates.”

. . .

Danae laughed out loud, and Lela did too, and in the picture two or three of the boys laughed as well, and Theodorus said something they didn't catch, and the whole colonnade suddenly had the shape of a room where something good is about to happen.

. . .

"And isn't he also a master of astronomy, and arithmetic, and music — of everything an educated man should know?" "Well — he seems to me to be." "Then if he says there's some physical resemblance between us, whether he's paying us a compliment or the reverse, one oughtn't to pay much attention to him?" "No. Perhaps not."

. . .

"But suppose it were the soul of one of us he was praising. Suppose he said that one of us was good, and wise. "Oughtn't the one who heard that to be very anxious to examine the person praised? "And oughtn't the other to be very willing to show himself?" "Yes. Certainly, Socrates."

10



So the search begins:
What is perception?
What is true judgment?
And what is the account of the truth?



The Man From Megara — the chapter's narrative and philosophical synthesis.

. . .

“Then, my dear Theaetetus — now is the time for you to show yourself, and for me to examine you. “Because although Theodorus often gives me flattering testimonials about people, Athenians and foreigners both, I assure you I have never once heard him praise anybody the way he has just praised you.”

. . .

“That’s all very well, Socrates,” said the boy. “But take care he wasn’t saying it for a joke.”

. . .

“That isn’t Theodorus’ way. Now don’t you try to get out of what we’ve agreed by pretending our friend is joking —

or you may make it necessary for him to give evidence, and no charge of perjury is ever likely to be brought against him. "So have the pluck to stand by your agreement." "All right. I must, then, if that's what you've decided."

Chapter 19

NINETEEN. Clay



Socrates continues the search
for what knowledge is.
Every answer so far has fallen short.



Clay — opening scene.

“Tell me, then. You’re learning some geometry from Theodorus, I expect?” “Yes, I am.” “And some astronomy, and music, and arithmetic?” “Well — I’m very anxious to, anyway.”

NOTE · 145c–d

Annotation (light / institutional): Curriculum.

Institutional only. (light)

. . .

“And so am I, my son. From Theodorus, or from anybody else who seems to me to know about these things. “But although I get on with them well enough in most ways, I have a small difficulty, which I think ought to be looked into, with your help and the rest of the company’s. “Now — isn’t it true that to learn is to become wiser about the thing one is learning?” “Yes, of course.” “And what makes men wise, I take it, is wisdom?” “Yes.” “And is that

in any way different from knowledge?" "What?" "Wisdom. Isn't it the things they know that men are wise about?" "Well — yes." "So knowledge and wisdom will be the same thing?" "Yes."

. . .

"Now this is just where my difficulty comes in. "I can't get a proper grasp of what on earth knowledge really is. "Could we manage to put it into words?"

. . .

Nobody in the colonnade said anything. "What do all of you say? Who'll speak first? Anyone who makes a mistake shall sit down and be Donkey, as the children say when they're playing ball; and anyone who comes through without a miss shall be King, and make us answer any question he likes." Still nobody said anything. "Well — why this silence? Theodorus, I hope my love of argument isn't making me forget my manners. It's only that I'm so anxious to start a discussion and get us all friendly and talkative together."

2



Theaetetus brings an image:
Clay is soft and easy to shape.
Our minds are like clay.



Clay — the chapter's central dialogue.

. . .

“No, no, Socrates — that’s the last thing anybody could call forgetting your manners. “But do make one of the young people answer. I’m not used to this kind of discussion and I’m too old to get into the way of it. It would suit them better and they’d profit more by it — youth can always profit, that’s true enough. “So go on. Don’t let Theaetetus off. Ask him some more questions.”

. . .

“He set that up,” said Lela. “Mm?” “He asked the whole room so that nobody would answer, and then he apologised to the old man so that the old man would have to hand him the boy.” She was watching very closely now. “That’s — Sophia, he’s been in that colonnade about four minutes and he’s already got exactly what he came for.” “Yes.” “Does

he always?" "Nearly always," said the owl. "The exceptions are worth a great deal and there are about three of them and you will see one of them at the end of the summer."

. . .

"Now give me a good frank answer, Theaetetus. What do you think knowledge is?" "Well — I ought to answer, Socrates, since you and Theodorus tell me to. And in any case, you and he will put me right if I make a mistake." "We certainly will, if we can."

. . .

3

CLAY AS A FIRST DEFINITION



We are shaped by what we learn.
Knowledge, like clay, takes
form from instruction.



Clay — the central concept made visible.

“Then I think that the things Theodorus teaches are knowledge. I mean geometry, and the subjects you listed just now. And then again there are the crafts — cobbling and the rest, whether you take them together or separately. They must be knowledge, surely.”

NOTE · 146c-d

Annotation (light / institutional): Crafts as knowledge.
Methodological prelude. (light)

. . .

“That’s certainly a frank answer, my dear lad — and indeed a generous one. “I asked you for one thing and you have given me many. I wanted something simple and I’ve got a variety.”

. . .

“And what does that mean, Socrates?” “Nothing, I dare say. But I’ll tell you what I think. “When you talk about cobbling, you mean just the knowledge of making shoes?” “Yes. That’s all I mean by it.” “And when you talk about carpentering, you mean simply the knowledge of making wooden furniture?” “Yes — that’s all I mean, again.” “And in both cases you are putting into your definition what the knowledge is of?” “Yes.”

. . .

“But that is not what you were asked, Theaetetus. “You weren’t asked to say what one may have knowledge of, or how many branches of knowledge there are. Nobody asked the question with any idea of counting them up. “We wanted to know what knowledge itself is. “Or am I talking nonsense?” “No. You’re perfectly right.”

. . .

4



Socrates asks questions:

Who is the maker?

Are all minds shaped the same?

What makes a good vessel?



Clay — the guiding analogy.

“Now think about this too. “Suppose we were asked about some commonplace, everyday thing. What is clay, for instance. “And suppose we answered: the clay of the potters, and the clay of the stove-makers, and the clay of the brick-makers. Wouldn’t that be absurd of us?” “Well — perhaps it would.”

. . .

“Absurd to begin with, I suppose, to imagine that the man who asked would understand anything at all from our answer when we say clay, whether or not we add that it is a doll-maker’s clay or anybody else’s. “Or do you think a man can understand the name of a thing when he doesn’t know what the thing is?” “No. Certainly not.” “And so a man who doesn’t know what knowledge is won’t understand knowledge of shoes either?” “No, he won’t.” “Then a man who doesn’t know what knowledge is won’t

understand what cobbling is, or any other craft?" "That's so."

. . .

"So when the question raised is what is knowledge, to answer by naming one of the crafts is an absurd answer. Because it points out something knowledge is of, when that wasn't what the question was about." "So it seems." "And besides, it goes no end of a long way round, when a short and commonplace answer is possible. "In the question about clay, for instance, it would surely be possible to say simply that it is earth mixed with liquid, and let the question of whose clay it is take care of itself."

5



Lela and Danae think about it:
Our minds can be shaped,
but we must also shape ourselves
and choose what to hold.



Clay — the argument unfolding step by step.

NOTE · 147a–c

Annotation (light / institutional): Clay definition.

Definitional analogy. (light)

. . .

“That seems easier, Socrates — now you put it like that.”
And then the boy sat forward. “But I believe you’re asking
just the sort of question that occurred to my friend here
and me, when we were talking a little while ago.”

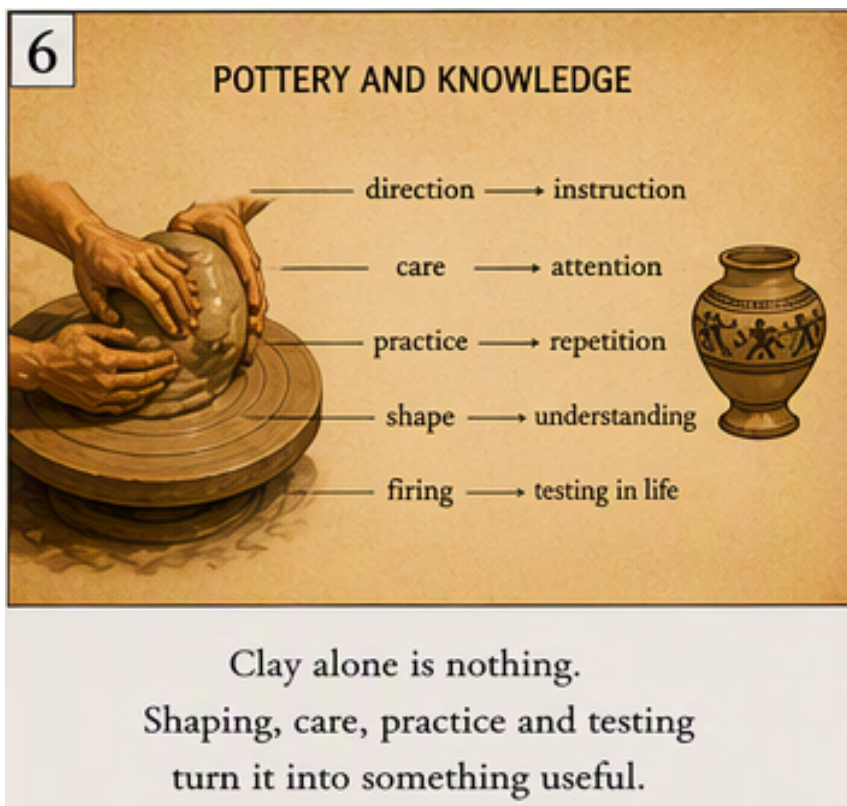
. . .

“And what was that, Theaetetus?”

. . .

“Theodorus here was showing us something with dia-
grams, about powers. “He was showing us that the side of

a three-foot square and the side of a five-foot square are not measurable by the same unit as the side of the one-foot square. And he went on in that way, taking each one in turn, until he got to seventeen — and there, for some reason, he stopped. “So it occurred to us that, since the powers were turning out to be unlimited in number, we might try to collect them all under one term that would cover every one of them.”





Clay — the competing interpretation.

**EUCLID · Elements X — commensurable in square;
lengthsquare-number ratio**

El.X.Def.2 — *commensurable in square* STRONG

(Two) straight-lines are commensurable in square when the squares on them are measured by the same area, but (are) incommensurable (in square) when no area admits to be a common measure of the squares on them.

EUCLID, ELEMENTS – BOOK X DEFINITION 2

(Two) straight-lines are commensurable in square when the squares on them are measured by the same area, but (are) incommensurable (in square) when no area admits to be a common measure of the squares on them.

ACTIONS (WHAT WE DO)	ILLUSTRATIONS	
1 Take two straight-lines Consider any two straight-lines (e.g., lines a and b). 2 Construct the squares on them Draw a square having line a as a side, and another square having line b as a side. 3 Look for a common area Seek an area which measures each of the two squares exactly a whole number of times (no remainder). 4 Decide • If such a common area exists, the lines are COMMENSURABLE IN SQUARE. • If no such common area exists, the lines are INCOMMENSURABLE IN SQUARE.	EXAMPLE: COMMENSURABLE IN SQUARE Let the lengths be 1 and $\sqrt{2}$. The squares on them have areas 1 and 2. The area 1 is a common measure: Line $a = 1$ Line $b = \sqrt{2}$ Area 1 measures the first square 1 time and the second square 2 times: $2 = 2 \times 1$. Therefore, the straight-lines of lengths 1 and $\sqrt{2}$ are COMMENSURABLE IN SQUARE.	EXAMPLE: INCOMMENSURABLE IN SQUARE Let the lengths be 1 and $\sqrt{3}$. The squares on them have areas 1 and 3. No area can measure both exactly. Line $a = 1$ Line $b = \sqrt{3}$ If a common area existed, some area A would measure the first square p times and the second q times, with whole numbers p and q. Then: $1 = pA$ and $3 = qA \Rightarrow \frac{3}{1} = \frac{q}{p}$ But $\sqrt{3}$ is not of the form $\frac{q}{p}$ (p, q whole numbers). Contradiction. Therefore, the straight-lines of lengths 1 and $\sqrt{3}$ are INCOMMENSURABLE IN SQUARE.
CONCEPT (WHAT IT MEANS) It is not required that the lines themselves have a common length. We compare the AREAS of the squares built on them. Two lines can fail to have a common length (commensurable in length), yet their squares can have a common area.		
IN SHORT	• COMMENSURABLE IN SQUARE: The squares on the two lines are measures of the same area. • INCOMMENSURABLE IN SQUARE: No area measures both squares exactly.	
This is the idea of "same measure" applied not to lengths, but to squares.		

El.X.Def.2 – commensurable in square

El.X.Prop.9 – *lengthsquare-number ratio* MODERATE

Squares on straight-lines (which are) commensurable in length have to one another the ratio which (some) square number (has) to (some) square number. And squares having to one another the ratio which (some) square number (has) to (some) square number will also have sides (which are) commensurable in length. But squares on straight-lines (which are) incommensurable in length do not have to one another the ratio which (some) square number (has) to (some) square number. And squares not having to one another the ratio which (some) square number (has) to (some) square number will not have sides (which are) commensurable in length either.

EUCLID, ELEMENTS – BOOK X • PROPOSITION 9

STATEMENT: Squares on straight-lines commensurable in length have the ratio of square number to square number. And conversely, if squares have the ratio of square number to square number, their sides are commensurable in length. Similarly for incommensurable.

I. COMMENSURABLE SIDES ⇒ SQUARES HAVE RATIO OF SQUARE NUMBERS

1 LAY OUT TWO COMMENSURABLE STRAIGHT-LINES.
Let A and B be straight-lines commensurable in length.

2 BY PROPOSITION X.5, RATIO IS NUMERICAL.
Since A and B are commensurable, there are numbers C and D such that
 $A : B = C : D$

3 BY COR. TO VI.20, SQUARES ARE IN THE SQUARED RATIO OF THE SIDES.
Therefore the ratio of the squares on A and B is the square of the ratio of A to B .

4 BY PROP. VIII.11, NUMBERS ARE IN THEIR OWN SQUARED RATIO.
Therefore $C^2 : D^2$ is the square = of the ratio of C to D .

5 EQUAL SQUARED RATIOS.
Since $A : B = C : D$, their squared ratios are equal.
 $A^2 : B^2 = C^2 : D^2$

II. SQUARES HAVE RATIO OF SQUARE NUMBERS ⇒ SIDES ARE COMMENSURABLE IN LENGTH

6 ASSUME SQUARES HAVE SUCH A RATIO.
Let $A^2 : B^2 = C^2 : D^2$, where C and D are numbers.

7 BY COR. TO VI.20, AGAIN.
 $A^2 : B^2$ is the square of the ratio of A to B .

8 BY PROP. VIII.11.
 $C^2 : D^2$ is the square of the ratio of C to D .

9 EQUAL SQUARED RATIOS GIVE EQUAL RATIOS.
Therefore $A : B = C : D$.

10 BY PROPOSITION X.6.
Since $A : B$ is the ratio of one number to another, A and B are commensurable in length.

III. INCOMMENSURABLE SIDES ⇒ SQUARES HAVE NOT SUCH A RATIO

11 LET SIDES BE INCOMMENSURABLE.
Let A and B be straight-lines incommensurable in length.

12 SUPPOSE, TO THE CONTRARY, THEIR SQUARES HAD SUCH A RATIO.
Assume $A^2 : B^2 = C^2 : D^2$.

13 THEN BY PART II, SIDES WOULD BE COMMENSURABLE.
From Part II, this would imply $A : B$ in length, contradicting the hypothesis.
Impossible!

IV. SQUARES HAVE NOT SUCH A RATIO ⇒ SIDES ARE INCOMMENSURABLE

14 LET SQUARES NOT HAVE SUCH A RATIO.
Suppose $A^2 : B^2$ is not the ratio of any pair of square numbers.

15 SUPPOSE, TO THE CONTRARY, SIDES WERE COMMENSURABLE.
Assume $A : B$ in length.

16 CONTRADICTION AND CONCLUSION.
This contradicts the hypothesis that $A^2 : B^2$ has not such a ratio. Therefore,
 $A \neq B$ (in length).

THE WHOLE TRUTH

- $A \sim B \Leftrightarrow A^2 : B^2 = C^2 : D^2$
- $A \not\sim B \Leftrightarrow A^2 : B^2 \neq C^2 : D^2$

COROLLARY

Commensurable in length $\Rightarrow$ commensurable in square.
But the converse is not always true.

(Proposition's Two Observations)

- Unstated assumption: from equal ratios $A : B = C : D$, we pass to equal squared ratios $A^2 : B^2 = C^2 : D^2$.
- Unstated assumption: from equal squared ratios $A^2 : B^2 = C^2 : D^2$, we pass back to $A : B = C : D$.

El.X.Prop.9 — lengthsquare-number ratio

El.X.Def.1 — commensurable / incommensurable STRONG

Those magnitudes measured by the same measure are said to be commensurable, but (those) of which no (magnitude) can serve as a common measure (are said to be) incommensurable.

EUCLID, ELEMENTS – BOOK X DEFINITION 1

Those magnitudes measured by the same measure are said (to be) commensurable, but (those) of which no (magnitude) admits to be a common measure (are said to be) incommensurable.



ACTIONS (WHAT WE DO)

- 1 **Take two magnitudes**
Consider any two magnitudes (e.g., two lengths).
- 2 **Look for a common measure**
Seek a third magnitude which measures each of the two exactly a whole number of times (no remainder).
- 3 **Decide**
 - If such a common measure exists, the two magnitudes are **COMMENSURABLE**.
 - If no such common measure exists, the two magnitudes are **INCOMMENSURABLE**.



CONCEPT (WHAT IT MEANS)

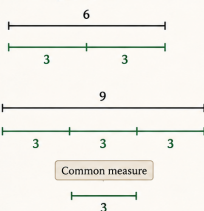
Two magnitudes are **commensurable** if they can be measured exactly—each is an integer multiple of some smaller magnitude.

If there is no magnitude that measures both exactly, they are **incommensurable**.

ILLUSTRATIONS

EXAMPLE: COMMENSURABLE

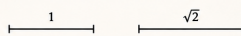
Lengths 6 and 9 are commensurable. The length 3 is a common measure.



Since $6 = 2 \times 3$ and $9 = 3 \times 3$, the lengths 6 and 9 are **COMMENSURABLE**.

EXAMPLE: INCOMMENSURABLE

Lengths 1 and $\sqrt{2}$ are incommensurable. No common measure exists.



If a common measure existed, some length m would measure both 1 and $\sqrt{2}$ exactly:

$$1 = \underbrace{m + m + \dots + m}_{(p \text{ times})} \quad \cdot \quad \sqrt{2} = \underbrace{m + m + \dots + m}_{(q \text{ times})}$$

for some whole numbers p and q .

But no magnitude m can do this. Therefore, 1 and $\sqrt{2}$ are **INCOMMENSURABLE**.

IN SHORT

- **COMMENSURABLE**: the two magnitudes can be measured by the same unit exactly.
- **INCOMMENSURABLE**: no unit can measure both exactly.

This distinction is fundamental in Book X.

El.X.Def.1 — commensurable / incommensurable

Why here: El.X Def.2; X.9 twin. No I–VI/VIII/IX/XI–XIII Referenced.

Note. El.X Def.2; X.9 twin. No I–VI/VIII/IX/XI–XIII Referenced.

Note. Core Theodorus El.X Def.1. Cite-first VII+X.

. . .

7



But Theaetetus wonders:
Is knowledge just what we are told?
Or must we test and discover
what is true?



Clay — Lela and Danae reconstruct the idea.

Lela sat up very straight. “Sophia. Is that —” “Yes.” “That’s irrational numbers. That’s root two. That’s the thing you can’t write as a fraction — that’s what he’s describing, isn’t it, the square whose side won’t measure against the unit —” “Yes.” “That boy is fifteen.” “That boy,” said Sophia, “is going to have a theorem named after him, and there is a book of Euclid’s Elements that is very largely his work, and he is one of the best mathematicians the Greeks ever produced. “And this is the afternoon he met Socrates. And he is about to be asked a question he cannot answer and he will fail at it for three days and never once get cross about it.”

. . .

“And did you find the kind of thing you wanted?” “I think we did. But I’d like you to see whether it’s all right.” “Go on, then.”

. . .

“We divided all the numbers into two kinds. “Any number that can be made by multiplying two equal numbers, we compared to a square in shape, and called a square number. “Then we took the ones in between — three and five, and any number that can’t be made by multiplying two equals, but only by multiplying a greater and a less; a number that is always contained by a greater side and a lesser one. That kind we compared to an oblong figure, and called an oblong number. “And then we defined as lengths any lines that produce square numbers when squared; and any line that produces an oblong number when squared we defined as a power — because although it isn’t measurable by the same unit as the others in length, it is measurable against them in the areas they have the power to produce. “And there’s another distinction of the same sort for solids.”

8



Not every vessel holds well.
Not every mind holds truth.
Some shapes are weak,
some are strong.



Clay — the historical layer.

EUCLID · Elements VII — plane number (oblong); square number

El.VII.Def.16 — *plane number (oblong)* STRONG

And when two numbers multiplying one another make some (other number) then the (number so) created is called plane, and its sides (are) the numbers which multiply one another.

EUCLID, BOOK VII — DEFINITION 16: PLANE NUMBER

“When two numbers multiplying one another make some other number, then the number so created is called plane, and its sides are the numbers which multiply one another.”

1

Today we learn how numbers can have shape.

DEFINITION 16
When two numbers multiplying one another make some other number, then the number so created is called plane, and its sides are the numbers which multiply one another.

2

Take the numbers 3 and 4.
Let 3 multiply 4.

$4 + 4 + 4 = 12$
(4 taken three times)

Therefore, $3 \times 4 = 12$.

3

According to Definition 16, the number 12 is called **PLANE**, because it is made by two numbers multiplying one another.
Its sides are the numbers which multiply.

So 12 is a **plane number** with sides 3 and 4.

4

Why do we call it “plane”?
Because we can arrange 12 objects in a rectangle on a flat surface.

It has length 4 and breadth 3.
It is a **rectangle** — a figure in the plane.

5

Another example.
Let 5 multiply 6.

$5 \times 6 = 30$

30 is a **plane number** with sides 5 and 6.

6

Yet another example.
Let 2 multiply 7.

$2 \times 7 = 14$

14 is a **plane number** with sides 2 and 7.

7

In general, whenever $a \times b = c$,

c is a **PLANE NUMBER**, and its sides are a and b .

8

Many numbers can be plane numbers.
For example:

$2 \times 5 = 10$ $3 \times 8 = 24$ $4 \times 9 = 36$

Each can be pictured as a rectangle with its two sides.

9

Remember, Alexander.

A **plane number** is a number produced by two numbers multiplying one another. Its sides are those two numbers.

This is the first step in seeing numbers not only as quantities, but also as **figures**.

El.VII.Def.16 — plane number (oblong)

El.VII.Def.18 — square number STRONG

A square number is an equal times an equal, or (a plane number) contained by two equal numbers.

MATHEMATICS
DISCIPLINES
THE MIND

EUCLID, BOOK VII — DEFINITION 18

"A solid number is that which is contained by a cube."

THE ELEMENTS
BOOK VII
DEFINITIONS

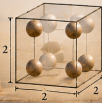
1 THE IDEA

A solid number is that which is contained by a cube.



2 A CUBE CONTAINS A NUMBER

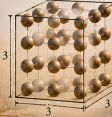
A cube with 2 units on each edge contains $2 \times 2 \times 2 = 8$ units.



$2^3 = 8$
A solid number (8)

3 A LARGER CUBE

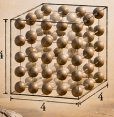
A cube with 3 units on each edge contains $3 \times 3 \times 3 = 27$ units.



$3^3 = 27$
A solid number (27)

4 ANOTHER EXAMPLE

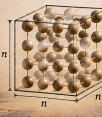
A cube with 4 units on each edge contains $4 \times 4 \times 4 = 64$ units.



$4^3 = 64$
A solid number (64)

5 THE GENERAL FORM

A cube with n units on each edge contains $n \times n \times n = n^3$ units.



n^3
A solid number

6 NOT EVERY NUMBER IS SOLID

Numbers like 2, 3, 5, 6, 7, 10, 12 are not contained by a cube, and so are not solid numbers.



2 3 5 6 7 10 12

Only numbers of the form n^3 (1, 8, 27, 64, 125, ...) are solid numbers.

ARISTOTLE TO ALEXANDER:

"Just as a square number is contained by a square, so a solid number is contained by a cube — a number that fills space in all three dimensions."

DEFINITION 18

A solid number is that which is contained by a cube.

ALEXANDER'S REFLECTION:

"So a solid number is a number that forms a perfect cube in space. It is the number of units that fill a cube completely."

EUCLID — ORDER — REASON — IMMORTAL TRUTH

El.VII.Def.18 — square number

El.VII.Def.17 — solid number MODERATE

And when three numbers multiplying one another make some (other number) then the (number so) created is (called) solid, and its sides (are) the numbers which multiply one another.

EUCLID, BOOK VII — DEFINITION 17: SOLID NUMBER

“When three numbers multiplying one another make some other number, then the number so created is called solid, and its sides are the numbers which multiply one another.”

1 Today we learn about solid numbers.

DEFINITION 17
When three numbers multiplying one another make some other number, then the number so created is called solid, and its sides are the numbers which multiply one another.

2 Let us take the numbers 2, 3, and 4.

First, 2 multiplies 3:
 $2 \times 3 = 6$

Then 6 is multiplied by 4:
 $6 \times 4 = 24$

Therefore, $2 \times 3 \times 4 = 24$.

3 According to Definition 17, the number 24 is called **SOLID**, because it is made by three numbers multiplying one another.

Its sides are the numbers which multiply:
2, 3, and 4.

So 24 is a **SOLID NUMBER** with sides 2, 3, and 4.

4 Why do we call it “solid”? Because we can arrange 24 objects in a three-dimensional block.

2 layers (height)
3 rows (depth)
4 in each row (length)

It fills space. That is why it is called **solid**.

5 Imagine we have 24 soldiers. We form a solid block:

2 layers
3 rows
4 in each row

$2 \times 3 \times 4 = 24$ soldiers.

6 Another example. Let 3, 4, and 5 multiply one another.

$3 \times 4 \times 5 = 60$

60 is a **SOLID NUMBER** with sides 3, 4, and 5.

7 In general, whenever $a \times b \times c = d$, the number d is called **SOLID**, and its sides are a , b , and c .

$\boxed{a} \times \boxed{b} \times \boxed{c} = \boxed{d}$

first side (height) second side (depth) third side (length) solid number (volume)

It is the product of three numbers.

8 More examples.

$1 \times 2 \times 7 = 14$ $2 \times 2 \times 3 = 12$ $3 \times 3 \times 3 = 27$

Each number has three sides, and the result is a **solid number**.

9 Remember, Alexander.

A **SOLID NUMBER** is a number produced by three numbers multiplying one another. Its sides are those three numbers.

Thus Euclid teaches us to see numbers not only as quantities, but also as **shapes in space**.

El.VII.Def.17 — solid number

El.VII.Def.19 — *cube number* MODERATE

And a cube (number) is an equal times an equal times an equal, or (a solid number) contained by three equal numbers.

9

FROM CLAY TO KNOWLEDGE



Knowledge grows from receiving,
but it becomes ours through
work, testing, and understanding.



Clay — a wordless conceptual plate.

“Excellent, my boys,” said Socrates. “I don’t think Theodorus is likely to be had up for false witness.”

. . .

“And yet, Socrates,” said Theaetetus, “I shouldn’t be able to answer your question about knowledge in the way I answered the one about lengths and powers — though you seem to me to be looking for something of the same sort. “So Theodorus turns out to be a false witness after all.”

. . .

“Well — suppose it had been your running he praised. Suppose he’d said he had never met a young man who was such a runner as you. “And then suppose you were beaten by the champion runner in his prime. Would you think Theodorus’ praise had lost any of its truth?” “No. I shouldn’t.”

. . .

Lela did not say anything, and Danae looked at her and did not say anything either, and in the picture a boy who had been dead for two thousand three hundred years said no, I shouldn't, and the conversation went on.

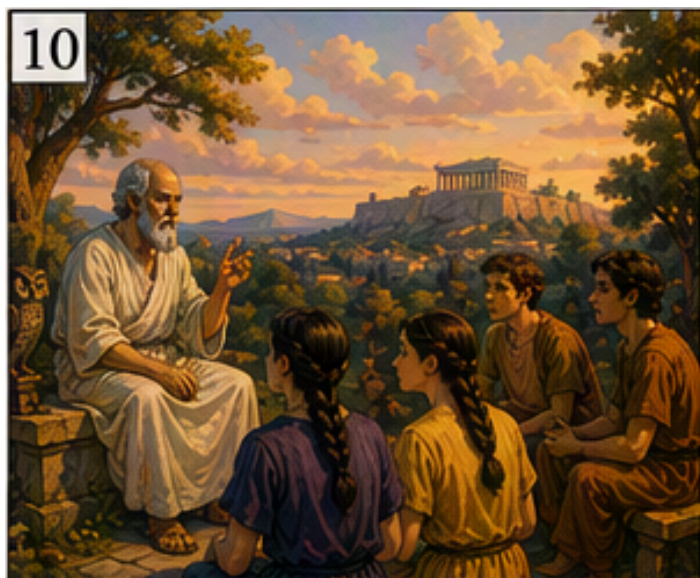
. . .

"But do you think finding out what knowledge is is really what I called it just now — a small thing? Don't you think it's a problem for the people at the top?" "Yes, rather, I do. And the very topmost of them."

. . .

"Then do have confidence in yourself, and try to believe that Theodorus knew what he was talking about. "You must put your whole heart into what we are doing — into this matter of getting a statement of what knowledge really is." "If putting one's heart into it is all that's required, Socrates, then the answer will come to light."

. . .



So the search continues.
Clay helps us begin,
but the final answer must hold
more than a soft beginning.



Clay — the chapter's narrative and philosophical synthesis.

“Go on, then. You gave us a good lead just now. “Try to imitate your own answer about the powers. There you brought a great many powers together within a single form. Now do the same thing for me: give one single account of the many branches of knowledge.”

NOTE · 148d

Annotation (light / institutional): One account.

Methodological uptake. (light)

. . .

“But I assure you, Socrates, I have often tried to think this out, when I’ve heard reports of the questions you ask. “And I can never persuade myself that anything I say will really do. And I never hear anybody else state it in the way you want. “And yet — you know — I can’t even stop worrying about it.”

. . .

“Yes,” said Socrates. “Those are the pains of labour, dear Theaetetus. “It is because you are not barren, but pregnant.”

Chapter 20

TWENTY. The Midwife



Socrates introduces a new image:
he compares his way of teaching
to the work of a midwife.



The Midwife — opening scene.

“I don’t know about that, Socrates. I’m only telling you what has happened to me.” “Then do you mean to tell me you’ve never heard about my being the son of a good hefty midwife? Phaenarete?” “Oh — yes. I’ve heard that before.” “And haven’t you ever been told that I practise the same art myself?” “No. I certainly haven’t.”

. . .

“But I do, believe me. Only don’t give me away to the rest of the world, will you? “You see, my friend, it’s a secret that I have this art. That is not one of the things people say about me, because they don’t know it. “What they do say is that I’m a very odd sort of person, always getting people into difficulties. You must have heard that, surely?” “Yes. I have.” “And shall I tell you what the explanation of it is?” “Yes, please do.”

. . .

2



A midwife does not give birth herself.
She helps another person bring forth
what is already within.



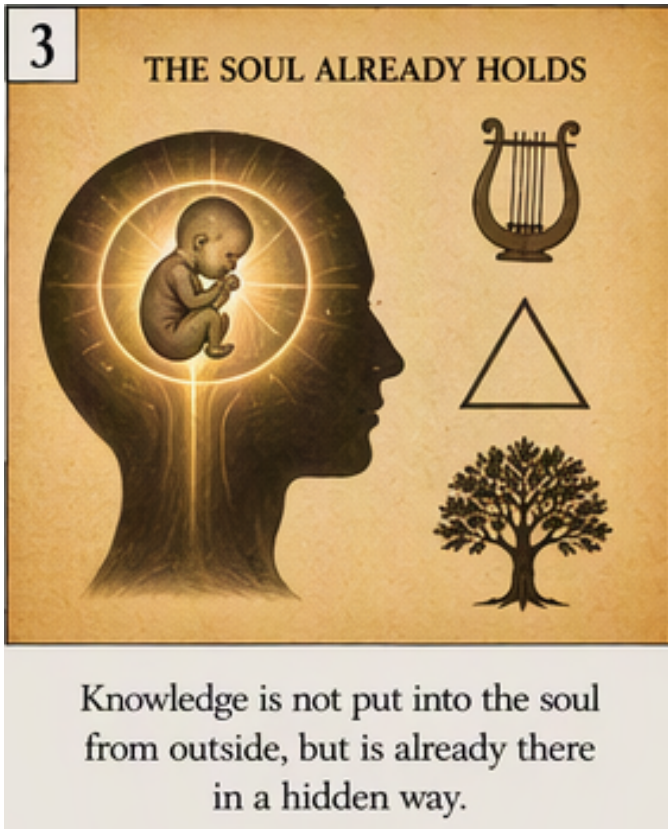
The Midwife — the chapter's central dialogue.

“Well — if you just think about the general facts of the business of midwifery, you’ll see more easily what I mean. “You know, I suppose, that women never work as midwives while they are still bearing children themselves. It’s only the ones who are past child-bearing who take it up.” “Oh yes.” “They say it was Artemis who was responsible for that custom. It was because she, who took on the care of childbirth, was herself childless. “She didn’t, it’s true, give the work to barren women, because human nature is too weak to get skill where it has no experience. But she gave the task to the ones who have become incapable of child-bearing through age — honouring their likeness to herself.” “Yes. Naturally.”

. . .

“And this too is very natural, isn’t it — or perhaps necessary? That it is the midwives who can tell better than anybody whether a woman is pregnant or not.” “Yes, of

course.” “And it’s the midwives who have the power to bring on the pains, and also, if they think fit, to relieve them. They do it with simple drugs and by singing charms. And in difficult cases they can bring the birth about; or, if they think it advisable, they can bring on a miscarriage.” “Yes. That’s so.”





The Midwife — the central concept made visible.

. . .

“There’s another thing too. Have you noticed this about them — that they are the cleverest match-makers alive? Because they are marvellously knowing about which couples will produce the best children.” “No. That’s not at all familiar to me.” “But they’re far prouder of that, believe me, than of cutting the cord.”

. . .

And he went round it, in his usual way, with the crops and the soil — that it is one art that knows when to sow and when to harvest, and one art that knows what ground to put a thing in; and then, because he was Socrates and could not leave anything alone, the awkward fact that there is an unlawful version of the same skill, which is called procuring, and that midwives will hardly touch even honest match-making for fear of being suspected of it.

4



Socrates asks questions, like a midwife,
to help draw out what Theaetetus
already knows but has not yet seen.



The Midwife — the guiding analogy.

. . .

“So the work of midwives is a very important one,” he said. “But it is not so important as my own performance. “And for this reason: that there isn’t in midwifery the further complication, that the patients are sometimes delivered of phantoms and sometimes of realities, and that the two are hard to tell apart. “If there were — then the midwife’s greatest and noblest function would be to distinguish the true offspring from the false. Don’t you agree?” “Yes. I do.”

. . .

“Now my art of midwifery is just like theirs in most respects. “The difference is that I attend men and not women, and that I watch over the labour of their souls and not of their bodies. “And the most important thing about my art

is the ability to apply every possible test to the offspring — to find out whether the young mind is being delivered of a phantom, that is to say an error, or of a fertile truth.”



Lela wonders:
Are we like blocks of clay to be shaped,
or do we already contain the shapes
we can discover?



The Midwife — the argument unfolding step by step.

. . .

“For one thing which I have in common with the ordinary midwives is that I myself am barren of wisdom. “The common reproach against me is that I am always asking other people questions and never say what I think about anything myself, because there is no wisdom in me. And that is true enough. “And the reason for it is this: that god compels me to attend the labour of others, and has forbidden me to give birth. “So that I am not in any sense a wise man. I cannot claim, as the child of my own soul, any discovery worth the name of wisdom.”

. . .

The grove was completely quiet. Lela had both hands over her mouth.

. . .

6



Danae thinks:

When I shape clay, I make something new.

But when I recognize a horse,
am I bringing something out
that was already in my mind?



The Midwife — the competing interpretation.

“But with the people who keep company with me, it is different. “At first, some of them may give the impression of being ignorant and stupid. But as time goes on, and we go on together, every one of them whom god permits is seen to make progress — a progress that astonishes other people and astonishes them. “And yet it is perfectly clear that this is not because of anything they have learned from me. It is that they discover, inside themselves, a multitude of beautiful things, which they bring out into the light. “But it is I, with god’s help, who deliver them of it.”

. . .

“He’s not being modest,” said Lela, through her fingers. “No,” said Sophia. “That isn’t modesty. That’s a job description. He’s saying it as flatly as a man saying he mends shoes.” “Yes. And he is about four weeks from being executed for it, and in one month’s time a jury of five hundred

men will listen to him say a version of the same thing and decide he is lying.”

. . .

7	MAKING	MIDWIFERY
		
The potter makes what was not there before.		The midwife helps what was already there to be born.
Two different kinds of causing.		



The Midwife — Lela and Danae reconstruct the idea.

“And a proof of it may be seen,” Socrates went on, “in the many cases where people who didn’t realise this took all the credit to themselves and thought I was no good. “They’ve then gone and left me sooner than they should — either of their own accord or because somebody else persuaded them to. And after they left me they’ve fallen in with harmful company, with the result that whatever was still in them has miscarried; while they’ve neglected the children I helped them bring into the world, and lost them, because they set more value on lies and phantoms than on the truth. “And in the end they’ve been set down for ignorant fools, both by themselves and by everybody else. “Aristides the son of Lysimachus was one of those. And there have been a great many others.”

. . .

“Sometimes they come back, wanting my company again, and ready to move heaven and earth to get it. “When

that happens, in some cases the divine sign that visits me forbids me to be with them. In others it permits me — and then they begin to make progress again.”



Theaetetus considers:
Perhaps learning is a kind of recollection
— remembering what the soul
already knows.



The Midwife — the historical layer.

. . .

Danae said, in a very small voice: “That’s sad.” “Yes,” said Sophia. “That’s the saddest thing anyone’s said all summer. He’s saying there are people he wanted back and wasn’t allowed to have.”

. . .

“There’s another point in which the people who keep company with me are like women in childbirth,” said Socrates. “They suffer the pains of labour, and are filled day and night with distress. Indeed they suffer far more than women do. “And this pain my art can bring on — and also take away. “But sometimes, Theaetetus, I come across people who don’t seem to me to be pregnant at all. Then I see that they have no need of me, and with the best will in the world I go into the business of match-making. And I

think I'm good enough — god willing — at guessing whose company would profit them. “I have given a great many of them away to Prodicus, and a great number to other wise and inspired men.”



The soul has seen these things before.
Learning is the journey back
to what is truly known.



The Midwife — a wordless conceptual plate.

. . .

“Well, my dear lad — this has been a long yarn. But the reason for it is that I have a suspicion that you are pregnant and in labour, as indeed you think yourself. “So I want you to come to me as to somebody who is both the son of a midwife and skilled in the art himself. And try to answer the questions I ask you as well as you can. “And when I examine what you say, I may perhaps think it is a phantom and not truth, and take it quietly away from you and abandon it. “Now if that happens, you mustn’t get savage with me, like a mother over her first child.”

. . .

“Do you know,” he said, “people have often before now got into such a state with me as to be literally ready to bite, when I take away some nonsense or other from them.

“They never believe that I’m doing it in all goodwill. They are so far from realising that no god can wish evil to a man, and that even I don’t do this kind of thing out of malice — but because it is not permitted to me to accept a lie and put away the truth.”



So we must examine our own minds
with care, ask the right questions,
and let understanding be born within us.
To learn is to remember.



The Midwife — the chapter's narrative and philosophical synthesis.

. . .

“Ready to bite,” said Danae. “I know.” “He said ready to bite.” “I know,” said Lela. “And four weeks later they did.”

. . .

“So begin again, Theaetetus, and try to say what knowledge is. “And don’t on any account tell me that you can’t. Because if god is willing, and you play the man, you can.”



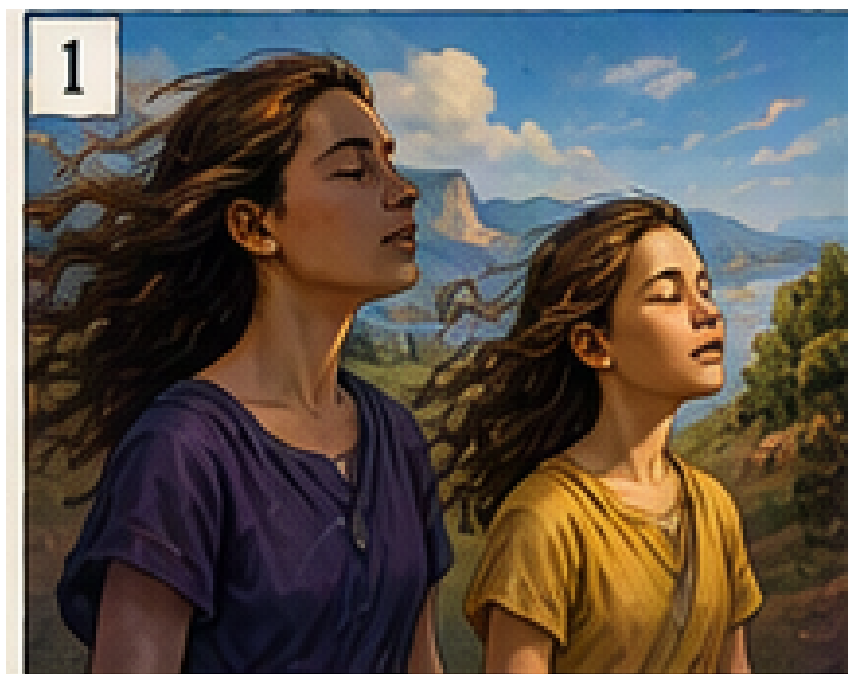
The teacher is a midwife of the soul.
He does not give you knowledge, but helps you give birth to what you already know.



The Midwife — the chapter's closing thought.

Chapter 21

TWENTY-ONE. The Same Wind





The Same Wind — opening scene.

“Well, Socrates,” said the boy, “after encouragement like that it would hardly be decent for anybody not to try his hardest to say what he has in him. “Very well, then. “It seems to me that a man who knows something perceives what he knows. And the way it appears at present, at any rate, is that knowledge is simply perception.”

. . .

“There’s a good frank answer, my son. That’s the way to speak one’s mind. “But come now. Let’s look at it together, and see whether what we have here is really fertile or a mere wind-egg. “You hold that knowledge is perception?” “Yes.”





The Same Wind — the chapter's central dialogue.

. . .

“But look here — this is no ordinary account of knowledge you’ve come out with. It’s what Protagoras used to maintain. He said the very same thing, only he put it rather differently. “He says, you know, that man is the measure of all things: of the things which are, that they are, and of the things which are not, that they are not. “You’ve read this, of course?” “Yes. Often.”



The Same Wind — the central concept made visible.

. . .

“Then you know that he puts it something like this — that as each thing appears to me, so it is for me; and as

it appears to you, so it is for you. You and I each being a man.” “Yes. That’s what he says.”

. . .





The Same Wind — the guiding analogy.

“Well — it isn’t likely that a wise man would talk nonsense. So let’s follow him up. “Now, doesn’t it sometimes happen that when the same wind is blowing, one of us feels cold and the other doesn’t? Or that one of us feels rather cold and the other very cold?” “That certainly does happen.”

. . .

“Well then — in that case, are we going to say that the wind itself, by itself, is cold, or not cold? “Or shall we listen to Protagoras, and say that it is cold for the one who feels cold, and for the other, not cold?”



The Same Wind — the argument unfolding step by step.

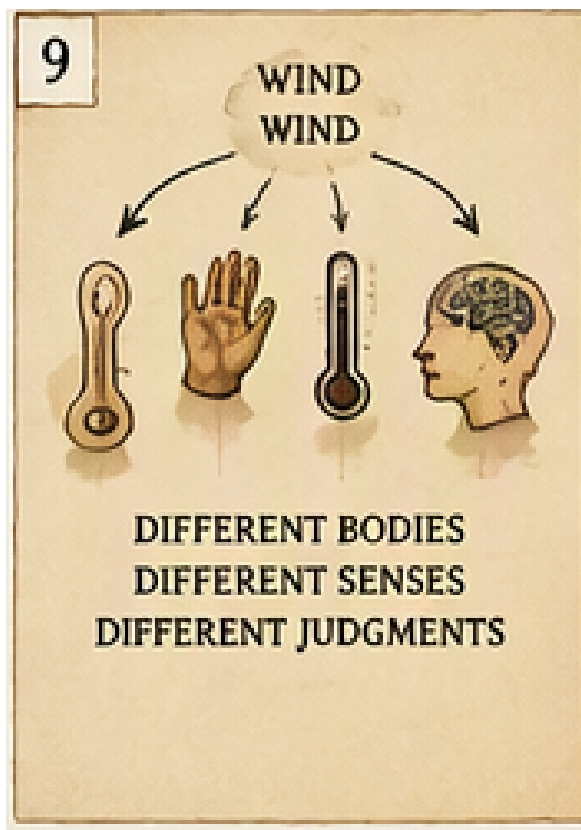
. . .

The three of them in the grass sat in a warm August night in Messenia with a picture of a colonnade in Athens

lying in front of them, and the cicadas going, and nobody breathing very much.

. . .

“It looks as if we must say that.” “And this is how it appears to each of us?” “Yes.” “But this expression it appears means he perceives it?” “It does.”





The Same Wind — the competing interpretation.

. . .

“There,” said Sophia. “Stop. I am going to hold it there for tonight, and I will tell you why. “That is the beginning of the largest single argument in Greek philosophy, and it runs for about a hundred pages, and the two of you have just watched it get lit with one question about the weather.”

. . .





The Same Wind — Lela and Danae reconstruct the idea.

“What’s the argument?” said Danae. “That whatever seems true to you is true, for you. “That there is no such thing as being wrong — only being different. That when you and I look at the same wind and disagree, there is nothing further to find out, because there is no wind underneath the feeling of it; there is only your cold and my not-cold, and neither of us has made a mistake, because there is nothing there to make a mistake about.”

. . .



The Same Wind — the historical layer.

Danae thought about it for a while, lying on her back. “That’s quite nice,” she said. “Yes,” said Sophia. “It is quite nice. It is the kindest doctrine anybody has ever invented and it has never once stopped being popular, and in about two thousand three hundred years it will be the single most common thing anybody in your sister’s school says about anything. “And in three days that old man is going to take it apart so thoroughly that nobody has ever put it back together. “And then he is going to lose anyway,” said the owl, “because when he has finished he still will not be able to say what knowledge is. And that is what this book is. Go to bed.”



The Same Wind — a wordless conceptual plate.

. . .

In the garden under the plane trees, Aristotle said: “How long does he keep it up?” “The whole of tomorrow and most of the day after.” “And at the end of it?” “At the end of it he stands up,” said Plato, “and says that all his art can do is stop a young man thinking he knows what he doesn’t know. And then he says he has to go to the King’s Porch, because Meletus has brought an indictment against him. “And that is the last line.” Aristotle looked up. “That’s in the book?” “That is the last line of the book,” said Plato. “Euclides wrote it down because it was what was said. He had no idea what he was doing. He was being accurate.”



The Same Wind — the chapter's narrative and philosophical synthesis.

Chapter 22

TWENTY-TWO. The Dice





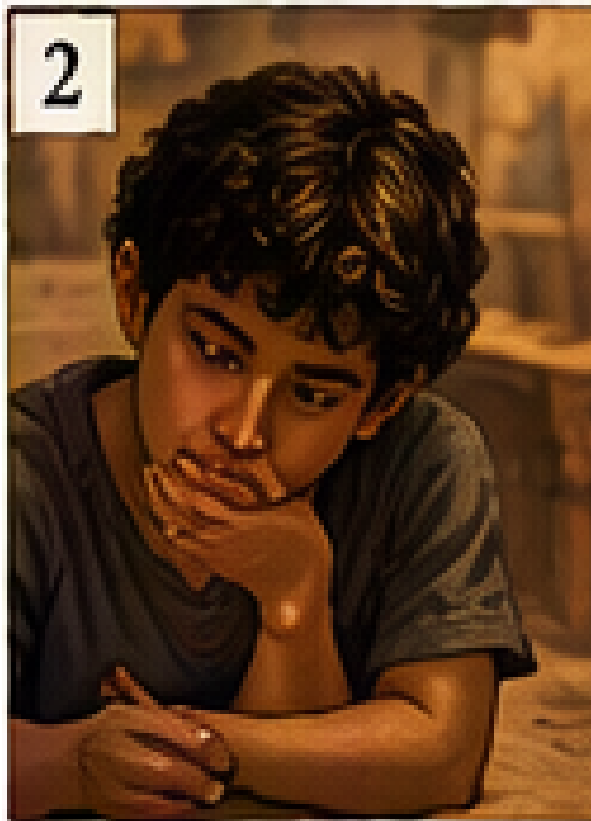
The Dice — opening scene.

“Now here’s a thing,” said Socrates, the next morning, as though no night had come between. “Protagoras was a very clever man. “And I fancy he was hinting at something in that remark about the measure — and telling the truth of it in secret, to his own pupils.” “What do you mean, Socrates? What truth?”

. . .

“I’ll tell you. And it’s no ordinary account either. “It is that nothing is one thing, just by itself. Nothing at all. You can’t rightly call anything by any name, or say it is of any kind whatever. If you call it big it will turn out small as well; if you call it heavy it will turn out light; and so on all the way through — because nothing is one thing, or one kind of thing. “Everything we say is — and we’re wrong to say it — is in fact coming to be, as a result of motion and change and mixture with other things. Nothing ever is. Everything is always becoming.”

...





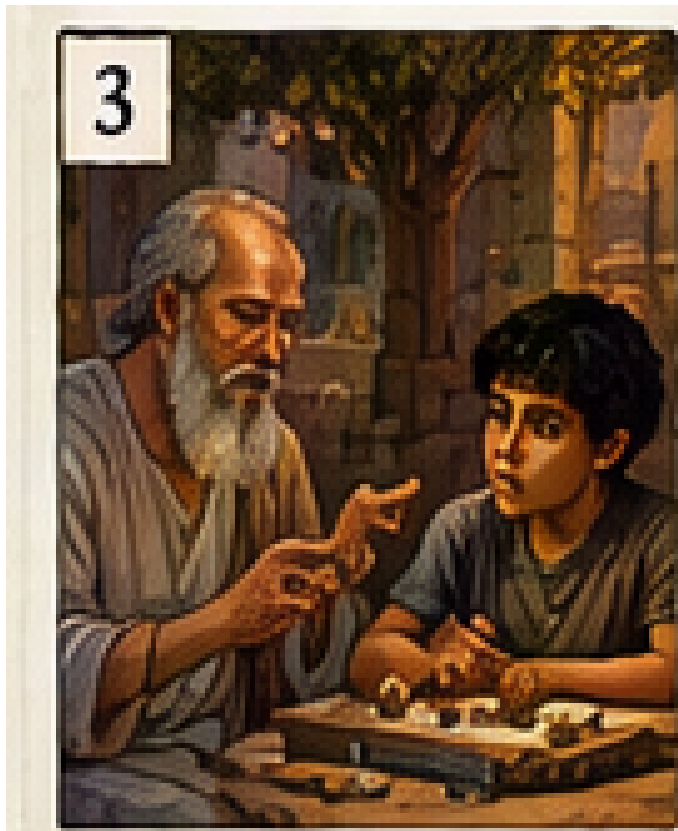
The Dice — the chapter's central dialogue.

“And on this,” he said, “let us take it that all the wise men are lined up one behind the other — with the single exception of Parmenides. Protagoras. Heraclitus. Empedocles. And the very greatest of the poets on either side: Epicharmus in comedy, and Homer in tragedy. “Because when Homer says Ocean, origin of the gods, and their mother Tethys, what he means is that all things are the offspring of flow and of motion. Or don’t you think that’s what he means?”

. . .

“Sophia.” “Yes.” “That’s — that’s the same line.” Lela had scrambled up onto her elbows. “That’s the exact same line of Homer. He quoted it in the other book. About Rhea and Cronus. He said whoever named them understood things the way Heraclitus does, and then he quoted Ocean and Tethys.” “Yes.” “So this is the same idea.” “It is the same idea,” said Sophia. “It is the whirlpool.”

...





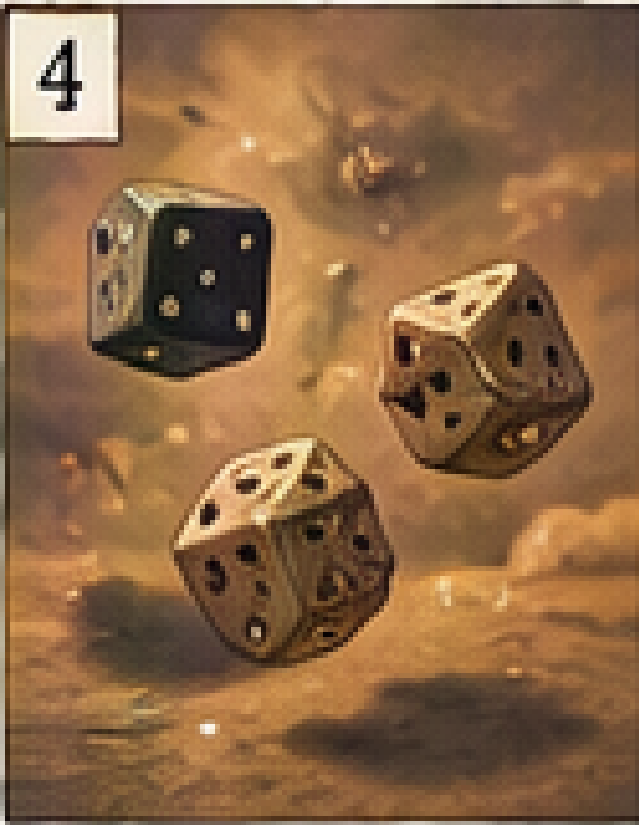
The Dice — the central concept made visible.

Lela sat all the way up. “He said that. At the end. He said the name-givers had fallen into a kind of whirlpool and were being spun round in it and dragging us in after them.” “Yes.” “So he already knew. When he was doing the words, he already knew this whole thing was coming.” “He had known it for thirty years,” said the owl. “What you watched him do to the words was a joke he was telling about the argument you are about to watch him take seriously. And it is the largest argument in the language, and it is going to take him two days, and he is not going to win it in the way you want him to.”

. . .

“Let’s see, then, whether it is a real child or a wind-egg,” said Socrates in the picture. “Look at it this way. “Take six dice. If you put four beside them, we say the six are more than the four — half as many again. “But put twelve beside them, and we say the six are fewer. Half the number. “And

there's no getting out of that. Or do you think there is?"
"No. I don't."





The Dice — the guiding analogy.

. . .

“Well then. Suppose Protagoras, or anybody else, asked you this: is it possible, Theaetetus, for anything to become bigger, or more in number, in any other way than by being increased? “What’s your answer to that?”

. . .

“Well, Socrates — if I answer what seems true to the question in front of me, I shall say no, it isn’t possible. “But if I think about the question we had before, then to avoid contradicting myself I have to say yes, it is.”

. . .

“That’s a good answer, my friend, by Jove it is. You’re inspired. “But I think if you answer yes, it will be like that line in Euripides — the tongue will be safe from refutation, but the mind will not.” “That’s true.”

5



MANY OUTCOMES
ONE GAME



The Dice — the argument unfolding step by step.

. . .

Danae sat bolt upright. “What does that mean?” “It’s from a play,” said Sophia. “A man has sworn an oath and wants out of it, and he says: my tongue swore it; my mind did not.” “So Socrates is saying —” “He is saying: you can say the words that get you out of the corner, and nobody will be able to catch you, and you will know perfectly well that you have not answered anything. “He says it to a boy of fifteen, in passing, as a compliment,” said the owl. “It is the single most useful sentence I have ever heard said to a child and nobody has ever put it on a wall.”

. . .





The Dice — the competing interpretation.

“Now,” said Socrates, “if you and I were professional experts, who had already sorted out everything that’s in our minds, we’d spend our spare time trying each other out — a regular sophists’ set-to, with a great clashing of argument against argument. “But as it is, we’re only plain men. So the first thing we’ll do is look at our own thoughts, in relation to themselves, and see what they are — whether they agree with one another or are completely at odds.” “That would certainly be my aim.” “And mine. “So — since we aren’t in any way pressed for time — don’t you think the thing to do is to go over this quietly and patiently? To take ourselves seriously to pieces, and ask what these apparitions inside us really are?”

. . .

7





The Dice — Lela and Danae reconstruct the idea.

And he set the three of them out, one at a time, as plainly as a man laying knives on a table. First: nothing can possibly have become greater or less, in size or in number, so long as it is equal to itself. Second: a thing to which nothing is added and from which nothing is taken away neither increases nor diminishes, but stays equal. Third: it is impossible that a thing should ever be what it was not before, without having become — without any process of becoming at all. “Isn’t that so?” “Yes. I think so.”

. . .

“Now it seems to me that these three things we have just admitted are fighting one another in our souls. “When we talk about the dice. And when we say that, within the space of a year, I — a full-grown man — without having been either increased or diminished, am now bigger than you, who are only a boy; and later on am smaller. Though I have lost nothing, and it is only that you have grown.

“Because that means that I am, at the later stage, what I was not before. And that without having become — since without becoming it isn’t possible to have become. And without losing any size I could never become less. “And there are countless other examples of the same thing, once we let these in.”





The Dice — the historical layer.

. . .

“You follow me, I take it, Theaetetus. I think you must be familiar with this kind of puzzle.”

. . .

“Oh yes,” said the boy. “Indeed, Socrates. I often wonder like mad what these things can mean. Sometimes when I’m looking at them I begin to feel quite giddy.”

. . .

In an olive grove two thousand three hundred years away, Danae said, “Yes.” She said it out loud, to nobody, sitting up with her hands flat on the ground, and she did not appear to notice she had said it at all.

. . .

9



**POSSIBLE
NOT CERTAIN**



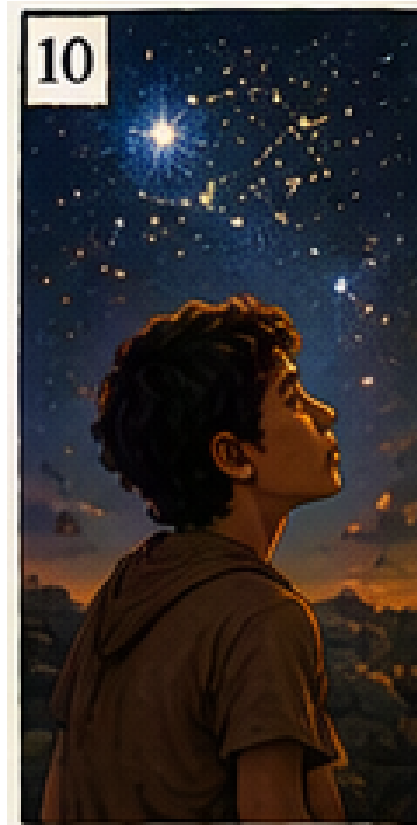
The Dice — a wordless conceptual plate.

“I dare say you do, my dear boy,” said Socrates. “It seems Theodorus was not far from the truth when he guessed what sort of person you are. Because this is an experience that belongs to a philosopher — this wondering. “This is where philosophy begins, and nowhere else. “And the man who made Iris the child of Thaumas was perhaps no bad genealogist.”

. . .

“Sophia,” said Danae, “what does that mean? The last bit.” “Iris,” said the owl, “is the rainbow. She is also the messenger — the one who goes up and down between the earth and the gods and carries what is said. “And her father, in the old genealogies, is Thaumas. “And thauma, Danae, is the Greek word for wonder. For the feeling you get when a thing is strange and you can’t stop looking at it. “So the man who wrote that down was saying that the rainbow — the thing that joins the ground to the sky

and carries messages across — is the daughter of Wonder. “And Socrates has just told a fifteen-year-old boy who feels giddy that this is not a fault in him. It is the beginning. It is the only place it ever begins.”





The Dice — the chapter's narrative and philosophical synthesis.

. . .

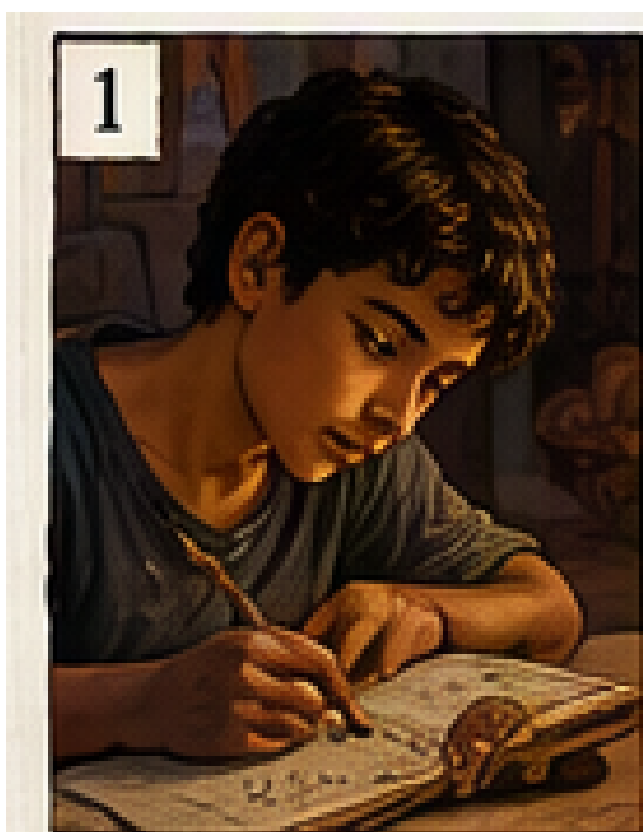
Danae lay down in the grass and looked at the sky for a while. “I feel like that,” she said. “The giddy one. All the time. I thought it was because I’m bad at it.” “No,” said Sophia.

. . .

And Lela, who had spent a year finding out that the thing she was best at was having answers ready, lay in the dark beside her ten-year-old sister and did not say anything at all, because there was nothing to say that would not have been about herself.

Chapter 23

TWENTY-THREE. The Verb To Be





The Verb To Be — opening scene.

“But aren’t you beginning to see what the explanation of these puzzles is? According to the theory we’re crediting to Protagoras?” “I don’t think I am. Not yet.” “Then I dare say you’ll be grateful to me if I help you dig out the hidden truth in the thought of a great man. Or perhaps I should say, of great men.” “Of course I shall, Socrates. Very grateful.”

. . .

“Then have a look round, and see that none of the uninitiated are listening.”

. . .

Danae laughed. “He’s checking nobody’s listening!” “He is.” “But he’s in a — that’s a public building. There are about nine people standing there.” “There are,” said Sophia. “Watch him do it anyway.”

...





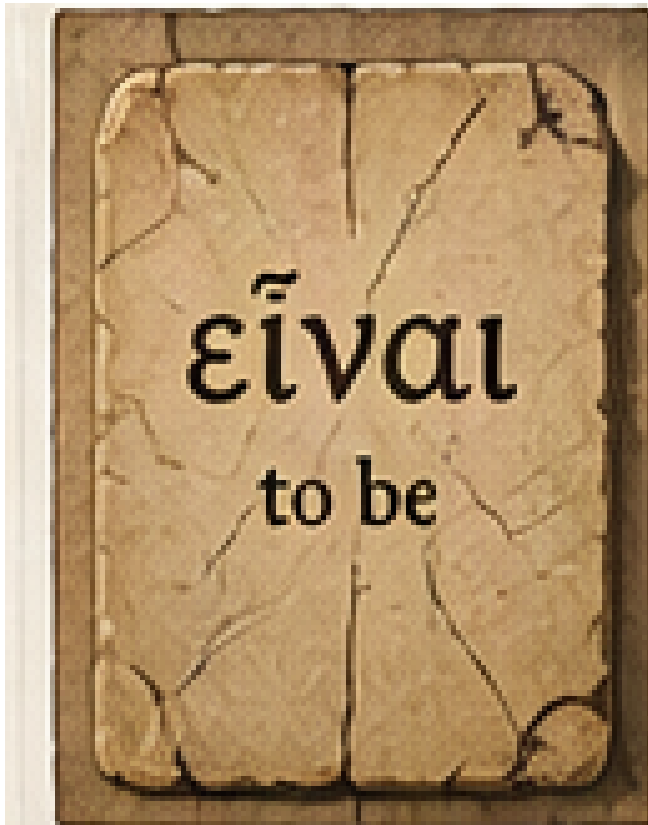
The Verb To Be — the chapter's central dialogue.

“I mean the people who think that nothing exists except what they can get hold of with both hands. “People who refuse to allow that actions, and processes, and the whole invisible world, have any place in reality at all.” “They must be tough, hard fellows, Socrates.” “They are, my son. Very crude people. “But these others — whose mysteries I’m going to tell you — are a much more subtle type.”

. . .

“And these mysteries,” he said, “begin from exactly the principle everything we’ve been saying depends on. “Which is that everything is really motion, and there is nothing but motion. “And motion has two forms — each of them infinite in number, but distinguished by what they can do. One is active and the other is passive. “And out of the meeting and the rubbing together of those two there comes an offspring, infinite in number, but always in twins. “On the one hand, the thing that is perceived. On the other, the

perception of it. “And the perception is in every case born together with the thing perceived, and comes out along with it.”





The Verb To Be — the central concept made visible.

. . .

“For the perceptions we have names like sight, and hearing, and smelling; feeling cold and feeling hot. And also what we call pleasures and pains, and desires and fears. And a great many others that have names, and an infinite number that don’t. “And on the other side there is the whole race of things perceived. For every kind of seeing, a kind of colour. For every kind of hearing, a kind of sound. And so on — each of them born of the same parents as the perception it belongs to.”

. . .

“Now what does this tale really mean, Theaetetus? How does it bear on what we were saying? Do you see?” “Not really, Socrates.”

4



15



15



15

15



The Verb To Be — the guiding analogy.

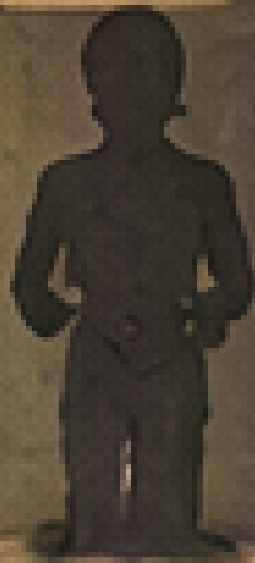
. . .

“Then let’s see if we can round it off. “What it’s trying to say, presumably, is this. “All these things are in motion, as we say. And their motion is distinguished by being fast or slow. What is slow has its motion in one and the same place, and in relation to whatever is near it. And in that way it produces offspring — and the offspring are faster, because they move through space. “So: the eye, and some other thing that has come into the eye’s neighbourhood — something of the right sort for an eye — together generate whiteness, and the perception that is by nature joined to it. “Neither of which would ever have come to be, if it had been anything else that the eye met, or anything else that met the object.”

3



IS



IS NOT



The Verb To Be — the argument unfolding step by step.

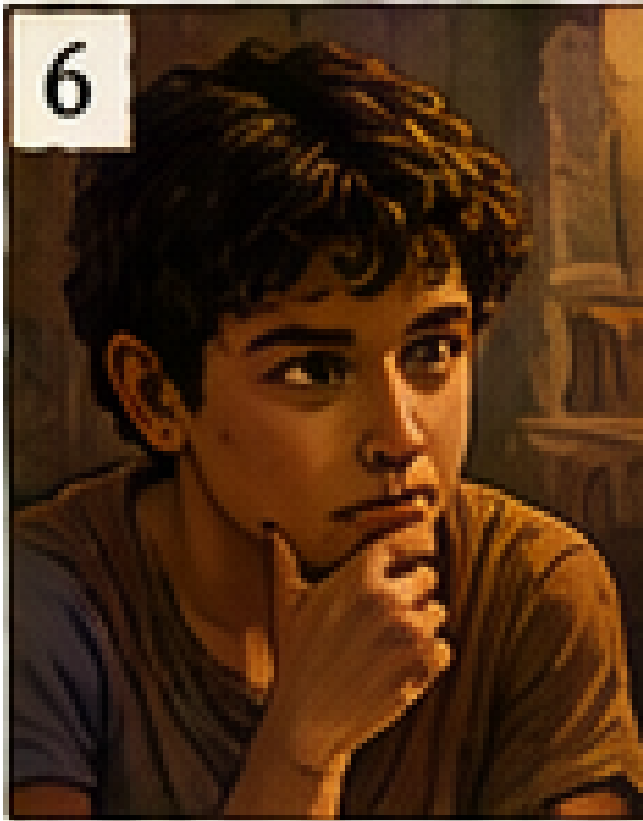
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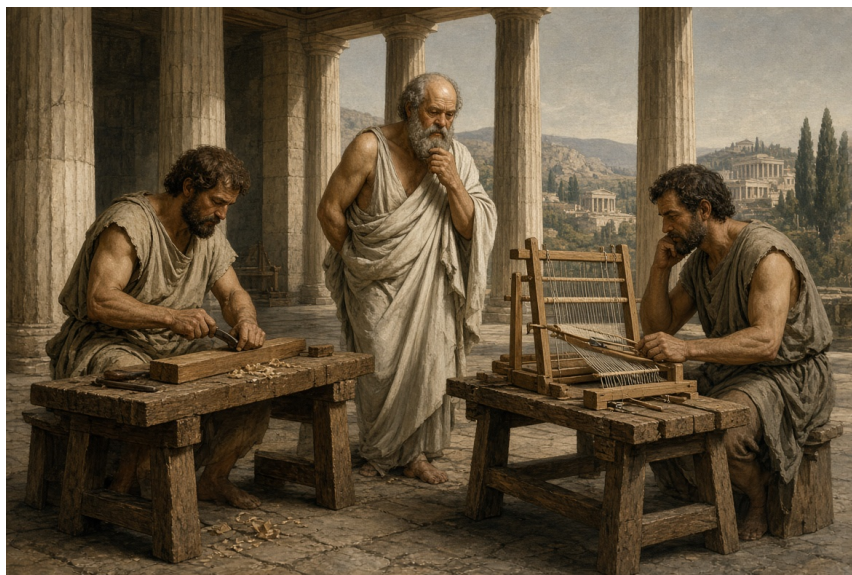
“And in that event, motions arise in the space in between. Seeing, from the side of the eye. Whiteness, from the side of the thing that is helping to produce the colour. “And the eye is filled with seeing. At that moment it sees — and becomes, not sight, but a seeing eye. “And its partner in producing the colour is filled with whiteness, and becomes, not whiteness, but white. A white stick, or a white stone, or whatever it happens to be that has turned out to be that colour.”

. . .

Nobody in the grove moved for a moment. Then Lela said, slowly: “The white isn’t in the stick.” “No.” “And it isn’t in the eye either.” “No.” “It happens in the gap. It gets born in the middle, between the two of them, when they

turn up at the same time. And before that there wasn't any white anywhere at all." "Yes," said Sophia.





The Verb To Be — the competing interpretation.

. . .

“That’s—“ Lela stopped, and started again. “That’s not stupid. That’s the thing. I keep waiting for it to be stupid and it isn’t. It’s mad and it isn’t stupid.” “No,” said the owl. “It is one of the cleverest things anybody has ever thought, and it was thought before anybody knew a single thing about eyes, and a great many people who have since found out a great deal about eyes have come round to something uncomfortably like it. “That is why he is taking two days over it. If it were stupid he would need four minutes and you have watched him do that.”

. . .

7



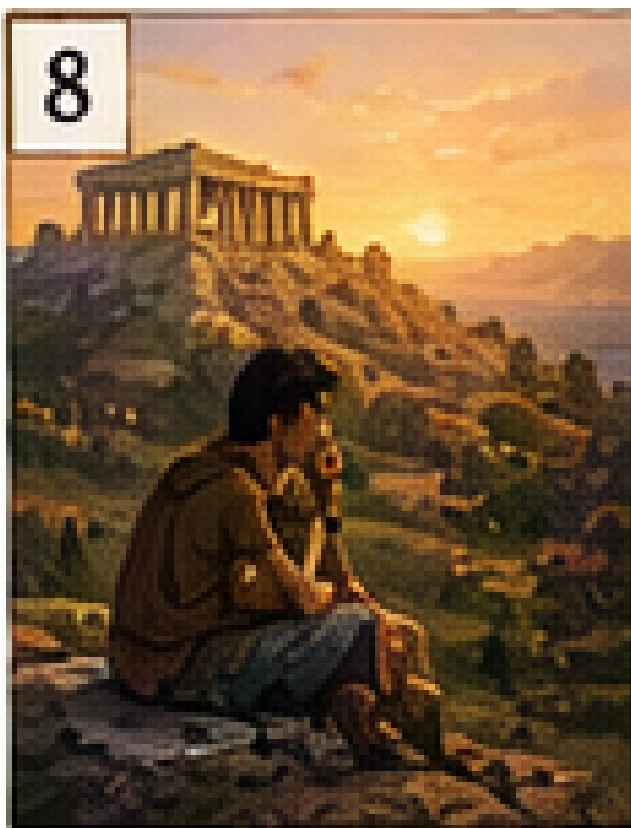


The Verb To Be — Lela and Danae reconstruct the idea.

“And we must understand this,” Socrates went on, “as applying in the same way to hard, and to hot, and to everything else. “Nothing, as we said before, is in itself any of these things. All of them, of every kind, are what things become through associating with one another, as a result of motion. “Because even in the case of the active and the passive, it’s impossible — as they say — for thought to take them one at a time and pin either of them down to being anything. “There is no passive until it meets the active. There is no active except in company with the passive. And what is active in company with one thing shows itself passive when it falls in with something else.”

. . .

“And so, wherever you turn, there is nothing — as we said at the start — which is in itself just one thing. Everything becomes, relatively to something. “And the verb to be must be totally abolished.”





The Verb To Be — the historical layer.

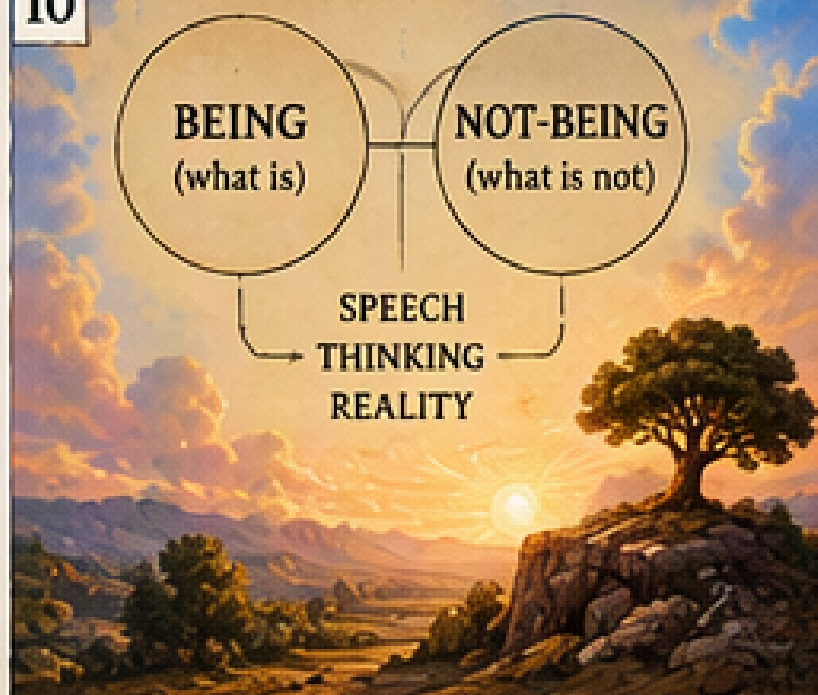
. . .

Lela said, “What?”

. . .

“—though indeed we’ve been led by habit and ignorance into using it ourselves more than once, even in what we’ve just been saying. “And that is wrong, these wise men tell us. Nor ought we to allow the use of words like something, or of something, or mine, or this, or that, or any other name that makes things stand still. “We ought to speak according to nature, and say things like becoming, and being produced, and passing away, and changing. “Because if you speak in a way that makes things stand still, you will easily be refuted. “And this applies to the single case and to the many lumped together — such a lump, I mean, as people call a man, or a stone, or give the names of the various animals and sorts of thing to.”

10





The Verb To Be — a wordless conceptual plate.

. . .

“Well, Theaetetus. Does that look to you a tempting meal? Could you take a bite of the delicious stuff?”

. . .

“I really don’t know, Socrates,” said the boy. “I can’t even quite make out what you think about it yourself — whether you’re saying this is what you believe, or whether you’re testing me.”

. . .

In the garden of the Academy, Aristotle had not written anything for a long time. “He has just abolished the word is,” he said. “He has.” “You cannot do that.” “Go on.” “You cannot do it because the sentence that abolishes it uses it.” The young man turned his hands over. “Everything is

motion. Is. He has said it himself and then apologised for saying it and then said it again in the apology. “You cannot state the doctrine that nothing stands still in a language where words stand still. The moment you open your mouth you have lost.”



The Verb To Be — the chapter’s narrative and philosophical synthesis.

. . .

Plato nodded slowly, and did not look especially surprised, and said: “Keep that. Do not use it yet. “Because he is going to say very nearly that himself, tomorrow, and much better than you have just said it, and when he does I want you to notice how long he waits.”

Chapter 24

TWENTY-FOUR. Asleep





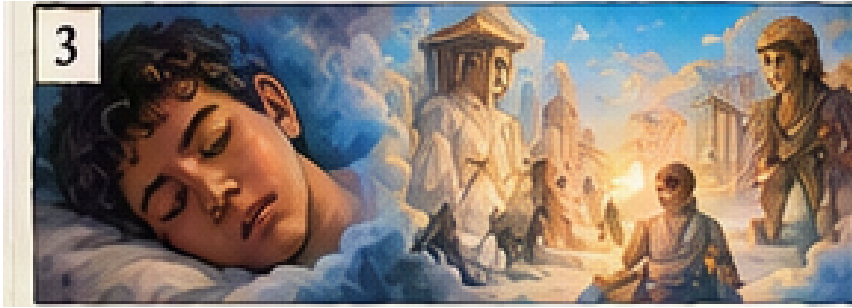
Asleep — opening scene.

“There’s a question you must often have heard people ask,” said Socrates. “The question what evidence we could offer, if we were asked whether at this moment, right now, we are asleep and dreaming all our thoughts — or awake, and talking to each other in real life.”

. . .

The whole grove seemed to Lela to go very slightly cold.

. . .



Asleep — the chapter's central dialogue.

“Yes, Socrates,” said Theaetetus. “It certainly is difficult to find the proof we want there. “The two states seem to match each other in all their features. There’s nothing to stop us thinking, while we’re asleep, that we’re having the very same discussion we have just had. “And when we dream that we’re telling the story of a dream, the likeness between the two is extraordinary.”

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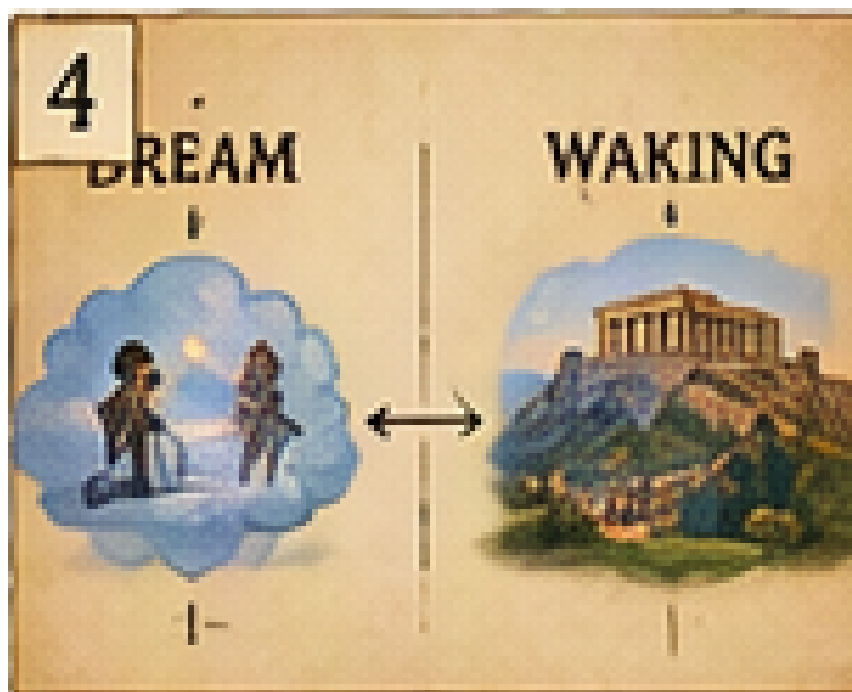


Asleep — the central concept made visible.

“You see, then,” said Socrates. “It isn’t difficult to find matter for dispute. “When we can’t even settle whether we’re asleep or awake — and since the time we spend asleep is equal to the time we spend awake — in each of the two states our soul insists that whatever it believes at the time is true beyond doubt. “So for half our lives we say these things are true, and for the other half we say those things are, and we make exactly the same fuss about each of them.”

. . .

“Danae,” said Lela. “What?” “Are we asleep?” “No.” “How do you know?” “Because I’m not,” said Danae, with enormous certainty, and Lela lay back in the grass and laughed, and then stopped laughing, and lay there for a while.





Asleep — the guiding analogy.

. . .

And the argument in the picture went on, and it was worse than the dreams. Because a sick man's food tastes bitter, Socrates said, and a healthy man's tastes sweet, and neither of them is making a mistake. The healthy man isn't wiser and the sick man isn't more ignorant. The wine is not sweet-in-itself and sour-in-itself. There is a sweet that happens between this wine and that tongue, and a sour that happens between the same wine and a different tongue, and there is no third thing behind them for either of them to be right about. And so — since nothing is one thing by itself, and the eye and the object make the white between them — it follows that whatever anybody perceives is exactly what he perceives, and is his own, and cannot be wrong about anything, because there is nothing left over to be wrong about.





Asleep — the argument unfolding step by step.

. . .





Asleep — the competing interpretation.

“So my perception is true for me,” said Theaetetus. “Because it always belongs to the being that is mine. “And I am, as Protagoras says, the judge of things that are for me, that they are — and of things that are not, that they are not.” “So it seems.”

. . .

“How, then, if I never make a mistake, and never stumble in what I think — about the things that are, or the things that are coming to be — how can I fail to know the things I perceive?” “There’s no way you can.”

. . .

7

IT SEEMS TRUE
BUT IS NOT





Asleep — Lela and Danae reconstruct the idea.

“So you were entirely right to say that knowledge is nothing but perception.”

. . .

The picture ran on for a moment with nobody in it speaking.

. . .



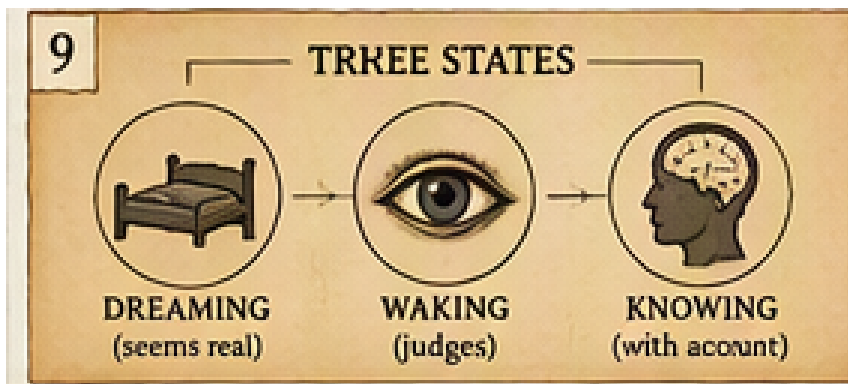


Asleep — the historical layer.

“It’s finished,” said Lela. “It is finished,” said Sophia. “The boy has now been delivered. It took him a day and a half and it is a whole living thing and it has not one loose joint in it. “Every piece of it holds. Protagoras’ measure, and the flux, and the eye and the whiteness, and the dreams, and the sick man’s wine. They all lock together and they all support each other and there is no way in. “And it says that nobody has ever been wrong about anything in the history of the world.”

. . .

Danae was quiet a long time. Then she said: “But people are wrong. Lela’s wrong about loads of things.” “Thank you.” “You are. You were wrong about the — you were wrong for a whole month last summer about a man walking through a tree.”

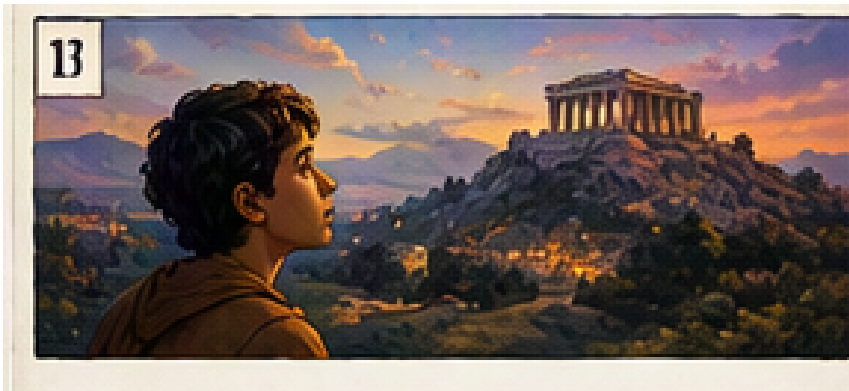


Asleep — a wordless conceptual plate.

. . .

“Yes,” said Sophia. “And that is what the rest of this book is, and it is going to take him longer than you think, and he is going to be extremely careful about it, and I

would like you both to notice something before he starts.” “What?” “He has just spent a day and a half building it,” said the owl. “For a boy who could not have built it. He made the best case anybody has ever made for a thing he does not believe, and he made it better than the man who invented it made it, and he did it before he laid a finger on it. “You have watched him do that once before, to Cratylus, and you did not know what you were watching. “You know now. Look at it properly. Almost nobody does this. Most people who argue spend their whole lives knocking down a thing nobody believes and calling it a victory.”





Asleep — the chapter's narrative and philosophical synthesis.

Chapter 25

TWENTY-FIVE. Pigs and Ba-boons

1





Pigs and Baboons — opening scene.

“Well,” said Socrates, “so we have brought your child into the world at last, whatever sort of creature it turns out to be. “And now that it’s born, we must run round the hearth with it — I mean, we have to look at it properly from every side, and make sure we aren’t letting something go that isn’t worth bringing up. “Or do you think that whatever it is, it has to be reared and not exposed? Will you bear to see it examined, and not get savage if somebody takes it away from you, first-born though it is?”

. . .

“Theaetetus will bear it, Socrates,” said Theodorus. “He’s not the least bit difficult. “But in heaven’s name, tell us — is it not so after all?” “You are a glutton for discussion, Theodorus,” said Socrates. “It’s good of you to think of me as a bag of arguments and suppose I can easily pull one out and say that after all it isn’t so. “But you don’t see what is happening. Not one of the arguments comes from

me; they always come from the person I am talking with. All I know, and it's very little, is how to take an argument from somebody else — somebody who is wise — and give it a fair reception.”





Pigs and Baboons — the chapter's central dialogue.

. . .

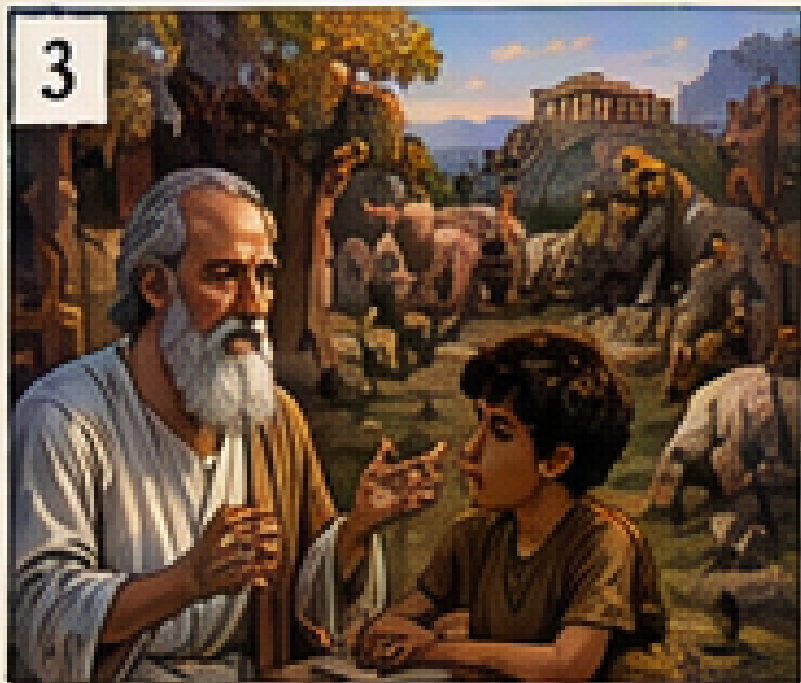
“That’s better said than what I said,” said Theodorus.
“Go on that way.”

. . .

“Then do you know what surprises me about your friend
Protagoras, Theodorus?” “What’s that?”

. . .

3





Pigs and Baboons — the central concept made visible.

“Well — I like most of what he says. That what seems to a man, is, for that man. But I’m astonished at the beginning of his book. “I don’t see why he didn’t say, in starting the Truth, that a pig is the measure of all things. Or a baboon. Or some still stranger creature that has perception. “That would have been a magnificent and thoroughly contemptuous opening. It would have shown us that while we were all admiring him for his wisdom as though he were a god, he was really no better in understanding than a tadpole — let alone any other man.”

. . .

Danae fell over sideways laughing. “He’s so rude,” she said, into the grass. “He’s so rude and he does it so politely.”

. . .





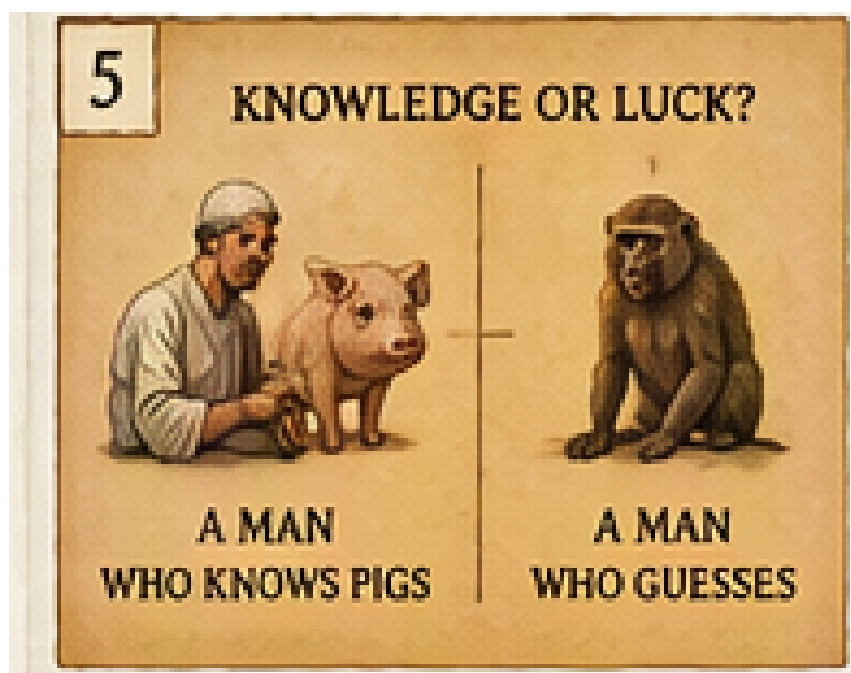
Pigs and Baboons — the guiding analogy.

“Or what are we to say, Theodorus? “If whatever each man judges by perception is true for him — if no man can assess another man’s experience better than he can himself, and nobody has any authority to examine another man’s judgment and see whether it’s right or wrong — if each of us is to be the sole judge of what is his own, and everything he judges is correct and true — “then how on earth, my friend, was Protagoras a wise man? “How was he fit to set up as a teacher of other people, and to be worth enormous fees? “And how were we the more ignorant ones, who had to go to him — when each of us is the measure of his own wisdom?”

. . .

“That’s the whole thing, isn’t it,” said Lela. “That is the whole thing,” said Sophia, “and it is about eleven words long, and it took him a day and a half of building to be allowed to say it. “If every man is already right, nobody

can teach anybody anything. And Protagoras charged more for teaching than any man in Greece.”





Pigs and Baboons — the argument unfolding step by step.

. . .

“Can we avoid saying that Protagoras was joking when he wrote that? “Or that he came out with this solemn pronouncement for the benefit of the common people — while to his own pupils he told the truth in secret?” “Socrates,” said Theodorus, “the man was my friend, as you were just saying. I couldn’t bear to have him refuted through anything I agreed to. “And I couldn’t bear to oppose you against what I think, either. So take Theaetetus again. He seemed to be following you very well just now.”

. . .

6





Pigs and Baboons — the competing interpretation.

“He does that too,” said Lela. “What?” “The old man just got out of it. He just — he said he was my friend, I’d rather not, and handed the boy back over.” “Yes,” said Sophia. “He will do it three more times before the end of tomorrow, and each time Socrates will let him, and each time it will be a little more obvious, and the fourth time Socrates is going to say something about it that Theodorus will not enjoy.”

. . .

And then the argument turned nasty for a while, in the way arguments do, and Socrates did the thing that Lela had been waiting three days to see him do to somebody, which was to demonstrate exactly how cheaply the whole business could be done if you wanted to do it cheaply.

. . .





Pigs and Baboons — Lela and Danae reconstruct the idea.

“Look,” he said. “Suppose somebody asked you this. “Is it possible for the same man to know a thing and not know it?” “And I suppose we’d have to say — “You’d have to say no. Now watch. “Cover one of your eyes with your hand and look at my cloak with the other. “Do you see the cloak?” “Yes.” “With both eyes?” “No. With one.” “Then you both see it and do not see it at the same time — and so, on your own account, you both know it and do not know it.”

. . .

“That’s cheating,” said Danae, sitting up furiously. “It is.” “That’s just — that’s not even an argument, that’s a trick, that’s the kind of thing a boy in my class does — “Yes,” said Sophia. “And Socrates does it on purpose, in his own voice, out loud, and then he stops and says what it is.”

. . .





Pigs and Baboons — the historical layer.

“Now — what defence would you have, Theaetetus, against a man who did that?” The boy did not answer. “None at all,” said Socrates. “And that is exactly my point. “Because there is a kind of man who would do it, and would think he had won, and would go away pleased. And what he has actually done is catch you with a word. “If we behave like that, we’ll be doing what we said we despised in the professional set-tos: fighting to win, instead of looking at the thing. “So let us do neither. Let us go back and look at where all this came from, and see whether we were right or wrong.”

. . .

“And then he does the best thing in the book,” said Sophia, “and I want you to be sitting up for it, because the two of you have earned it, and because you are not going to see it anywhere else.”

. . .

9

TRUE KNOWLEDGE NEEDS



PERCEPTION
of the thing

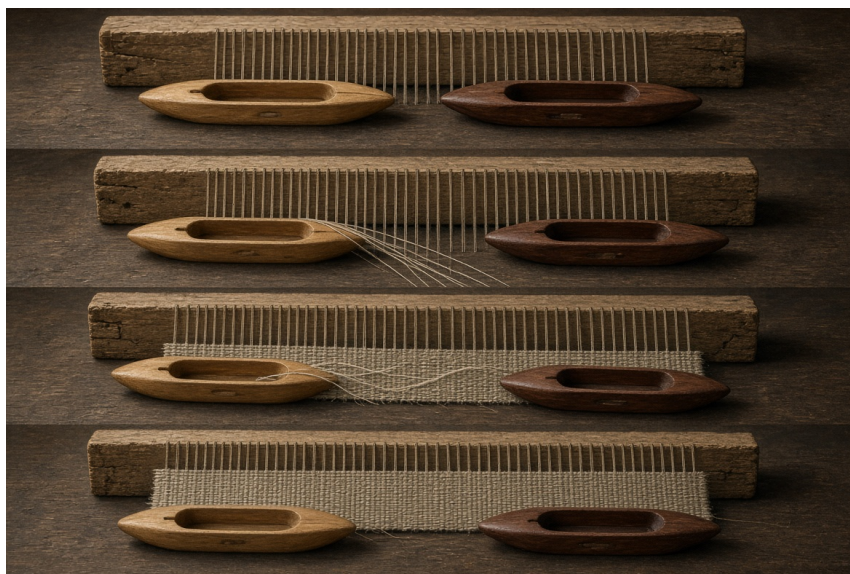


TRUE
JUDGMENT



AN ACCOUNT
of how and why





Pigs and Baboons — a wordless conceptual plate.

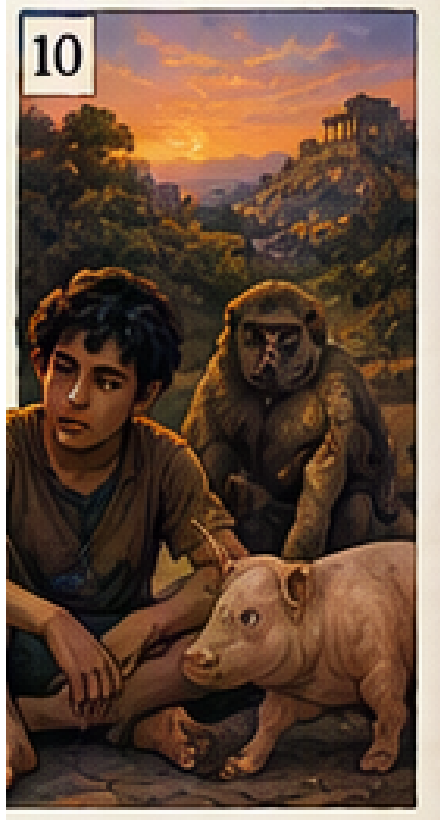
“But Protagoras is dead,” said Socrates, “and cannot come and defend his own child. And we are trampling on it while its guardian isn’t here. “And nobody else will lift a hand for it — not even Theodorus, who inherited it from him. “So it looks as if we shall have to do it ourselves. We shall have to come to his rescue. “Let me try to speak for him.”

. . .

Lela put both hands over her face. “He’s going to argue for the other side.” “He is going to argue for the other side,” said Sophia. “He is going to stand up and be Protagoras and make the best defence of the thing he has just been attacking, because the man who invented it is dead and there is nobody else in the room decent enough to do it. “That is what is coming tomorrow. Go to bed.”

. . .

10





Pigs and Baboons — the chapter's narrative and philosophical synthesis.

In the garden, Aristotle said, after some time: “Nobody does that either.” “No.” “He is winning and he stops and he argues the other man’s case for him because the other man is dead.” “Yes.” “Why?” “Because he is not trying to win,” said Plato. “You have been told that about him since you got here and you have been very polite about it and you have not believed a word of it until this afternoon. “Now you have seen it. It is the only thing about him that is genuinely hard to imitate, and I have watched clever men try for thirty years, and I have not managed it myself.”

Chapter 26

TWENTY-SIX. The Rescue





The Rescue — opening scene.

He began quietly, and he did not do a voice. That was the first thing Lela noticed and the thing she remembered longest. He did not put on an accent or make himself grand or do any of the things people do when they pretend to be somebody else. He simply began speaking as Protagoras, in his own voice, and after about four sentences it stopped being a performance and became a man in the room.

. . .

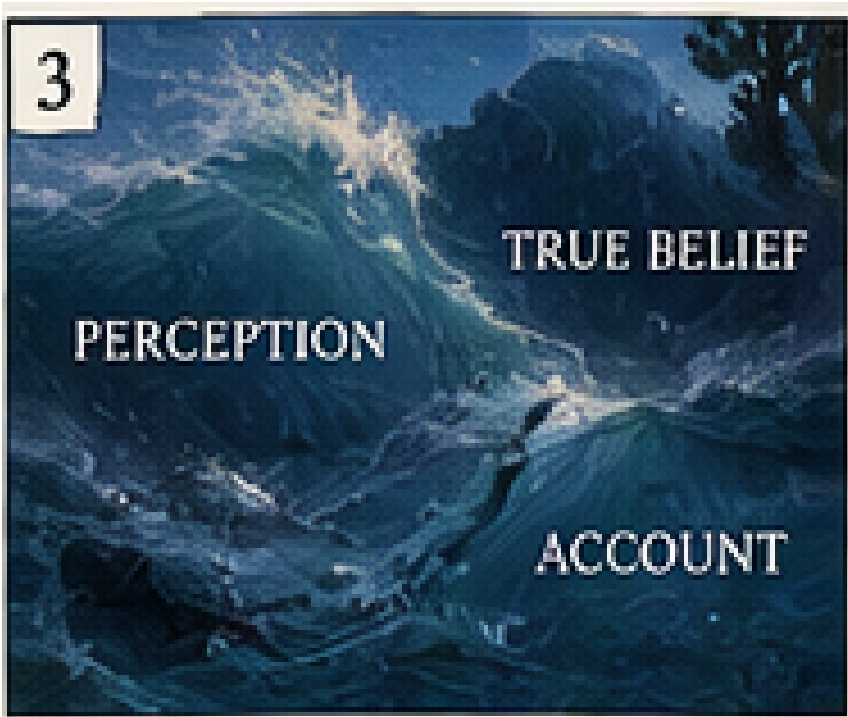
“My good Socrates,” he said, “you keep talking about pigs and baboons. You are showing the mentality of a pig yourself, in the way you handle my writings, and you are persuading your audience to follow your example. “That is not the way to behave.”

. . .

“Oh,” said Danae, with great satisfaction.

. . .

“I take my stand on the truth being as I have written it. Each one of us is the measure both of what is and of what is not. “But there are countless differences between men, for exactly this reason — that different things both are, and appear to be, to different people. “I certainly do not deny that wisdom exists, or that there are wise men. Far from it. “But the man I call wise is the man who can change the appearances. The man who, in any case where bad things both appear and are to one of us, works a change, and makes good things appear and be for him instead.”





The Rescue — the chapter's central dialogue.

. . .

Lela sat forward. “That’s—“ “Yes,” said Sophia. “That’s an answer. That’s a real answer. He’s saying you can be wise without anybody being wrong.” “Yes.” “You’re not a man who knows the truth and tells it to a man who doesn’t. You’re a — you’re a doctor. You take somebody from a bad state to a better one. Nobody was lying. He was just sick and now he isn’t.” “Yes,” said the owl. “And Socrates thought of that. Not Protagoras. Protagoras never wrote it. This is the best version of Protagoras that has ever existed, and the man who made it is the man trying to destroy it, and he made it four weeks before he died, for a dead opponent, in front of a boy of fifteen, because there was nobody else to do it.”

. . .

4

START
AGAIN



The Rescue — the central concept made visible.

“Remember what we were saying,” the speech went on. “To the sick man what he eats both appears and is bitter. To the healthy man it both appears and is the opposite. “Now what we have to do is not to make one of these two wiser than the other — that isn’t even a possibility. Nor is it our business to go about accusing people, calling the sick man ignorant for judging as he does and the healthy man wise because he judges differently. “What we have to do is make a change from the one state to the other, because the other is better. “And in education it is exactly the same. We have to change a worse state into a better one. Only the doctor does it with drugs, and the teacher does it with words. “What never happens is that a man who judges what is false is made to judge what is true. Because it is impossible to judge what is not, or to judge anything other than what you are experiencing at that moment; and what you are experiencing at that moment is always true. “What really happens is this: when a man’s soul is in a

bad state, he judges things that are akin to it; and giving him a sound soul causes him to think different things — good things. “And the things that then appear to him are what some people, who are still at a primitive stage, call true. “My position is that the one kind are better than the other. But in no way truer.”





The Rescue — the guiding analogy.

. . .

Nobody in the grass said anything for a while. “That’s not stupid either,” said Lela at last. “No.” “Sophia, that’s — some of that’s nicer than what Socrates thinks.” “Yes,” said the owl. “Notice that. And notice who said it for him.”

. . .

6

PERCEPTION

TRUE
BELIEF

ACCOUNT



The Rescue — the argument unfolding step by step.

“Nor, my dear Socrates, should I dream of suggesting that we look for wisdom among frogs. “I look for wisdom about animal bodies in doctors. About plants, in gardeners. Because I am quite prepared to maintain that gardeners, when they find a plant sickly, go to work by causing it to have good and healthy — that is, ‘true’ — perceptions instead of bad ones. “And in the same way the wise politician is the man who makes wholesome things seem just to a city, instead of harmful ones. “Whatever in any city is thought just and admirable is just and admirable — in that city, and for as long as that opinion holds. But the wise man replaces each harmful opinion with a wholesome one, and makes it both be and seem just. “And on the same principle, the teacher who can educate his pupils along those lines is a wise man, and is worth his large fees to them. “So we can hold both that some men are wiser than others, and that no man judges what is false. “And you too, Socrates, whether you like it or not, must put up with being a measure.”

. . .

And then it changed. Lela could not have said afterwards exactly where, but somewhere in the next few sentences the speech stopped being about the doctrine at all, and Protagoras – or Socrates being Protagoras, or the two of them together, which is what it had actually become – started telling Socrates how to argue.





The Rescue — the competing interpretation.

. . .

“If you want to go back to the beginning and make a case against the theory, then let us hear your objections set out properly. “Or if you prefer question and answer, do it that way. There’s no reason to avoid it; an intelligent person might well prefer it. “Only I beg you to observe this one condition. “Do not be unjust in your questions.”

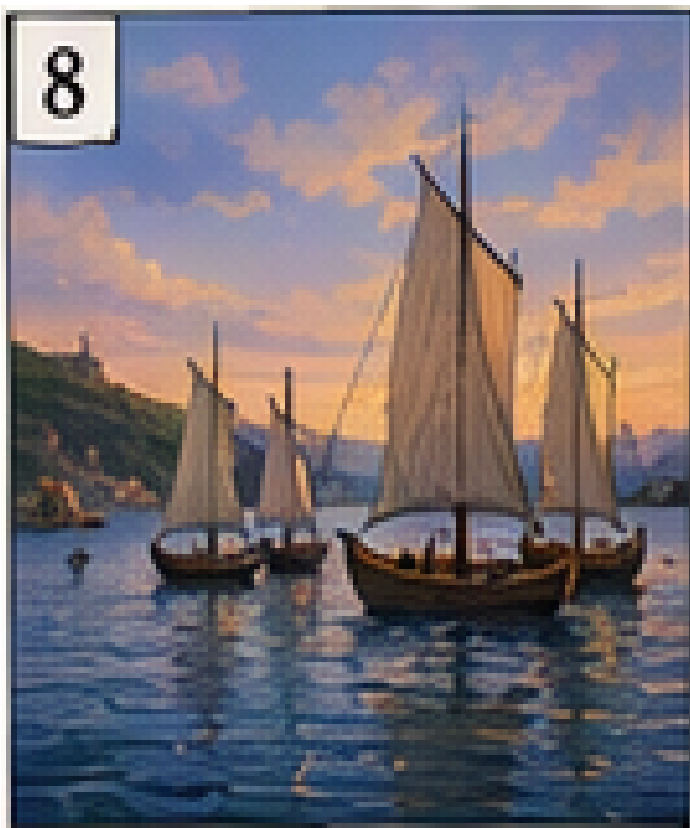
. . .

Lela’s head came up.

. . .

“It is the height of unreasonableness that a man who says he cares about goodness should be consistently unjust in a discussion. “And what I mean by injustice, here, is the behaviour of a man who does not take care to keep

controversy distinct from discussion. “A man who forgets that in controversy he may play about, and trip his opponent up as often as he can — “but that in discussion he has to be serious. He has to keep helping his opponent back onto his feet. And he must point out to him only those slips which are his own fault, or the fault of the company he has been keeping.”





The Rescue — Lela and Danae reconstruct the idea.

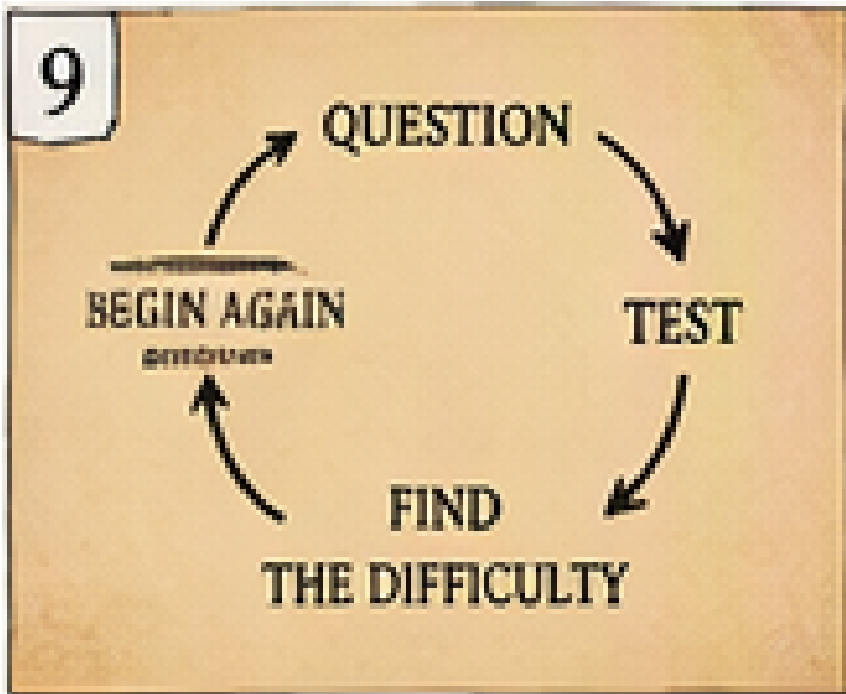
. . .

“Sophia,” said Lela, and her voice had gone odd. “Stop it a second.” The picture held. “Say the middle bit again.” “In discussion he must be serious; he must keep on helping his opponent to his feet again.”

. . .

Lela sat in the dark with her arms round her knees. “I made eleven points,” she said. “You did.” “I watched three trials and I found out what a jury wants and I built a thing to win with. And then I went and found the only person in Athens who wouldn’t use it, and I was angry with him for a month.” “Yes.” “And this is the man he’s arguing against.” She looked up. “This is the sophist. This is the one who charged money. And he’s the one who just said the thing I needed to be told.”

...





The Rescue — the historical layer.

“If you observe that distinction,” the speech finished, “the people who spend time with you will blame themselves for their confusion and their difficulties, and not you. They will want your company and think of you as their friend. But they will loathe themselves, and take refuge from themselves in philosophy, in the hope of becoming different people and being rid for ever of the men they used to be. “But if you do what most people do, and the opposite of this, you will get the opposite result. “Instead of philosophers, you will bring your companions up to be the enemies of philosophy.”

. . .

“Well, Theodorus,” said Socrates, in his own voice, and rather flatly. “There is my contribution to the rescue of your friend. The best I can do with my resources, which is little enough. “If he were alive himself, he’d have come to the rescue of his own offspring in a grander style.”

. . .

“That must be a joke, Socrates,” said Theodorus. “It was a very spirited rescue.”





The Rescue — a wordless conceptual plate.

. . .

“You are kind, my friend. “Now tell me. Did you notice that Protagoras was complaining of us, in that speech we have just heard, for aiming our arguments at a small boy — and making the child’s nervousness a weapon against his ideas? “And how he called our method of arguing an amusing game, and solemnly stood up for his measure of all things, and ordered us to be serious when we dealt with his theory?” “Yes, of course I noticed.” “Then do you think we should obey him?” “Most certainly I do.”

. . .

“Look at the company, then,” said Socrates. “They are all children except you. “So if we’re going to obey Protagoras, it is you and I who have got to be serious about his theory. It is you and I who must question and answer one another.

“Then at least he won’t have this against us — that we turned the criticism of his philosophy into a game with boys.”

. . .



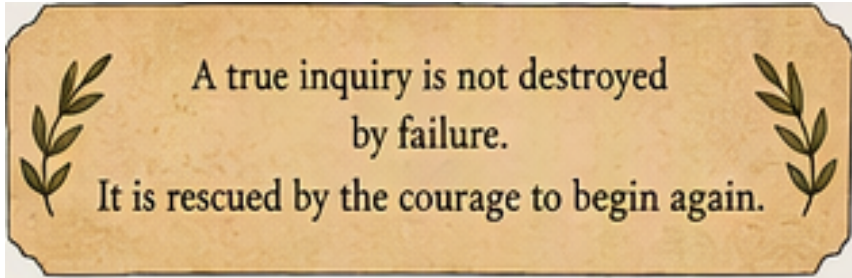
The Rescue — the chapter’s narrative and philosophical synthesis.

Danae was on her feet. “He did it again!” “He did,” said Sophia. “He spent — he spent twenty minutes being the other man and making the other man tell him off for arguing with a child, and then he turned round and said well, you agreed with him, so it has to be you, and the old man has got absolutely nowhere to go —” “Nowhere at all,” said the owl. “He built the trap out of the rescue.”

. . .

“Well, isn’t our Theaetetus better able to follow the investigation of a theory than many an old fellow with a long beard?” “But not better than you, Theodorus. “Don’t

go on imagining that it is my business to strain every nerve defending your dead friend while you do nothing. “Come now, my very good Theodorus. Come a little way with me.”



The Rescue — the chapter's closing thought.

Chapter 27

**TWENTY-SEVEN. Not True
For Anyone**

1





Not True For Anyone — opening scene.

It took him about four minutes after that.

. . .

“Consider,” he said. “Men believe there is such a thing as wisdom, and such a thing as ignorance, among themselves. They believe it in the way people believe things they never say out loud. “You see it in emergencies, if nowhere else. When men are in distress — on a battlefield, or in sickness, or in a storm at sea — every one of them turns to the leader in that particular thing as though he were a god, and looks to him for salvation. And they do it because he is better than they are in exactly one respect. He knows. “And everywhere human life goes on you find men looking for teachers and masters, for themselves and for their animals and for the running of everything they do. And you find men who believe they are able to teach, and to take the lead. “In all of that, what can we say except that men do

believe in the existence of wisdom and ignorance among themselves?” “There can be no other conclusion.”





Not True For Anyone — the chapter's central dialogue.

. . .

“And they believe wisdom is thinking what is true — and ignorance is judging falsely?” “Yes, of course.”

. . .

“What then, Protagoras, are we to make of your argument? “Are we to say that all men, on every occasion, judge what is true? Or that they judge sometimes truly and sometimes falsely? “Whichever we say, it comes to the same thing: that men do not always judge what is true. That human judgements are both true and false. “Because think, Theodorus. Would you — would anybody of Protagoras’ school — be prepared to maintain that nobody ever thinks his neighbour is ignorant, or judging falsely?” “No. That’s not a thing one could believe, Socrates.” “And yet that is where the theory has been driven.”





Not True For Anyone — the central concept made visible.

. . .

“And what of Protagoras himself? “Suppose he did not believe that man is the measure — any more than most people believe it, and most people don’t. Then this Truth of his that he wrote is true for nobody at all. “But suppose he did believe it, and the majority don’t agree with him. Then — to begin with — the more the people to whom it does not seem true outnumber the people to whom it does, the more it isn’t than it is.” “That must be so. If it is going to be or not be according to individual judgement.”





Not True For Anyone — the guiding analogy.

. . .

“And secondly,” said Socrates, “it has this most exquisite feature.”

. . .

“Here it comes,” said Sophia.

. . .

“Protagoras admits, I take it, that the opposite opinion about his own opinion — namely that it is false — must be true. Since he agrees that all men judge what is.” “Undoubtedly.” “And in conceding the truth of the opinion of the people who think him wrong, he is admitting the falsity of his own opinion?” “Yes. Inevitably.” “But for their part, the others do not admit that they are wrong?” “No.” “But Protagoras again admits that judgement to be true, according to his own written doctrine?” “So it appears.”

5

IS IT TRUE
ONLY FOR THIS
PERSON?

OR FOR
EVERYONE?



Not True For Anyone — the argument unfolding step by step.

. . .

“Then it will be disputed by everybody — beginning with Protagoras. “Or rather, it will be admitted by him. When he grants that the man who contradicts him judges truly, then even Protagoras himself will be granting that neither a dog nor the man in the street is the measure of anything he has not learned about. “Isn’t that so?” “It is so.”

. . .

“Then since it is disputed by everybody — the Truth of Protagoras is not true for anyone at all. “Not even for himself.”

. . .

8



APPEARANCE
(particular)



BELIEF
(individual)



KNOWLEDGE
(universal)



Not True For Anyone — the competing interpretation.

Danae let out a long breath. “He killed it with itself.”
“He killed it with itself,” said Sophia. “It is the most famous move in the whole of Greek philosophy and people are still arguing about whether it is fair, and you have just watched it happen, and it took less than a page.”

. . .

“Socrates,” said Theodorus, “we are running my friend too hard.”

. . .

And the thing that happened next was, to Lela, the strangest of the whole day.

. . .

8





Not True For Anyone — Lela and Danae reconstruct the idea.

“But it is not at all clear, my dear Theodorus, that we are running on the right track,” said Socrates. “So it’s likely that Protagoras, being older than we are, really is wiser as well. “And if he were to stick his head up out of the ground, as far as the neck, just here where we are — he would in all likelihood convict me of talking nonsense twenty times over, and show you up too for agreeing with me, and then duck down again and rush off. “But I suppose we have to take ourselves as we are, and go on saying the things that seem to us to be.”

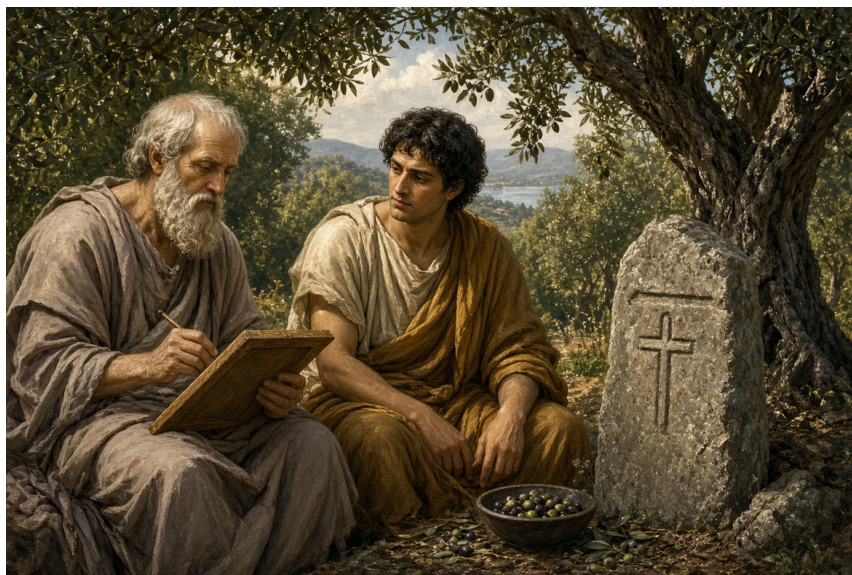
. . .

“He just won,” said Danae. “Yes.” “He won and then he said the other man would beat him twenty times over if he were here.” “Yes.” “Does he mean it?”

. . .

9





Not True For Anyone — the historical layer.

Sophia took a while over that one. “I think he means about half of it,” she said. “I think he knows the argument is good and I think he also knows that the man is dead and cannot answer, and that winning against a man who cannot answer is not the same as being right. “And I think he says it out loud because he would rather be a little ridiculous than let a boy of fifteen go home believing that an argument beats a person.”

. . .

After that they walked the theory back, carefully, to see how much of it could be saved. Most things, Socrates allowed, might really be for each man what they seem — warm, dry, sweet, all of that sort. But health? Nobody would seriously claim that every creature, woman or child or animal, can tell what is good for it and cure its own sickness. There, if anywhere, one person is better than another. And in a city, perhaps, whatever the city decides is

just and admirable is just and admirable, in that city, for as long as it thinks so. But when it comes to laying down what is actually to the city's advantage — that is different. There, one counsellor is better than another. There, one city's decision can be closer to the truth than another's. Because nobody has the nerve to say that when a city decides a thing is in its own interest, the thing will therefore turn out to be in its interest.





Not True For Anyone — a wordless conceptual plate.

. . .

“That’s the crack,” said Lela quietly. “Say it.” “You can believe whatever you like about now. You can’t believe whatever you like about later.” She was frowning at the picture. “Because later turns up and it’s the same for everybody.”

. . .

“But I see, Theodorus,” said Socrates, “that we are getting into a larger discussion, coming out of the smaller one.” “Well — we have plenty of time, haven’t we, Socrates?”



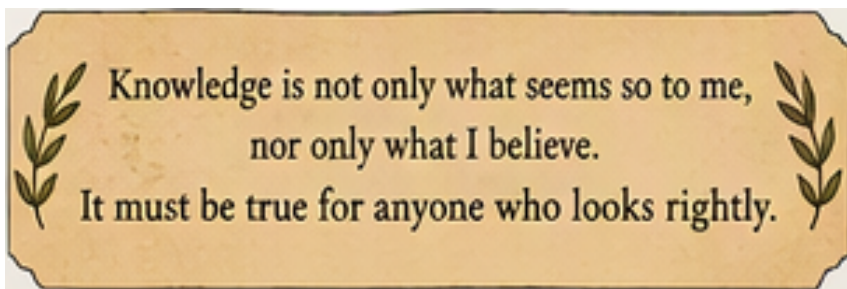
Not True For Anyone — the chapter's narrative and philosophical synthesis.

. . .

Socrates stopped. It was a small thing. He was sitting with his hands on his knees as he always sat, and he did not move, and something went across his face. “We appear to,” he said.

. . .

Lela’s hand closed on a fistful of dry grass. “Sophia.” “Yes.” “How long?” “Four weeks,” said the owl.



Not True For Anyone — the chapter's closing thought.

Chapter 28

TWENTY-EIGHT. The Thra- cian Girl





The Thracian Girl — opening scene.

“That remark of yours reminds me of something that has often occurred to me,” Socrates said. “How natural it is that men who have spent a great part of their lives in philosophy make such fools of themselves when they appear as speakers in the law courts.”

. . .

“How do you mean?”

. . .

“Look at the man who has been knocking about in law courts and such places since he was a boy. And compare him with the man brought up in philosophy, in the life of a student. “It’s like comparing the upbringing of a slave with the upbringing of a free man.”

. . .





The Thracian Girl — the chapter's central dialogue.

“Because the one has what you mentioned just now. Plenty of time. “When he talks, he talks in peace and quiet, and his time is his own. It is so with us now — here we are, beginning on our third new discussion. And he can do the same, if he’s like us and prefers the newcomer to the question in hand. It doesn’t matter to men like that whether they talk for a day or for a year, so long as they hit on what is. “But the other one — the man of the law courts — is always in a hurry when he talks. He has to speak with one eye on the clock. “And he can’t make his speech on whatever subject he likes. He has his opponent standing over him, armed with compulsory powers, and with the sworn statement, which is read out point by point as he goes along and which he must keep to. “The talk is always about a fellow slave, and it is addressed to a master, who sits there holding some suit or other in his hand. “And the struggle is never a matter of indifference.

It always directly concerns the speaker. “And sometimes life itself is at stake.”





The Thracian Girl — the central concept made visible.

. . .

Nobody in the grove moved.

. . .

“Conditions like that make a man keen and highly strung, and skilled at flattering the master and working his way into favour. “But they make his soul small, and warped. “His early servitude stops him growing straight and free. It forces him into crooked things by putting dangers and alarms on a soul that is still tender. He can’t meet them by honest practice, so he takes to lies, and to paying back one wrong with another; and so he gets bent and twisted, over and over, until he grows up to be a man with a mind that has no health in it — having become, in his own eyes, a man of ability and wisdom. “There is your practical man, Theodorus.”

4



AT A DISTANCE
it appears to be a girl

UP CLOSE
it is a boy



The Thracian Girl — the guiding analogy.

. . .

Lela had her hand over her mouth and she was not crying, but she was very close to it. “He’s describing it,” she said. “The water clock. The sworn statement being read out. The man standing over you. He’s describing the room. We were in that room.” “Yes.” “He’s describing it four weeks before and he already knows exactly what it does to people and he goes in anyway.” “Yes,” said Sophia. “Why doesn’t he—” “Because he has said, in the middle of it, what he actually thinks,” said the owl. “The talk is always about a fellow slave, and it is addressed to a master. That is what he thinks a trial is. He is not afraid of it and he is not impressed by it. He thinks it is a small room where small things happen to people, and he is about to be killed in one, and he does not change his mind about what it is.”





The Thracian Girl — the argument unfolding step by step.

. . .

“What about our own set, then?” said Socrates. “Shall we have a look at them?”

. . .

And then he did a thing the girls had never seen him do, which was to spend ten minutes being extremely funny about himself.

. . .

7



STRAIGHT
IN AIR
BENT
IN WATER



ROUND
FROM HERE
OVAL
FROM THE SIDE



The Thracian Girl — the competing interpretation.

“The men at the top in philosophy,” he said, “don’t even know the way to the market-place. “They don’t know where the law courts are, or the council chamber, or any other place the city meets. “As for laws and decrees, they neither see them nor hear them. “Party politics, and clubs, and dinners, and parties with flute-girls — it never enters their heads to go. Whether a man in the city is well-born or badly born, or has some disgrace handed down to him from his ancestors on either side, he knows less about it than he knows how many pints of water there are in the sea. “And he doesn’t even know that he doesn’t know it. He isn’t keeping clear of these things in order to get a reputation. The truth is that it is only his body that lives and sleeps in the city. His mind, having decided that all these things are of little or no account, spurns them and pursues its winged way, as Pindar says, throughout the universe — measuring the things that are under the earth

and on the face of it and above it, and never lowering itself to anything close at hand.”

. . .





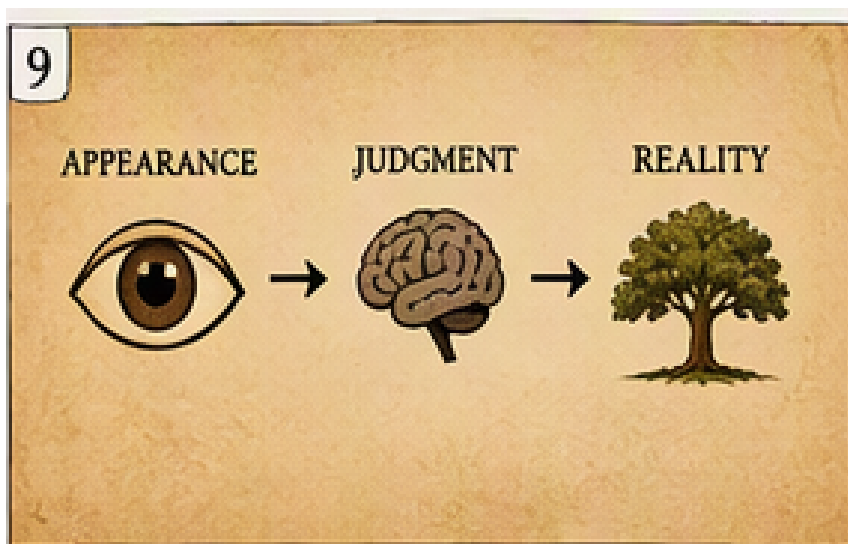
The Thracian Girl — Lela and Danae reconstruct the idea.

“Is that true?” said Danae. “Does he not know where the market is? He’s in the market every single day, that’s the whole thing about him —” “He is making a portrait,” said Sophia, “of the sort of philosopher he is not, and he is doing it with great affection and a certain amount of malice, and he is about to tell you a joke that is two hundred years old already.”

. . .

“It’s like Thales,” said Socrates. “He was studying the stars, Theodorus, and gazing up into the sky — and he fell into a well. “And a Thracian servant girl, a witty and an attractive one, made fun of him. She said he was so eager to know what was going on in the sky that he couldn’t see what was in front of his feet. “Anyone who gives his life to philosophy is open to that joke. “It’s true that such a man cares nothing for his next-door neighbour — he not only

doesn't know what he's doing, he hardly knows whether he's a man at all, or some other kind of creature."





The Thracian Girl — the historical layer.

. . .

Danae was flat on her back in the grass, delighted. “She laughed at him.” “She did.” “A servant girl laughed at the cleverest man in the world for falling down a hole and Socrates put her in the book.” “He put her in the book,” Sophia agreed, “and she is still there, and she has been laughing at philosophers for two and a half thousand years without stopping, and nobody knows her name.”

. . .



The Thracian Girl — a wordless conceptual plate.

“But when he drags somebody upwards,” Socrates went on, “when somebody is willing to come with him, and to get away from am I wronging you or are you wronging me and consider justice and injustice themselves — to leave off asking whether a king with a mass of gold is happy, and ask instead about kingship, and about human happiness and misery in general, what they are and how a human being should go about getting the one and escaping the other — “then the little sharp legal mind is the one that is at a loss. “He gets dizzy from hanging at such a height and looking down from mid-air. Being unused to it, he is distressed and helpless and stammers, and he is a laughing-stock — not to Thracian servant girls or anybody else uneducated, because they don’t see what is happening, but to everybody who has been brought up as a free man.”

. . .

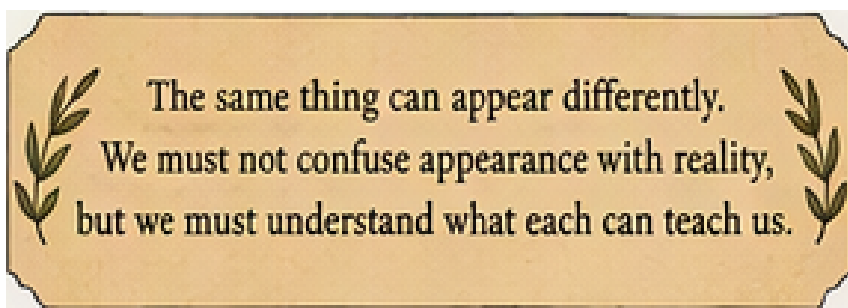
“He’s fair,” said Lela. “Mm?” “He gave both of them the fall. He let the girl laugh at the philosopher and then he put the lawyer in the air and made him dizzy, and they’re the same joke twice. “He’s not saying his lot are better. He’s saying they’re bad at different things and both of them look like idiots in the other one’s house.”



The Thracian Girl — the chapter’s narrative and philosophical synthesis.

. . .

“Yes,” said Sophia. “And then he is going to say which house he would rather be found in, and he is going to say it in about nine sentences, and it is the most famous thing in this book and possibly the most famous thing he ever said outside a courtroom. “So sit up.”



The Thracian Girl — the chapter's closing thought.

Chapter 29

TWENTY-NINE. Like a God





Like a God — opening scene.

“It isn’t possible, Theodorus, that evil should be destroyed,” said Socrates. “There must always be something opposed to good. “Nor can it have its place among the gods. It haunts this mortal region, and this nature of ours, of necessity. “And that is why we should make all speed to take flight from here to there. “And that flight is: to become like the divine, so far as a man can. “And to become like the divine is to become righteous and holy, with wisdom.”

. . .

The grove was silent.

. . .





Like a God — the chapter's central dialogue.

“But it isn’t easy to persuade men that the reasons commonly given for avoiding wickedness and pursuing goodness are the right ones — that a man should shun the one and take up the other in order to have a reputation for being good and not bad. “That, it seems to me, is old wives’ talk. “The truth is this. “God is in no way and in no manner unrighteous. He is righteousness itself, as far as righteousness can go. And nothing is more like him than the one among us who has become as righteous as it is possible for a man to be. “It is on this that a man’s real ability turns, and his worthlessness, and his nothingness. “For to know this is wisdom and excellence, and not to know it is plain folly and wickedness. Everything else that passes for ability and wisdom is vulgar when it appears in the conduct of public affairs, and mean and crude in the arts.”

3



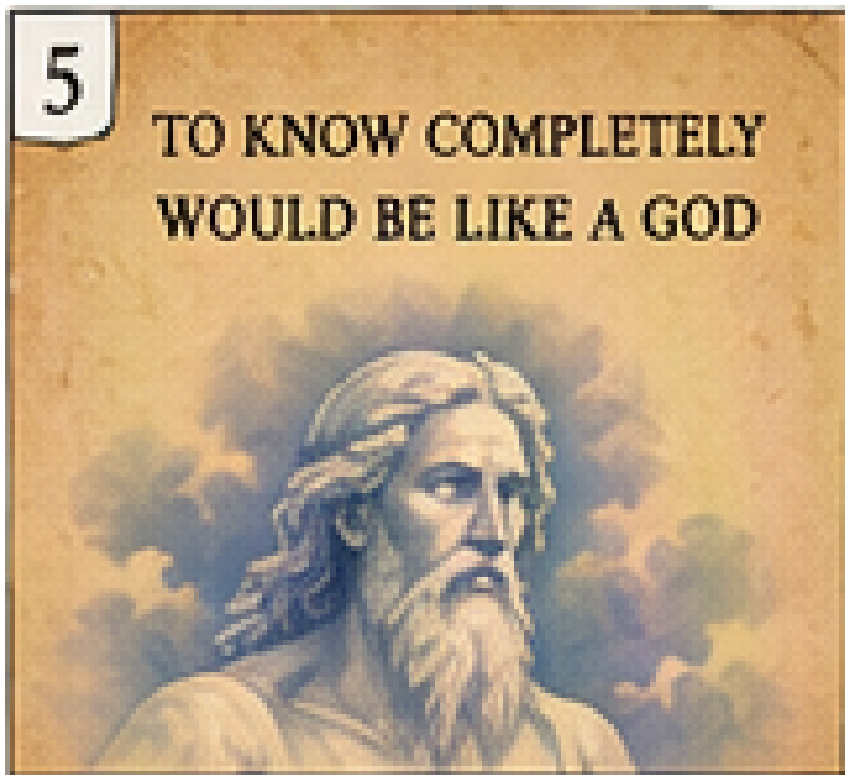


Like a God — the central concept made visible.

. . .

5

TO KNOW COMPLETELY
WOULD BE LIKE A GOD





Like a God — the guiding analogy.

“So when a man does wrong and says and does unholy things, it is very much the best thing for him that we should not concede that he is a clever rascal. “Because such men glory in the reproach; they think it means they are not useless — not a burden on the earth — but the sort of men who can survive in a city. “We should tell them the truth. They are not the sort of men they think they are, and they are all the more what they think they are not, for not thinking it. “They do not know the penalty for wrongdoing, which is the last thing a man ought not to know. “Because it is not what they think it is — beatings and death, which sometimes do not come at all to a man who does wrong. “It is a penalty that cannot be escaped.”

. . .

“What is it, then?”





Like a God — the argument unfolding step by step.

. . .

“There are two patterns, my friend, set up in reality. “One is divine and supremely happy. The other has nothing of god in it, and is the pattern of the deepest unhappiness. “But these men do not see that this is so. Their stupidity, their utter lack of sense, prevents them from noticing that by their unjust actions they are growing more like the one and less like the other. “And the penalty they pay is the life they lead.”

. . .





Like a God — the competing interpretation.

Lela did not say anything. She lay on her back in a Greek olive grove in August and looked up at the sky and did not say anything at all for a long time, and Danae let her.

. . .

“And if we tell them that unless they get rid of this cleverness of theirs, when they die the place that is pure of all evil will not receive them — that they will go on for ever living a life in their own likeness, bad men keeping company with bad — “then they will hear all this as though it were talk from fools, addressed to men of ability.”

8

WE AIM AT TRUTH
EVEN IF WE ARE
NOT GODS



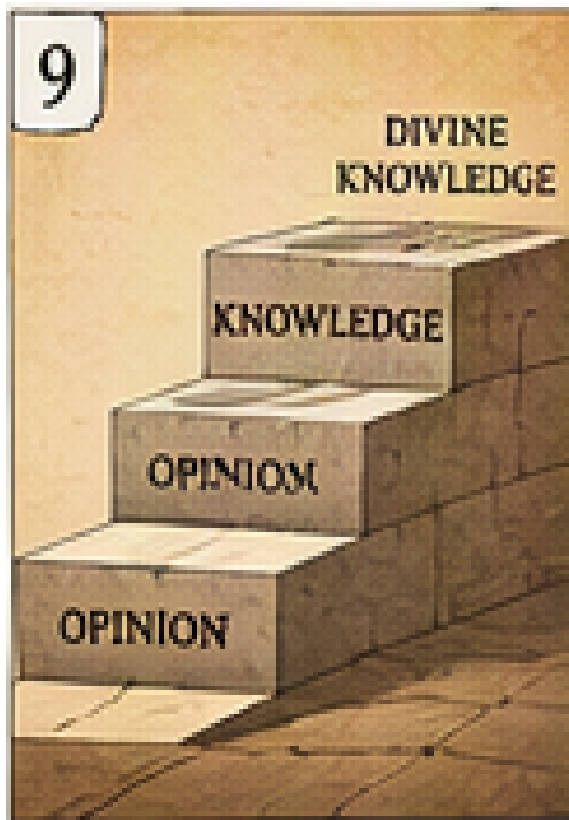


Like a God — Lela and Danae reconstruct the idea.

. . .

“He is not describing anybody in that room,” said Sophia, quietly. “I want you to have that clear. He is not talking about Theodorus and he is not talking about the boy. “He is talking about the sort of man who is going to prosecute him in four weeks, and about the sort of man who is going to vote against him in five, and about the sort of man they will both go home to dinner and be pleased with themselves in front of. “And he does not say so. He does not put a single name in it. He puts it as far away from this room as it will go — the two patterns, the penalty that cannot be escaped — and then he goes back to the argument as though he had never left it. “You have been asking me all summer why he made them so angry. That is why. Not what he said. That he was always, always kind to the man in front of him, and merciless about the man in general,

and everybody in the room could tell which one they were going to be when they got home.”

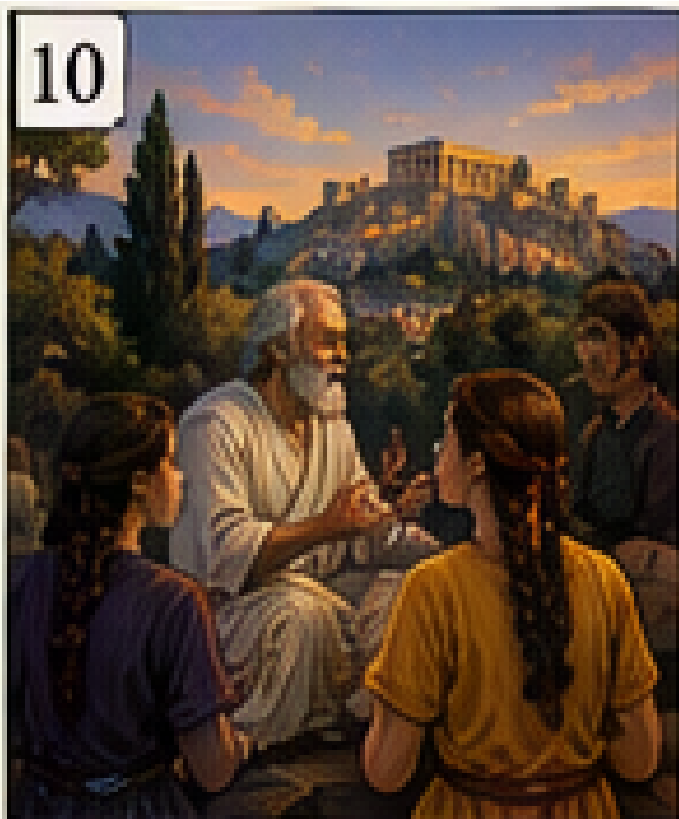




Like a God — the historical layer.

. . .

10





Like a God — a wordless conceptual plate.

In the garden of the Academy, nobody had spoken for some minutes. Then Aristotle said, without looking up: “Did he know?” “Did he know what?” “That he had four weeks.”

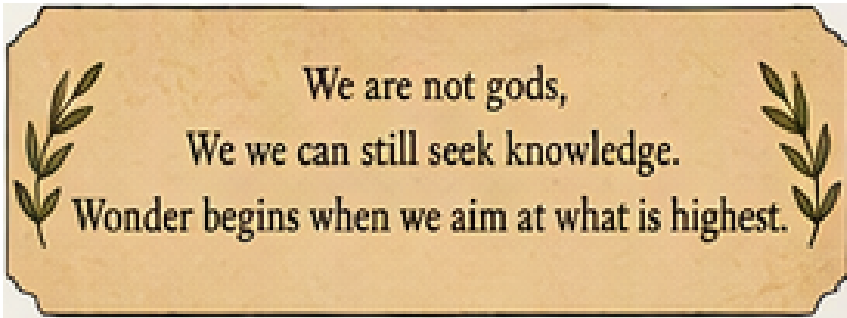
. . .

Plato took a long time answering that one. “No,” he said at last. “Not in the way you mean. There had been no indictment yet when this was said. He walked to the King’s Porch out of this conversation and found it waiting. “But he had known for about thirty years that it was coming eventually, and he had said so out loud, more than once, and he had been told by a great many people who loved him that he should stop. “And he had thought about it carefully, in the way he thought about everything, and had decided that being killed by such men was a smaller evil than becoming one. “And I want you to understand that I am not saying that to make him sound brave,” said the old

man. “I am saying it because it was an argument, and he made it, and I have never been able to find anything wrong with it, and I have been looking for thirty-five years.”



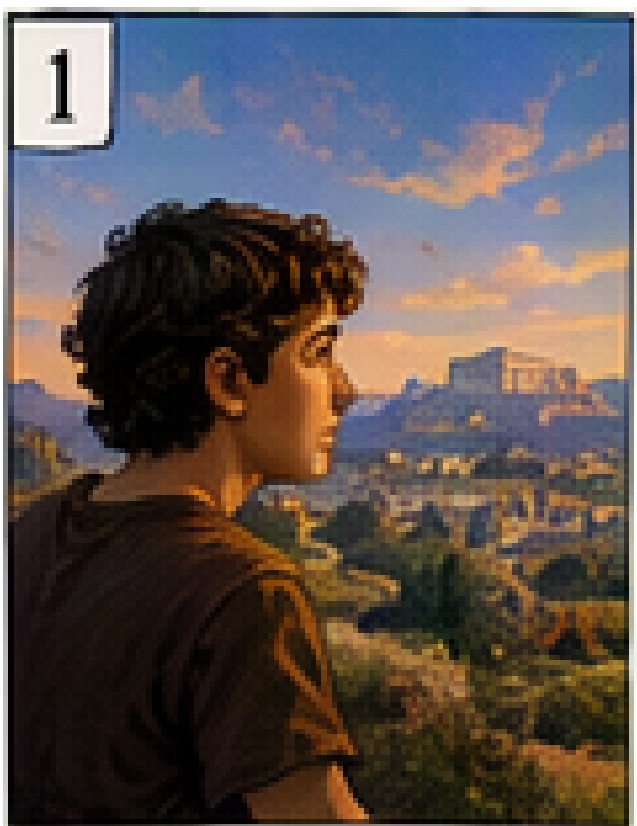
Like a God — the chapter's narrative and philosophical synthesis.



Like a God — the chapter's closing thought.

Chapter 30

THIRTY. What Will Be





What Will Be — opening scene.

“But that’s enough of that,” said Socrates. “It was a digression, and it has gone on long enough. Let us go back.”

. . .

Danae groaned into the grass. “He’s done. He’s just done the best thing he’s ever said and he’s going back to the argument.” “He always does,” said Sophia. “There is not one page in any book he is in where he says a large thing and then lets himself stand about admiring it. He says it and then he asks the next question. I have never decided whether that is the best thing about him or the most annoying.”

. . .

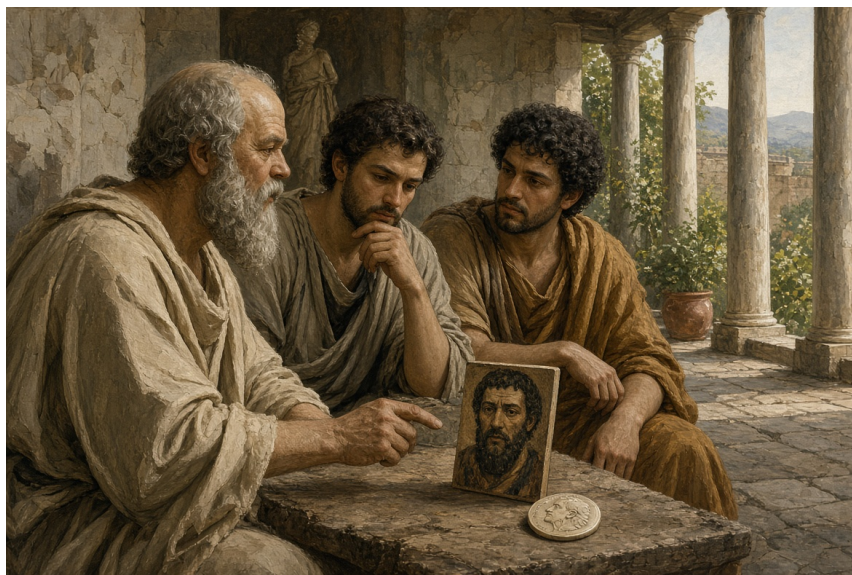
2

WHAT WILL BE?

CAN WE KNOW?

CAN WE GUESS?

OR IS IT OPEN?



What Will Be — the chapter's central dialogue.

“So,” said Socrates. “We had got this far. “The people who say that whatever seems to a man is, for that man — they will stand their ground about most things. Warm, dry, sweet, pleasant, all of that. “But when it comes to some things they will not. And we named one: health. And another: what is to a city’s advantage.” “That’s where we were.”

. . .



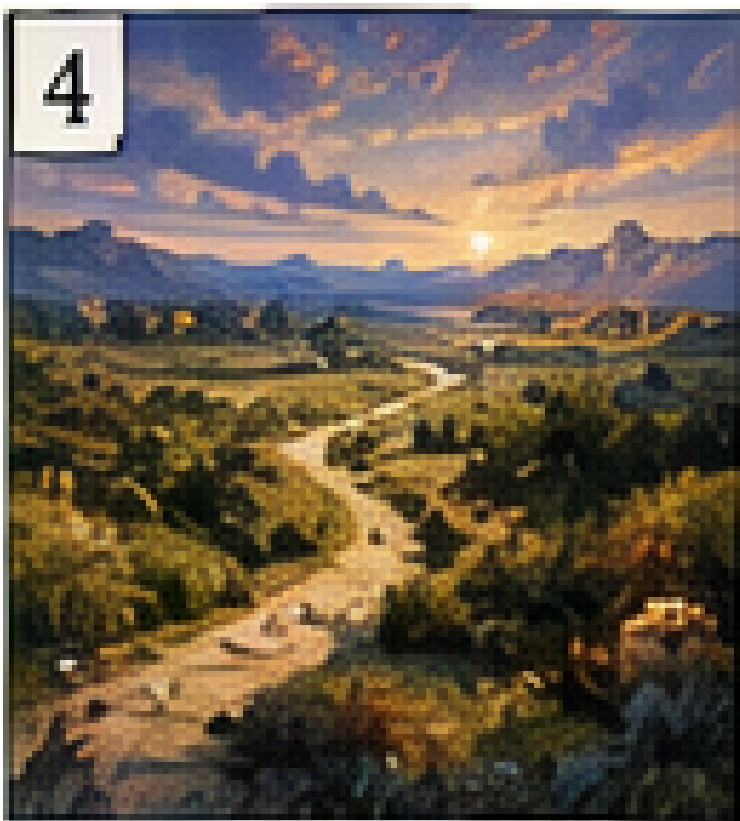


What Will Be — the central concept made visible.

“Then take the case of a city laying down a law. “Every city, when it makes a law, makes it thinking that the law will be to its advantage. Isn’t that so?” “Certainly.” “And when it lays it down, does it always hit what is to its advantage? Or does it very often miss?” “I should say it very often misses.”

. . .

“Now think about what that means. “When we were talking about what a whole thing is — about the just and the admirable and the unholy — the theory was quite willing to say that whatever a city thinks and lays down is true for that city, for as long as it thinks it. “But nobody will follow it into saying that when a city decides a thing will be to its advantage, the thing therefore will be to its advantage. “Because the thing it is deciding about is the future. “And the future arrives.”





What Will Be — the guiding analogy.

. . .

Lela sat up. “That’s my one.” “It is your one,” said Sophia.

. . .

5

POSSIBLE

PROBABLE

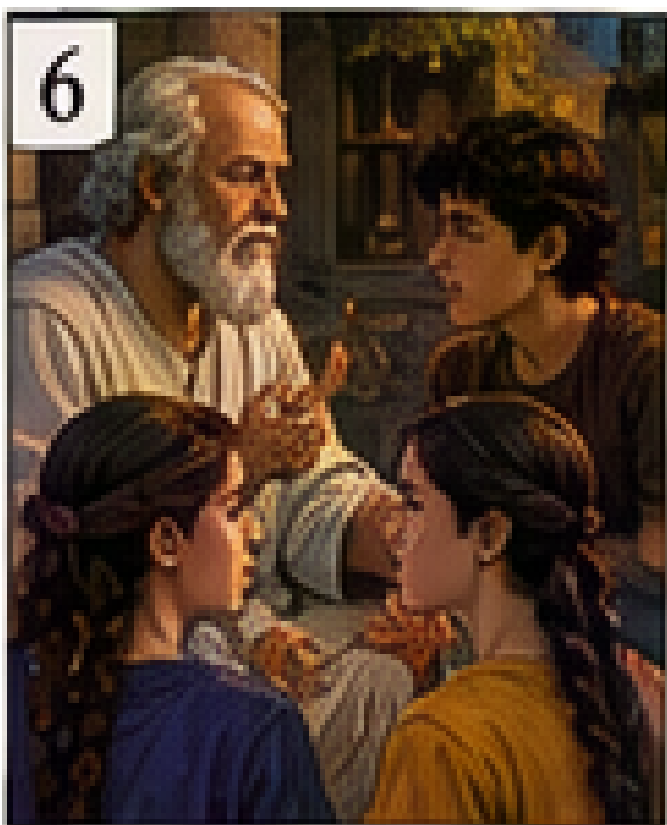
NECESSARY

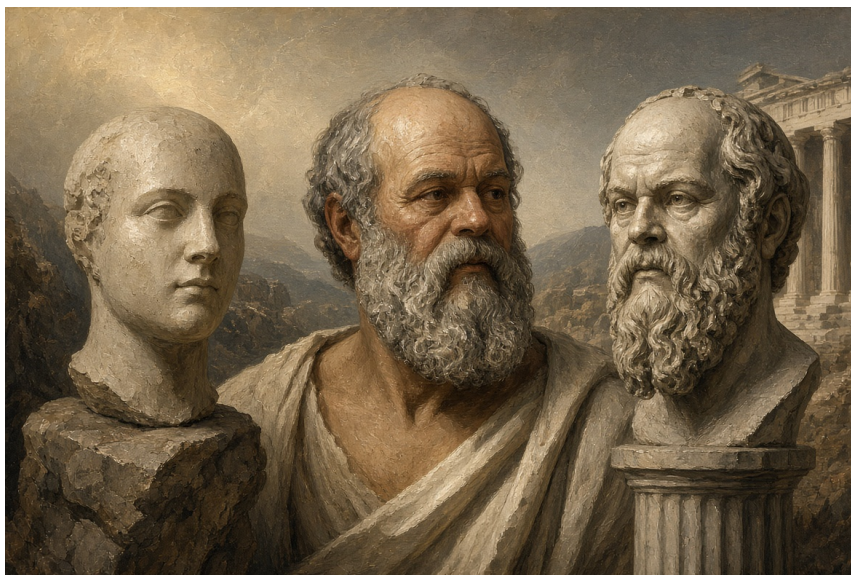




What Will Be — the argument unfolding step by step.

“And in all of these cases,” said Socrates, “when we make a law, we’re making it about what is going to be. And everybody admits that in questions about what is going to be, one man is better than another. “Take a doctor and a sick man. When the sick man is going to have a fever, which of the two judges better about what is coming?” “The doctor.” “Take the man who plants a vine. Which judges better about how the wine will taste — the planter, or the man who will drink it?” “The planter.” “And when a lyre is being tuned — which of them judges better about the concord that is going to come out of it? The musician, or the man who will listen to it afterwards?” “The musician.”





What Will Be — the competing interpretation.

. . .

“And in the same way, about a feast — the cook judges better than the guest about the pleasure that is going to come, before it comes. “About the pleasure he is having now, we won’t argue. Let that be whatever it seems to be. “But about what will be pleasant to a man — there, the man who isn’t a cook is not the measure at all.”

. . .

8

WE PLAN
WE REASON
WE PREPARE
BUT THE FUTURE
IS NOT ALWAYS
OURS TO SEE



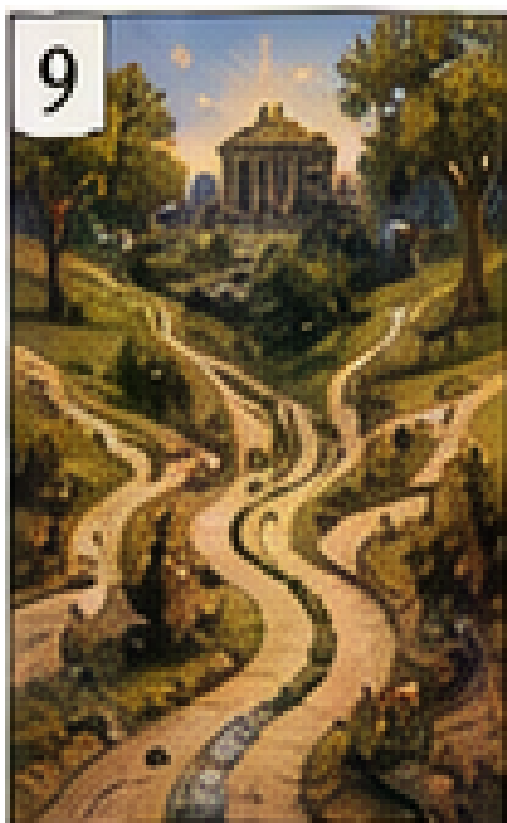


What Will Be — Lela and Danae reconstruct the idea.

“So Protagoras is beaten,” said Danae, “by dinner.”

. . .

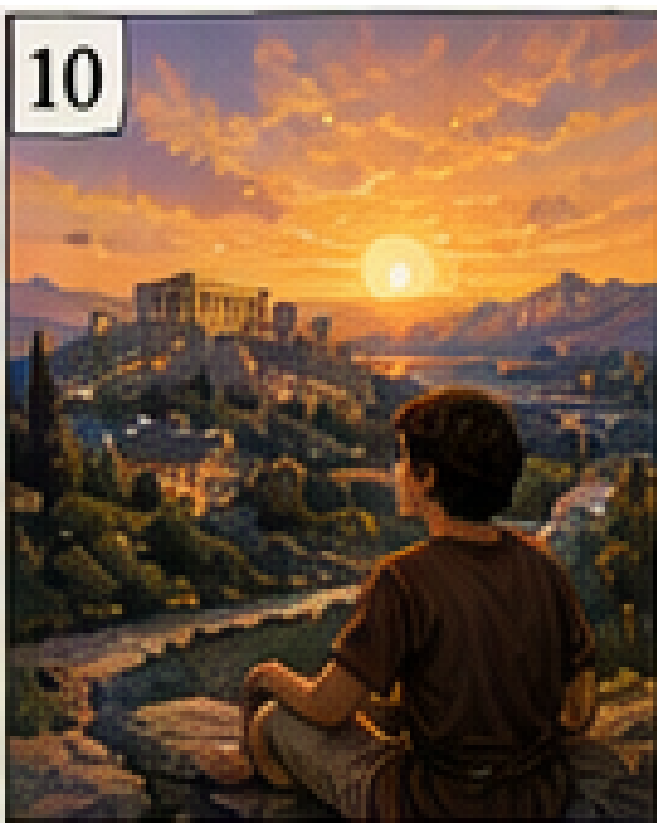
“Not beaten,” said Sophia. “Cornered. It is different and it matters. “There is still a room he is safe in, and Socrates has just built it for him, and it is the room where everything is happening right now. Inside that room he is untouched and he always will be; nobody has ever managed to tell a man that the wind he is standing in is not cold. “But the door of that room is later. “And the moment you step through it — the moment you say this will be good for me, or that law will help, or I shall enjoy this — you have said something that the world can turn round and disagree with. “Which is why,” said the owl, “people who believe that everything is a matter of opinion are almost always talking about how things are, and almost never about what will happen next.”





What Will Be — the historical layer.

. . .





What Will Be — a wordless conceptual plate.

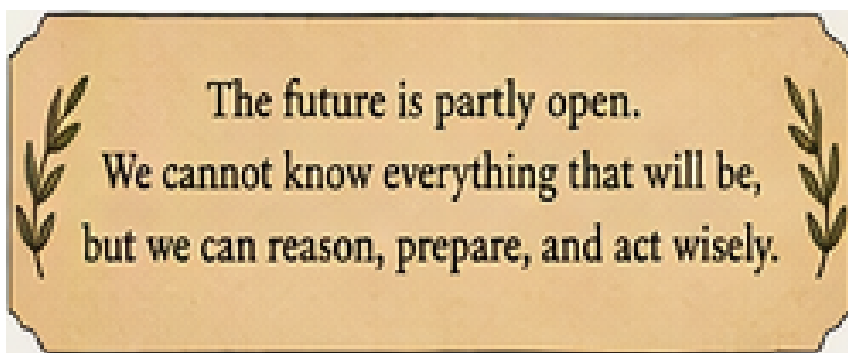
“And I imagine, Theodorus,” said Socrates, “that even you, though you are his friend, would hardly maintain that on questions of what is to come, one man is not a better judge than another.” “I should not be prepared to fight for it, no.” “And in the whole business of rhetoric and public speaking — if anybody were prepared to fight for it, he would have to maintain that when an orator persuades a jury about what is going to happen, the thing then happens that way, because the jury believed it. “And nobody is that brave.”

. . .



What Will Be — the chapter's narrative and philosophical synthesis.

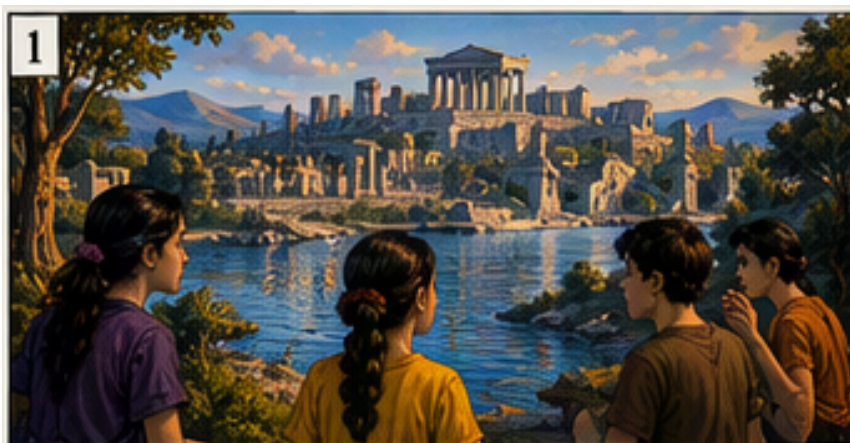
“He did it again,” said Lela. “What?” “He’s been dead careful all day not to mention the courts and then he — that’s the third time. The water clock. The master with the suit in his hand. And now the orator persuading a jury about the future.” “Yes,” said Sophia. “He’s not doing it on purpose.” “No,” said the owl. “I do not think he is. I think it is where his mind has been going all month, the way a tongue goes to a tooth.”



What Will Be — the chapter's closing thought.

Chapter 31

THIRTY-ONE. The Men of Ephesus





The Men of Ephesus — opening scene.

“Then all the more reason,” said Socrates, “to examine the thing by going right back to where it starts. Which is the way they present it themselves. “Everything is motion. There is nothing but motion.”

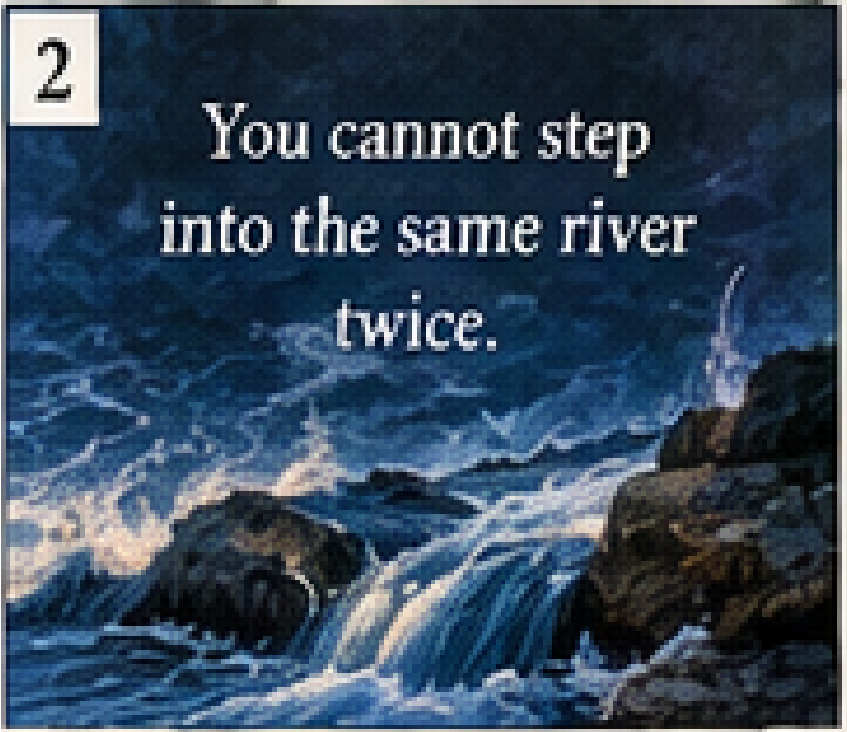
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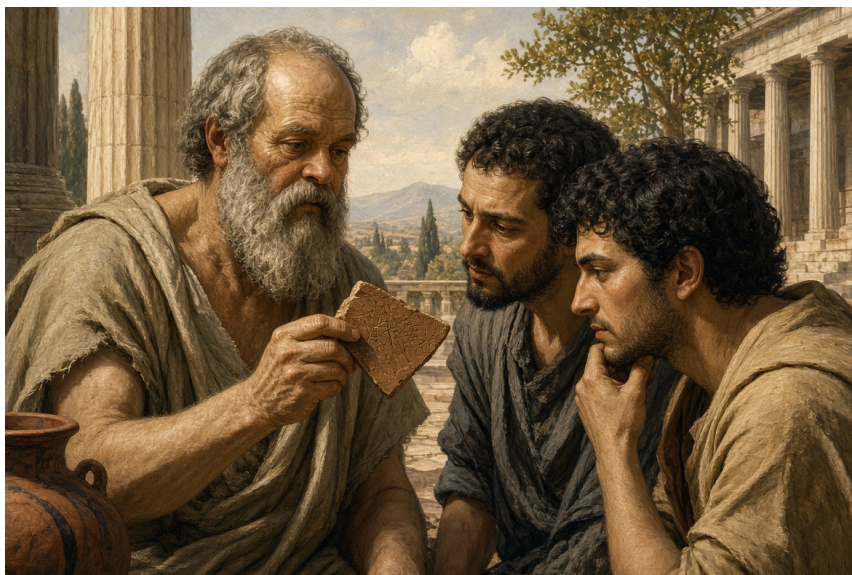
And here Theodorus, who had spent the entire afternoon being manoeuvred, dragged into arguments, quoted against himself and generally used as furniture, finally got something he actually wanted to say.

. . .

2

You cannot step
into the same river
twice.

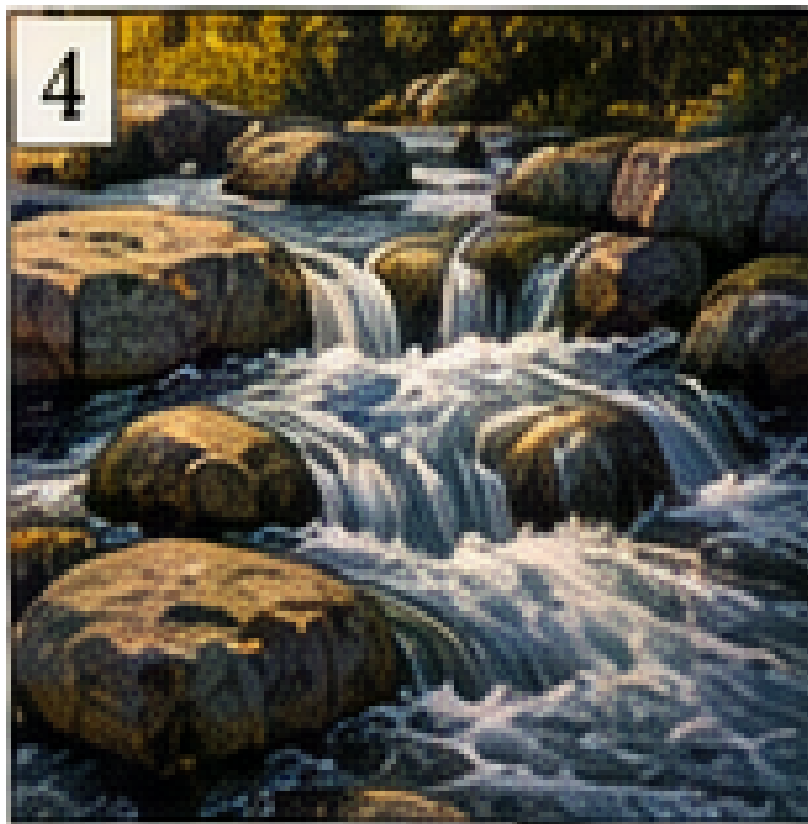




The Men of Ephesus — the chapter's central dialogue.

“You know, Socrates — these Heraclitean doctrines. Or, as you say, Homeric, or older still. “You can’t discuss them in person with any of the people at Ephesus who claim to be experts in them. You might as well try to discuss something with a maniac. “They are exactly like the things in their own books. Always on the move. “As for staying with what has been said, or sticking to one question, or quietly answering and then asking in turn — there is less than nothing of that in them. That’s an exaggeration, I suppose. I mean there isn’t so much as a tiny scrap of stillness in these people. “If you ask one of them a question, he pulls some little riddling phrase out of his quiver and shoots it off at you. And if you try to make him give an account of what he has just said, you get hit by another one, full of strange turns of language. “You will never reach a conclusion with any of them. Ever. “Indeed they never reach a conclusion with each other, because they are so very careful never to let anything be stable — not in an argument, and not in

their own souls. I suppose they think that if they did, it would be a thing standing still, and that is what they are totally at war with, and what they are determined to drive out of the universe if they possibly can.”



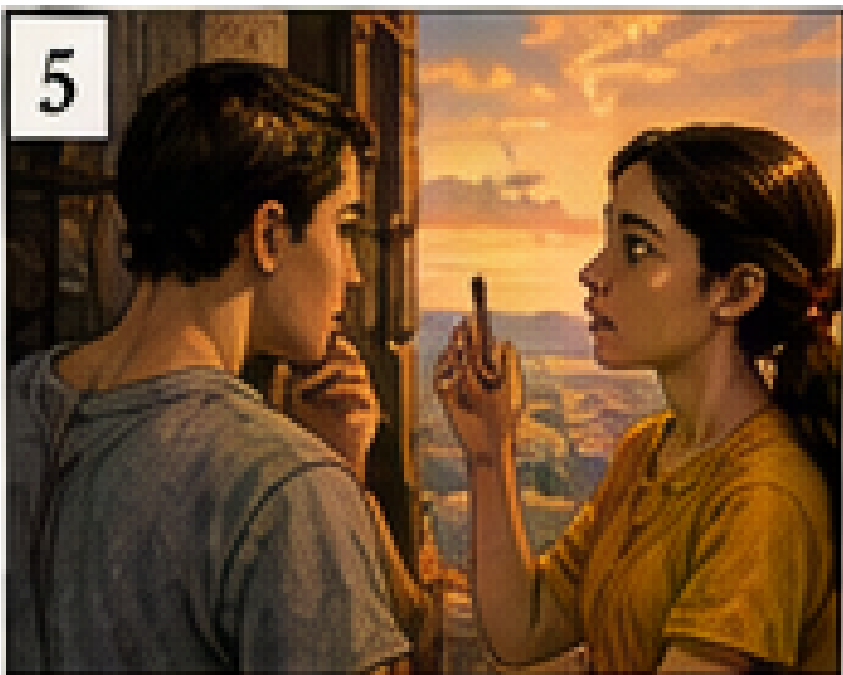


The Men of Ephesus — the central concept made visible.

. . .

Danae was face down in the grass with her shoulders going. “He’s — Lela, he’s so cross.” “He’s been wanting to say that for twenty years,” said Lela, wiping her eyes.

. . .





The Men of Ephesus — the guiding analogy.

“I dare say you’ve only seen these men on the field of battle, Theodorus,” said Socrates, “and never in peacetime — since you don’t belong to their set. I expect they save these matters to be explained at leisure to their pupils. The ones they want to make like themselves.”

. . .

“Pupils, my good man? “There are no pupils and there are no teachers among these people. They just spring up on their own, one here, one there, wherever they happen to catch their inspiration. And no one of them will credit any other with knowing anything. “As I was going to say — you will never get these men to give an account of themselves, willing or unwilling. “What we must do is take their doctrine out of their hands, and consider it for ourselves, as we would a problem in geometry.”

6

ALWAYS FLOWING
YET A RIVER



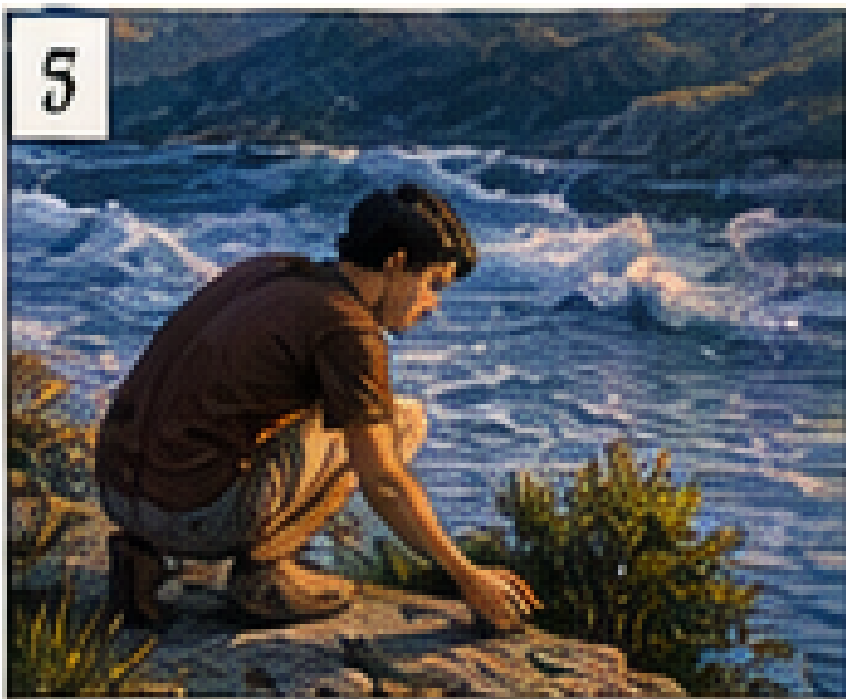


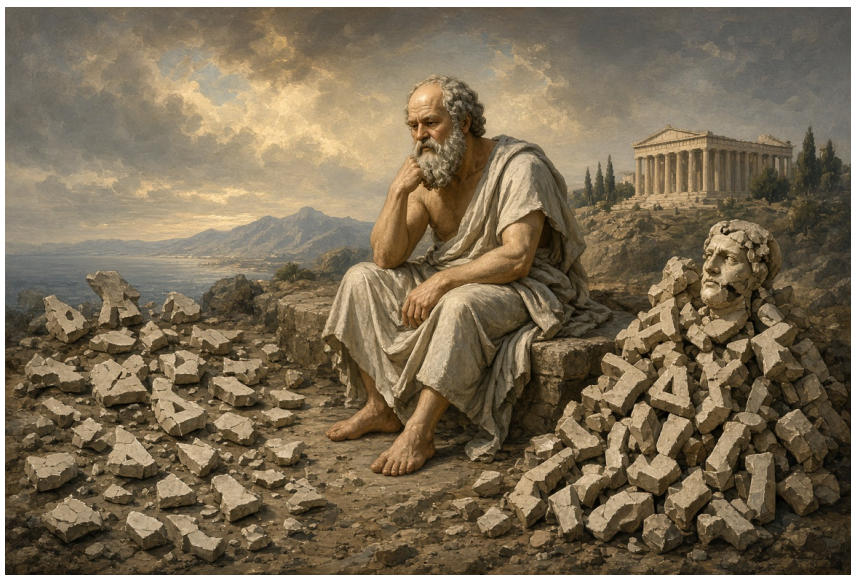
The Men of Ephesus — the argument unfolding step by step.

. . .

“That’s not fair,” said Lela, unexpectedly. Sophia turned her head. “Go on.” “Well, it isn’t. He’s very angry and he’s very funny and he’s — Sophia, he’s describing people who won’t sit still and answer a question, and he’s saying it in front of a man who’s spent fifty years making people sit still and answer questions and getting hated for it. “And Socrates isn’t joining in.”

. . .



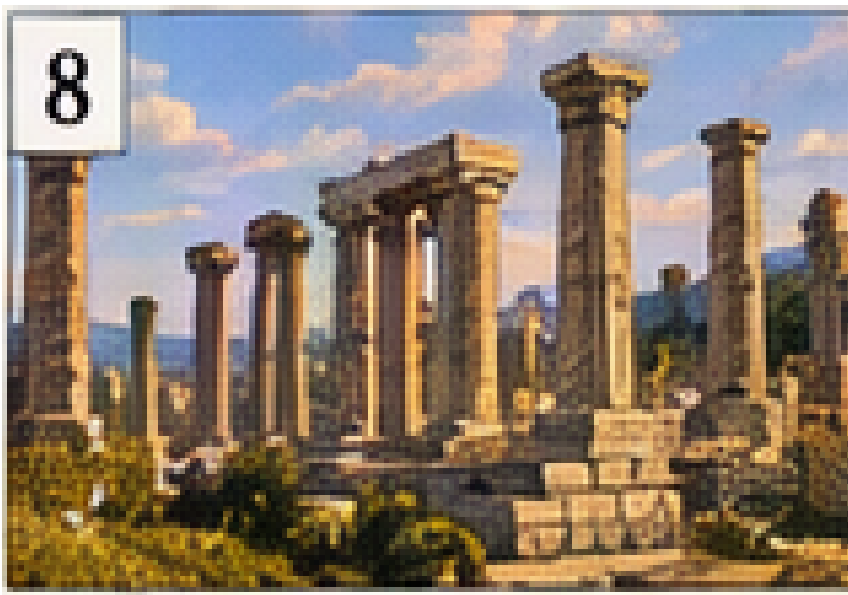


The Men of Ephesus — the competing interpretation.

“No,” said the owl. “He is not. Notice what he says next. He says the mildest possible thing, which is that Theodorus has probably only met them at their worst — and then he lets it go and takes the doctrine seriously. “You have now watched him do this to Protagoras, who was a rival, and to Cratylus, who was rude to him, and to the men of Ephesus, who will not even stay in the room. “He has never once, in anything I can show you, attacked a doctrine by attacking the people who hold it.”

. . .

8





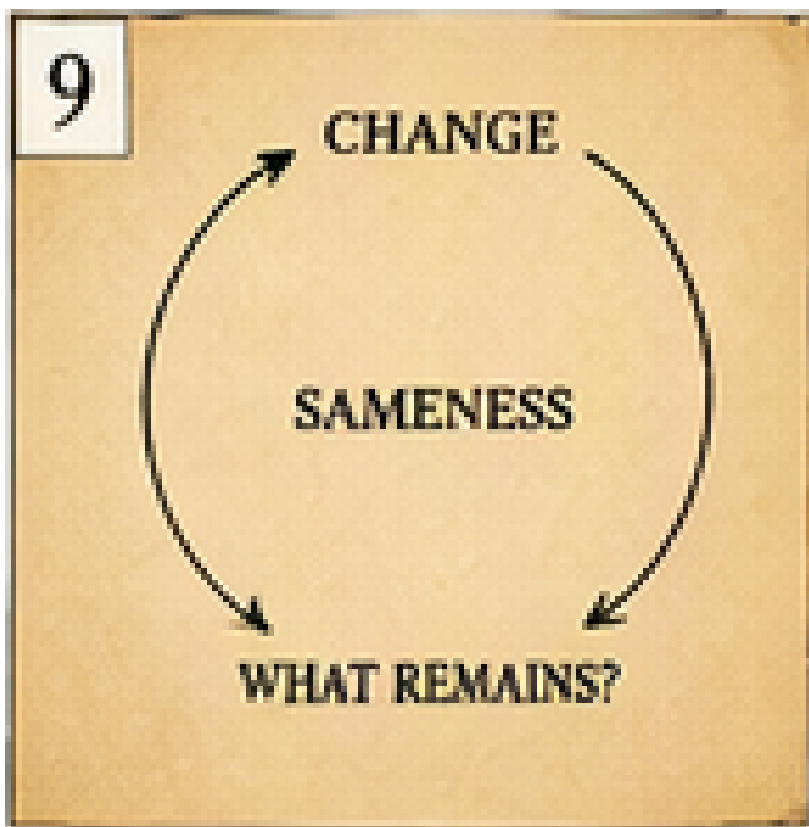
The Men of Ephesus — Lela and Danae reconstruct the idea.

“We inherited this problem from the ancients, didn’t we,” said Socrates. “They used poetry, which hid their real meaning from most people — that Ocean and Tethys, the origin of everything, are flowing streams, and that nothing stands still. “And in more modern times it is put to us by men who are better at it, and who make their meaning plain enough that even shoemakers can take it in — so that they give up the silly idea that some things in the world stand still while others move, and learn that everything is in motion, and recognise the greatness of their teachers.”

. . .

“But I was almost forgetting, Theodorus. There are other thinkers who have announced the opposite. “Who tell us that unmoved is the Universe, and other things of that kind — a Melissus, or a Parmenides — against the whole party of the Heracliteans. “These men insist that everything is

One, and that this One stands still, inside itself, having no place at all to move in.”





The Men of Ephesus — the historical layer.

. . .

The picture went on running. Neither of the girls said anything, because neither of them had noticed anything. But high up on the split trunk, Sophia had put her head on one side.

. . .

“What are we to do with all these people, my friend? “We have been gradually going forward until, without noticing, we have got ourselves in between the two parties. And if we don’t manage to put up some kind of fight and get away, we shall pay for it — like the boys who play that game on the line in the wrestling schools, and get caught by both sides and pulled in opposite directions.”





The Men of Ephesus — a wordless conceptual plate.

. . .

“I think we ought to begin with the other party — the fluent fellows we started out after. If they turn out to be talking sense, we’ll help them drag us over to their side and try to escape the others. “But if the men who stand for the Whole seem nearer the truth, we’ll take refuge with them from the men who move what should not be moved. “And if it turns out that neither party has a reasonable theory — then we shall look very absurd, thinking that insignificant people like ourselves have anything to say, after rejecting the views of men who lived so long ago and had all wisdom. “Think now, Theodorus. Is it any use for us to go forward on such a dangerous venture?”



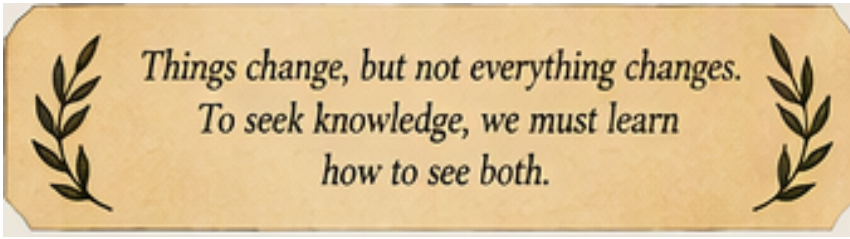
The Men of Ephesus — the chapter's narrative and philosophical synthesis.

. . .

“We can’t refuse to examine them,” said Theodorus.

. . .

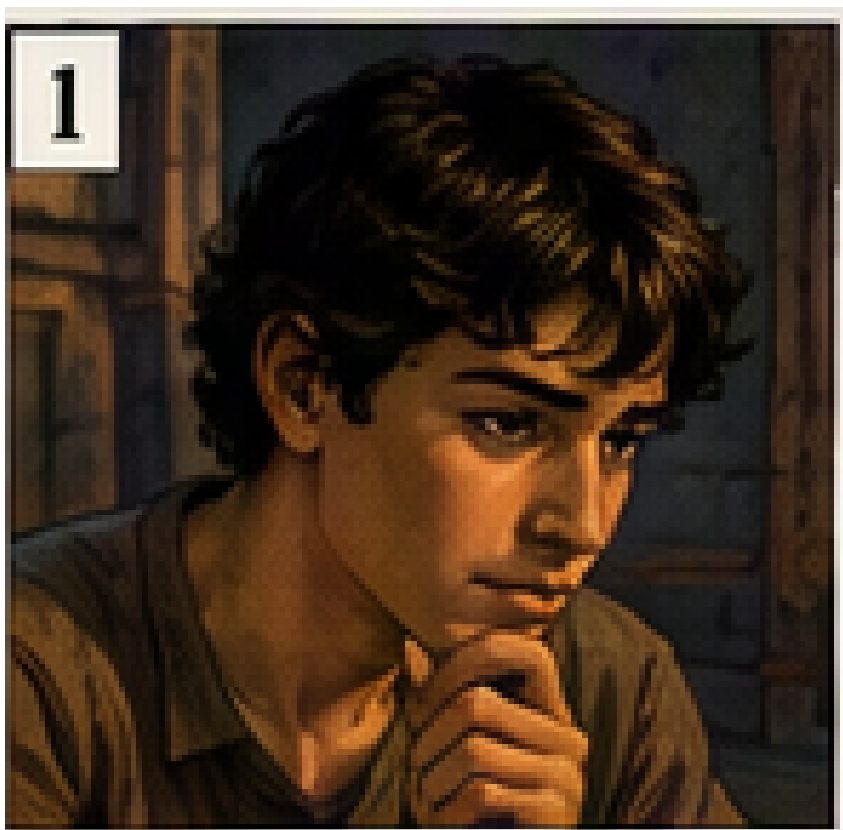
“He said it,” said Sophia. Both girls looked up. “Said what?” “Nothing,” said the owl. “Go on watching.”



The Men of Ephesus — the chapter's closing thought.

Chapter 32

THIRTY-TWO. Not Even So





Not Even So — opening scene.

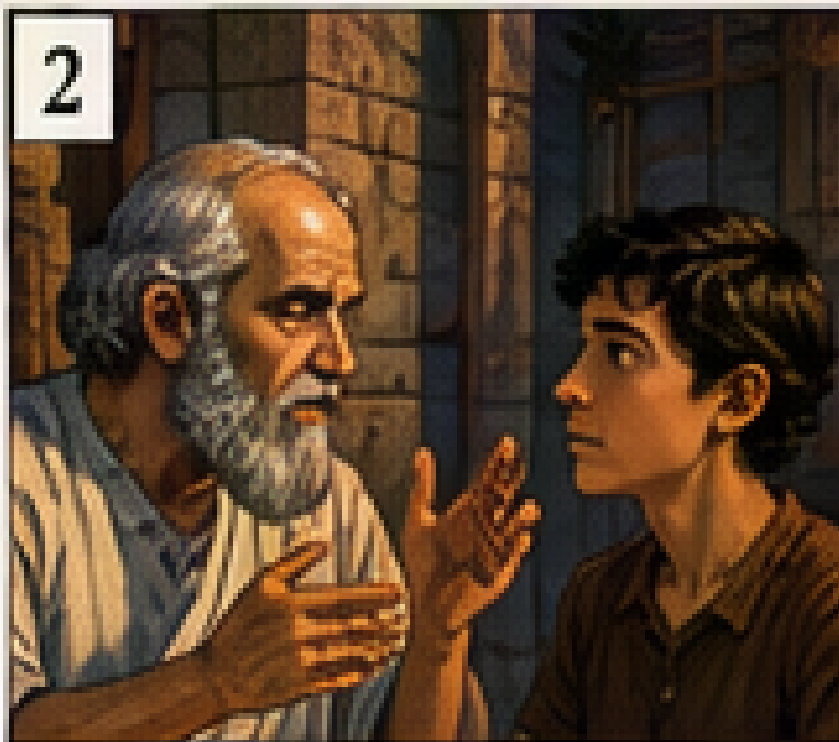
It took him about twenty minutes and it was the cleanest thing Lela had ever watched anybody do.

. . .

He began by asking what they meant by motion. Not what motion was — what kinds there were. “Is it one kind, or two? Let’s see. It seems to me there are two. “When a thing goes from one place to another, or turns round in the same place — that is one kind. Call it moving about. “And when a thing stays in the same place but grows old, or turns from white to black, or from soft to hard — that is a different kind. Call it altering. “Two kinds. Do you agree?” “I do.”

. . .

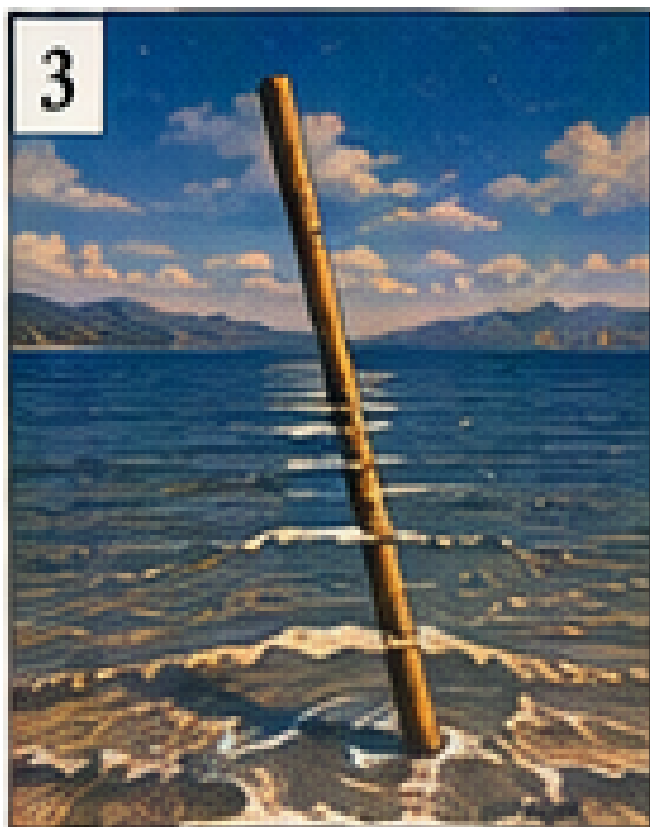
2





Not Even So — the chapter's central dialogue.

“Now then,” said Socrates. “These men say everything is in motion. “Do they mean everything is in both kinds of motion, always — moving about and altering? Or do they mean some things are in one kind and some in the other?” “I really can’t say.” “Then think what happens if they don’t say both. “If a thing moved about but never altered, we could say what it was like while it was moving — we could say it was flowing white, for instance. And then something would be standing still after all: the whiteness. And these men will not have anything standing still, anywhere, on any terms. “So they have got to say both. Everything is always moving about and always altering, in every way, all the time.” “They must.”





Not Even So — the central concept made visible.

. . .

“Very well then,” said Socrates. “Now look at a colour. “You said just now that white is not a thing in the stick and not a thing in the eye. It gets born in between them, when they meet. “But if everything is always altering in every way — is the white staying white while it is being born? Or is it, at that very instant, already flowing away into some other colour?”

. . .





Not Even So — the guiding analogy.

“It must be flowing away.”

. . .

“Then can we ever rightly call it white at all?”

. . .

The grove was silent.

. . .

“And it’s the same,” Socrates said, “with seeing. If everything is always altering, then seeing is no more seeing than not-seeing. No perception is more that perception than it is not. “And if no perception is any more one thing than another — then perceiving is no more perceiving than not-perceiving. “But knowledge was supposed to be perception. “So when we were asked what is knowledge, the answer we gave was no more knowledge than not-knowledge.”





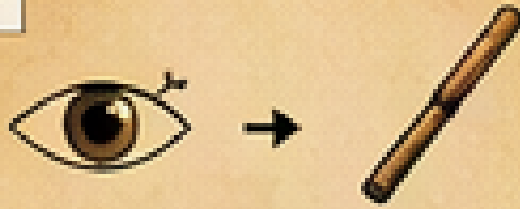
Not Even So — the argument unfolding step by step.

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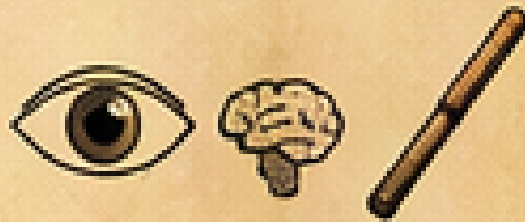
“Wait,” said Lela. The picture went on, and she scrambled up onto her knees. “Wait. Wait. If everything is always changing — then when you say the word, the thing has already changed. So you can’t say what anything is. Not because it’s hidden. Because the sentence is too slow.” “Yes,” said Sophia.

. . .

6



IT LOOKS BENT



IT IS STRAIGHT



Not Even So — the competing interpretation.

“So nobody can answer any question at all.” “That is exactly what he is about to say. Listen.”

. . .

“So on this theory,” said Socrates, “it turns out to be impossible to answer any question whatever. “Because if all things are moving in every way, then whatever answer you give — about anything — it is so and it is not so equally. Or, if you want to speak more exactly and avoid bringing anything to a standstill, you must not even say so. “You must say: not even so. “Because so makes a thing stand still. And these men will not permit that.”

. . .

7





Not Even So — Lela and Danae reconstruct the idea.

“Not even so,” said Danae, to herself. “Yes.” “You can’t even say yes.” “You cannot even say yes,” said Sophia. “That is the end of it, and there is nothing under it, and it took him about eleven sentences. “And the thing I want you to notice is that he did not do it with a trick. He did not cover one eye. He took the theory exactly as they stated it, at the strongest, in the version he himself built yesterday, and he followed it all the way down, and at the bottom of it there was a place where nobody can say anything, including them.”

8





Not Even So — the historical layer.

. . .

“And so,” Socrates finished, “we may say to your friends from Ephesus: if all things are in motion, then every answer, about anything whatever, is equally correct — both it is so and it is not so. “Or, if you prefer, it comes to be so and it comes to be not so. So that we do not bring them to a standstill with our words.” “You’re quite right.” “Except, Theodorus, that I said so and not so. And one ought not even to say so — because so would no longer be in motion. Nor not so either; that is not a motion. The people who state this theory will have to establish some other language; as it is, they have no words that fit their own hypothesis. “Unless, perhaps, not even so would suit them best of all. Said indefinitely.”

9

APPEARANCE

REALITY



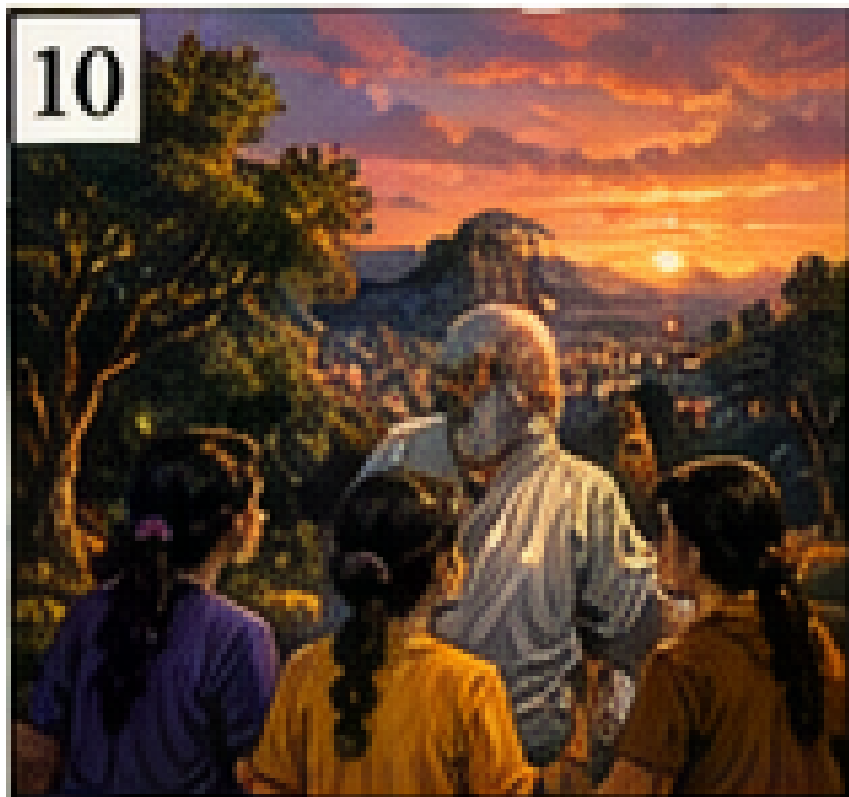


Not Even So — a wordless conceptual plate.

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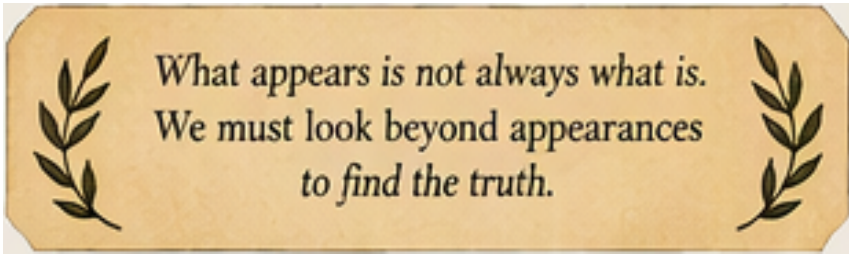
“That’s what he was waiting for,” said Lela. “Yes.” “That’s the thing the boy in the garden said. Two nights ago. He said you can’t say the doctrine in a language where the words stand still, and Plato told him to keep it and not use it and to notice how long Socrates waits.” “Yes,” said Sophia. “He waited a whole day.” “He waited a whole day,” the owl agreed, “and a digression, and a rescue, and a refutation, and the wrestling schools. He waited until he had built the thing at full size and taken it seriously and got everybody in the room to agree that he had. “And then he said it. “A clever boy in a garden can find the flaw in an afternoon. Almost anybody clever can. The difference between that boy and that man is about fifteen hours of patience, and the boy is going to spend the next forty years finding that out.”

10





Not Even So — the chapter's narrative and philosophical synthesis.



Not Even So — the chapter's closing thought.

Chapter 33

THIRTY-THREE. Reverend and Awful

1





Reverend and Awful — opening scene.

“Well, Theodorus,” said Socrates. “We have escaped from your friend. And we are not going to grant him that every man is the measure of all things, unless he is a man of some understanding. “And we shall not grant that knowledge is perception — not by the road of the theory that all things are in motion.”

. . .

And then Theaetetus, who had said almost nothing for a day and a half, spoke up.

. . .

“Oh no, Theodorus. Not yet. Not until you and Socrates have done what you said you would just now, and dealt with the other side. The people who say the Universe stands still.”





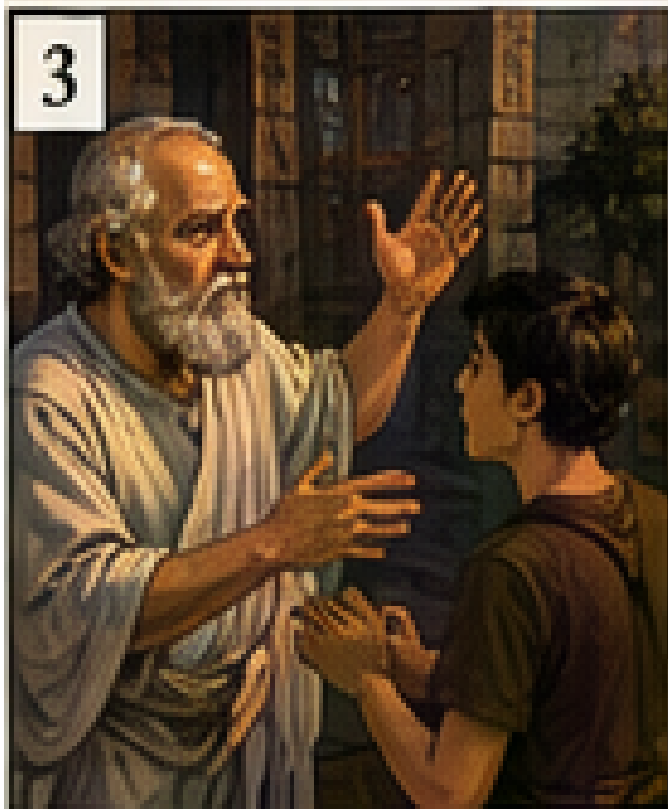
Reverend and Awful — the chapter's central dialogue.

. . .

“What’s this, Theaetetus?” said Theodorus. “You, at your age, teaching your elders to be unjust and break their agreements? “What you have to do is get ready to give an account to Socrates yourself, for the rest of the discussion.” “All right. If he likes. But I would rather have heard those views discussed.” “Well — challenging Socrates to an argument is like inviting cavalry onto the plain. Ask your questions and you shall hear.”

. . .

3





Reverend and Awful — the central concept made visible.

“But I don’t think, Theodorus,” said Socrates, “that I am going to be persuaded by Theaetetus to do what he asks.”
“What is it makes you unwilling?”

. . .

“Shame.”

. . .

Lela put her hand out and touched her sister’s arm without meaning to, which was a thing she had done twice in her life, both times in this grove.

. . .

4

WONDER



QUESTIONS

IGNORANCE



THE BEGINNING
OF PHILOSOPHY



Reverend and Awful — the guiding analogy.

“I am afraid,” said Socrates, “that our criticism might be a very cheap affair. “And if I feel like that about the many who have made the universe one and unmoved — Melissus and the rest of them — I feel it still more in the face of the One. “In the face of Parmenides. “Parmenides seems to me, in Homer’s words, to be reverend and awful. “I met him when I was very young and he was a very old man. And he seemed to me to have a wholly noble depth.”

. . .

The picture ran on. Neither of the girls moved at all.

. . .

“Sophia,” said Lela, after a while, and her voice came out wrong. “Did that happen?” “Yes.” “He met him?” “He met him,” said the owl.





Reverend and Awful — the argument unfolding step by step.

. . .

“When?” “When he was about nineteen, and Parmenides was about sixty-five, and Parmenides had come to Athens for the Great Panathenaea with a man called Zeno, and they stayed in a house outside the wall in the Potters’ Quarter, and a great many people came to hear Zeno read out a book. “And a young man got up and said something clever about it. “And an old man took him to pieces so thoroughly that he could not answer a single one of it, and then sat him down and gave him a lesson that lasted the rest of the day.”

6





Reverend and Awful — the competing interpretation.

. . .

Danae said, very quietly: “Are we going to see it?”

. . .

“At the end of the summer,” said Sophia. “It is the last thing I am going to show you, and it is the oldest, and the chain is four men long and fifty years deep, and the picture is going to be poor. “I have been telling you since the first night that the chains are not all the same length. That is the one I was telling you about.”

. . .

7



What is this?

Why does it happen?

What can we know?

What cannot be known?



Reverend and Awful — Lela and Danae reconstruct the idea.

“I am afraid,” Socrates was saying, “that we might not understand even what he says. Still less should we get at his real thought. “And above all, I am afraid that the very thing we set out to look at — what knowledge is — might be left unexamined, in the crowd of theories that will come rushing in on us if we let them in. “Especially as the one we have just raised is one of unmanageably vast size. To treat it as a sideshow would be an insult and an injury; and if it is discussed properly, it will spread out until it swallows the question about knowledge completely. “We must not do either. “What we must do is use my midwife’s art, and deliver Theaetetus of the thoughts he has conceived about knowledge.”





Reverend and Awful — the historical layer.

. . .

“Well,” said Theodorus. “If that’s what you think proper, it must be done.”

. . .

Lela lay back in the grass. “He’s not going to do it,” she said. “No.” “He’s got four weeks to live and a fifteen-year-old has just asked him the one question he’s spent his whole life being afraid of, and he says no, and the reason he gives is that it’s too big and the boy’s own question would get lost.” “Yes.” “That’s — Sophia, that’s not cowardice.” “No, it is not,” said the owl. “That is a man refusing to spend a child’s afternoon on his own favourite subject. There is a word for that and it is not cowardice, and I am not going to say it for you.”

9





Reverend and Awful — a wordless conceptual plate.

. . .

In the garden of the Academy, under the plane trees, the light had gone long and yellow. Aristotle said: “He met Parmenides.” “He did.” “You have never mentioned it.” “No.” “Is there an account of it?”

. . .

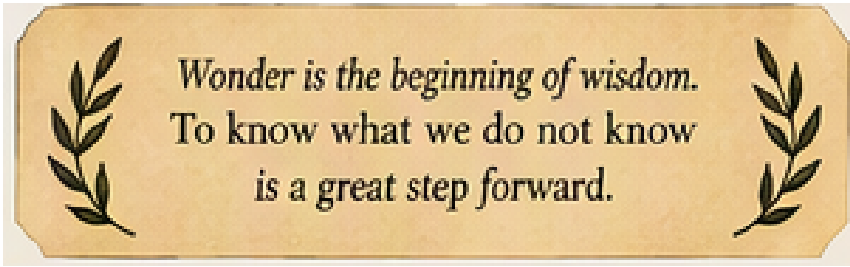
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Reverend and Awful — the chapter's narrative and philosophical synthesis.

Plato did not answer for a while. Then he said: "There is a book. "I have had it for a long time and I have not given it to anybody, and I am going to give it to you at the end of the summer, and not before. "It is the last thing on the list. And I will tell you now what it is, so that you have the whole of the summer to be uneasy about it, because you will be better for that. "It is the strongest attack that has ever been made on everything I have taught you. "And I wrote it."

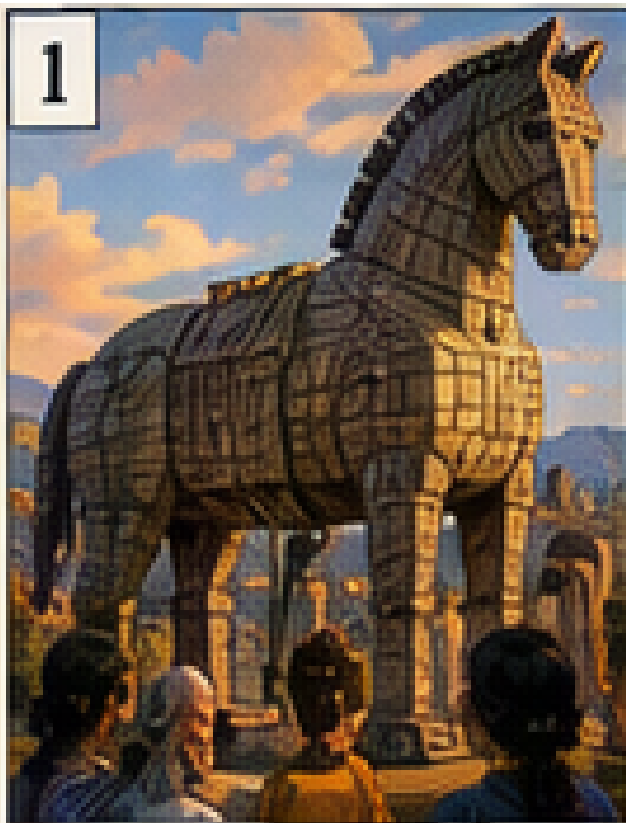


Reverend and Awful — the chapter's closing thought.

Chapter 34

THIRTY-FOUR. The Wooden Horse

1





The Wooden Horse — opening scene.

“Now, Theaetetus. Your answer was that knowledge is perception.” “Yes.” “Suppose you were asked: with what does a man see white and black things, and with what does he hear high and low notes? You’d say, I imagine, with his eyes and ears.” “I should, yes.”

. . .

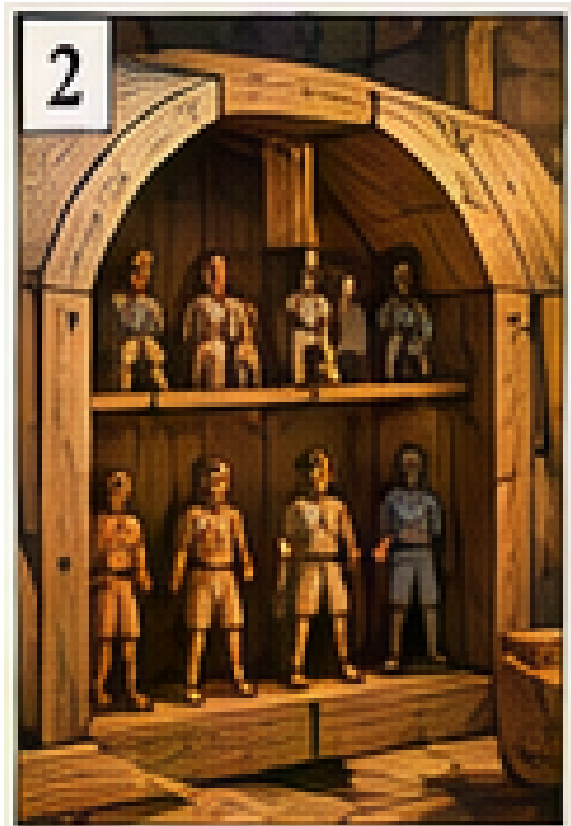
“Now, as a rule there’s nothing ill-bred about being easy with words and not fussing over your choice of them; it’s rather the opposite that gives a man away. “But sometimes exactness is necessary. And it’s necessary here — because there is something in your answer that isn’t right. “Think. Is it more correct to say that the eyes are that with which we see? Or that through which we see? “Do we hear with the ears, or through the ears?”

. . .

“Well — I should think, Socrates, that it’s through which we perceive, in each case. Rather than with which.”

. . .

“Yes, my son. “It would be a very strange thing if there were a number of perceptions sitting inside us, as though we were Wooden Horses — and there were not some single form, soul or whatever one ought to call it, that all of them come together in. “Something with which, through those, as if they were instruments, we perceive everything that can be perceived.”





The Wooden Horse — the chapter's central dialogue.

. . .

Danae sat up. “Wooden horses.” “Yes.” “Like the — like at Troy? With the men inside?” “Exactly like at Troy,” said Sophia. “That is the joke. He is saying: either there is somebody at home in there, or you are a large hollow object with a crowd of separate soldiers sitting in the dark inside you, none of whom has met any of the others.”

. . .

“Now — the instruments through which you perceive hot, and hard, and light, and sweet. Do they all belong to the body?” “They all belong to the body.” “And will you agree that what you perceive through one power you can’t perceive through another? What you perceive through hearing, you couldn’t perceive through sight; and the other way round?” “I could hardly refuse to grant that.”

. . .





The Wooden Horse — the central concept made visible.

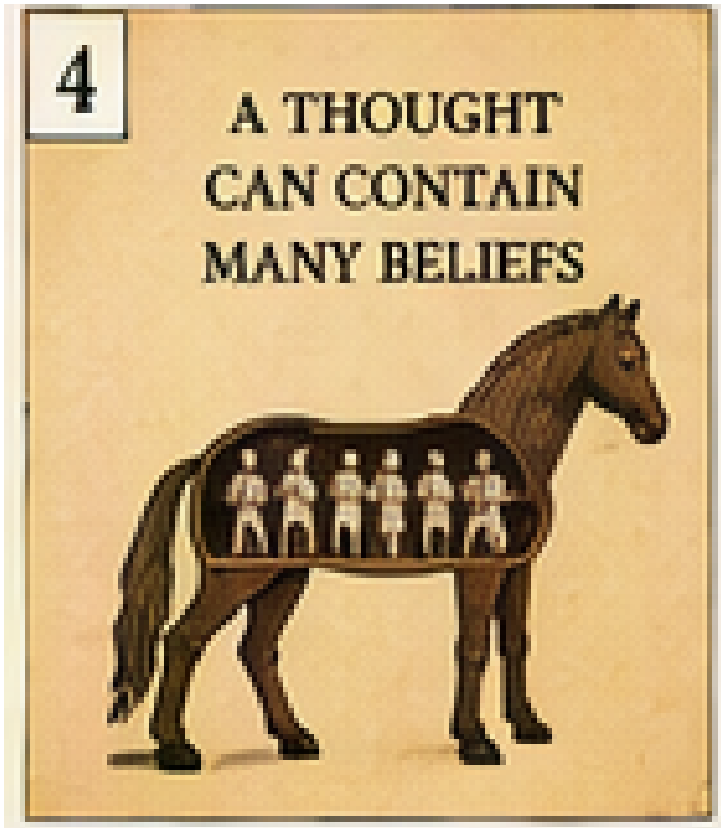
“Then take a sound and a colour. “First of all — don’t you think this same thing about both of them: that they both are?” “I do.” “And that each of them is different from the other, and the same as itself?” “Of course.” “And that both together are two, and each of them is one?” “Yes. I think that too.” “And can you consider whether they are like or unlike each other?” “Yes. I may be.”

. . .

“Now — what is it through which you think all those things about them? “Because it isn’t possible to get at what is common to both, either through sight or through hearing. “Here’s another thing that will show it. Suppose it were possible to ask whether the two of them are salty. You can tell me what you’d examine that with. Plainly not sight, and not hearing, but something else.” “Yes, of course. The power that works through the tongue.”

. . .

“Good. “Then through what does that power work — the one that shows you what is common to all things, and to these two? The thing you express with the words is and is not, and the other terms we were using just now? “What instruments will you assign for all of those? “Through what does the part of us that perceives, perceive all of them?”





The Wooden Horse — the guiding analogy.

. . .

The boy in the picture took a long time.

. . .

“You mean being and not-being,” he said slowly. “And likeness and unlikeness. And same and different. And one, and any other number applied to them. And odd and even, and everything that goes with those. “And you want to know through what bodily instruments the soul perceives all of them.” “You follow me exceedingly well, Theaetetus. Those are exactly the things I am asking about.”

. . .

“But I couldn’t possibly say,” said Theaetetus. “All I can tell you is that it doesn’t seem to me there is any special instrument for these at all, the way there is for the others.

“It seems to me that in looking at what is common to everything, the soul works through itself.”

. . .

“He got it,” said Lela. “He got it,” said Sophia.





The Wooden Horse — the argument unfolding step by step.

. . .

“Yes, Theaetetus — you would say that. Because you are handsome, and not ugly, as Theodorus would have it. For handsome is as handsome says. “And besides being handsome, you have done me a good turn. You have saved me a vast amount of talk. “Because this was what I thought myself. But I wanted you to think it too.”

. . .

In the garden of the Academy, the young man from Stagira had stopped moving entirely. “Say that again,” he said. Plato did not need to ask which part. “There is no special instrument for these. In looking at what is common to everything, the soul works through itself.” “And he lets it stand.” “He lets it stand. It is the first thing in two days that he does not take away again.”

...





The Wooden Horse — the competing interpretation.

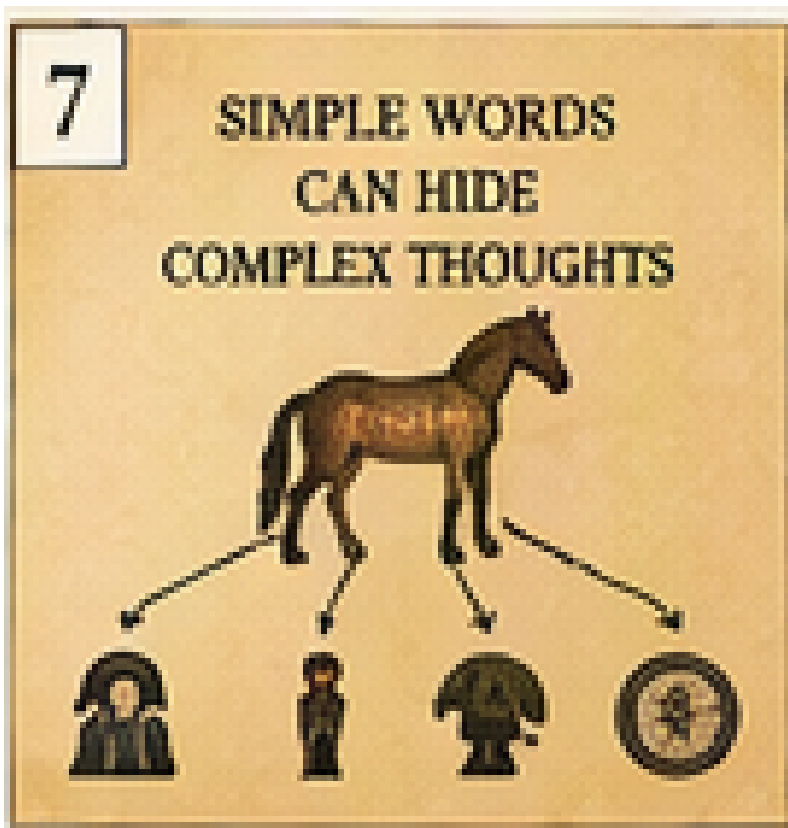
Aristotle sat with the tablet on his knee for a long time. “There is an enormous amount in that,” he said at last. “Yes.” “Being. Sameness. Difference. One and two. Like and unlike. None of them arrives by any door in the body — and yet every animal alive works with them every hour it is awake. A dog knows two rabbits from one rabbit.” “Does it?” “Something does,” said Aristotle. “And if it isn’t the eye, and it isn’t the ear, and it isn’t the nose, then there is something else, and nobody has ever said what it is or where it is.”

. . .

Plato looked at him for a moment. “Then that is yours,” he said. “I am not going to do it. I am sixty-two and I have other things to finish. “Take it away and do it properly, and do not do it this year, and when you do it, remember which afternoon you got it.”

. . .

“Now, in which class do you put being?” Socrates was saying. “That, above all, is something that goes along with everything.” “I should put it among the things the soul reaches out after by itself.” “And like and unlike? Same and different?” “Yes.” “What about beautiful and ugly? Good and bad?” “Yes — those too. In those, above all, I think the soul examines their being by comparing them with one another. Here it seems to be making a calculation inside itself, of past and present in relation to the future.”





The Wooden Horse — Lela and Danae reconstruct the idea.

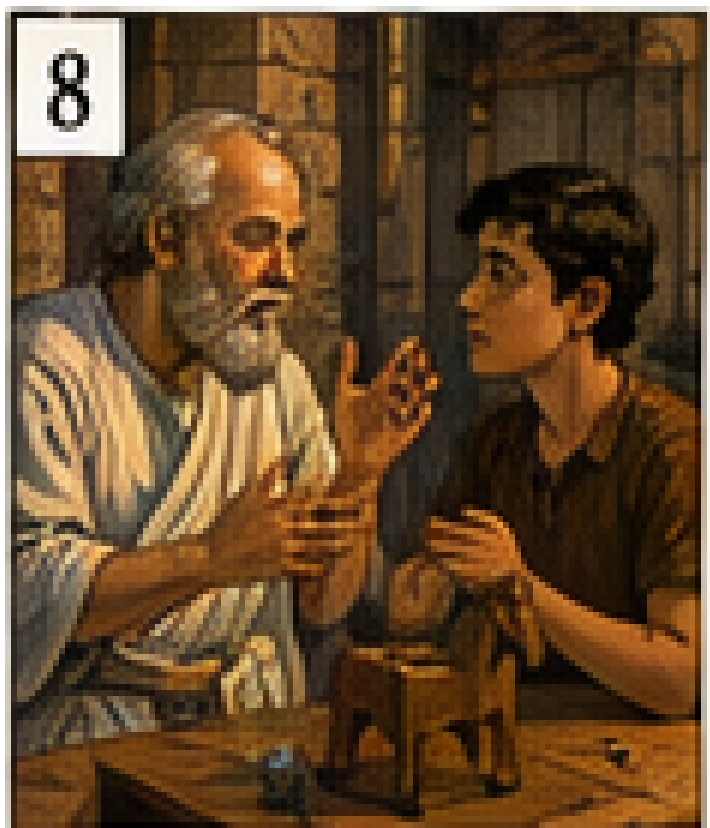
. . .

“Not so fast, now. “Wouldn’t you say it is through touch that the soul perceives the hardness of what is hard, and the softness of what is soft?” “Yes.” “But as for their being — the fact that they are — and their opposition to each other, and the being of that opposition: there the matter is different. There the soul tries to reach a decision for us by rising up and comparing them with one another.” “Yes. Undoubtedly.”

. . .

“And so there are some things that all creatures, men and animals alike, can perceive from the moment they are born — the experiences that reach the soul through the body. “But calculations about their being, and about whether they are any good to us — those come, when they come at all,

only as the result of a long and difficult growth, with a great deal of trouble and education in it.” “Yes. That certainly is so.”





The Wooden Horse — the historical layer.

. . .

“Now. Is it possible for somebody who doesn’t even get at being to get at truth?” “No. It’s impossible.” “And if a man doesn’t get at the truth of a thing, will he ever be a man who knows that thing?” “I don’t see how, Socrates.”

. . .

“Then knowledge is not to be found in the experiences. “It is to be found in the reasoning about them. “It is there, it seems, and not in the experiences, that it is possible to get hold of being, and truth.”

. . .

Lela sat very still. “Sophia.” “Yes.” “That’s not nothing.” “No. It is not nothing.” “He’s failed — the definition’s dead, I can see it’s dead. But that isn’t nothing. Knowledge isn’t

in the experiences, it's in the thinking about them. That's — I could use that. That's a thing you could actually carry around."

. . .





The Wooden Horse — a wordless conceptual plate.

“So, Theaetetus — perception and knowledge could never be the same thing.” “No. Apparently not. We have now got the clearest possible proof that knowledge is something different from perception.”

. . .

“But our object in starting this discussion,” said Socrates, “was not to find out what knowledge is not. It was to find out what it is. “However. We have made a little progress. “We shall not look for knowledge in perception at all now. We shall look for it in whatever we call that activity of the soul when it is busy by itself about the things that are.”

. . .

“Well — the name, I suppose, is judgement.” “Your opinion, my dear lad, is correct. “Now look back to the beginning. Wipe out everything we have said so far, and see

whether you can see any better from where you have got to. “Tell me again. What is knowledge?”

. . .

“Well, Socrates — one can’t say it’s judgement in general, because there’s also false judgement. “But true judgement may well be knowledge. So let that be my answer. “And if the same thing happens again, and we find as we go on that it turns out not to be so, we’ll try something else.”

. . .



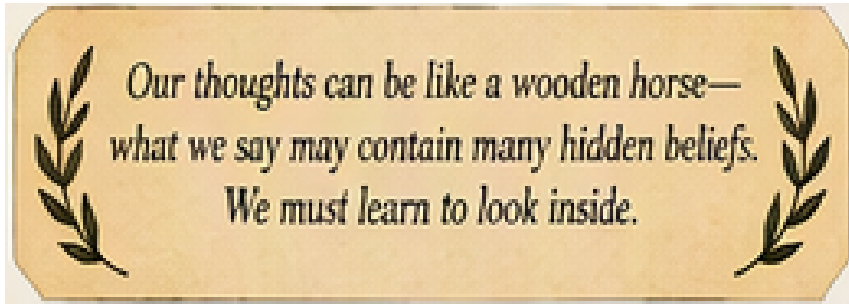


The Wooden Horse — the chapter's narrative and philosophical synthesis.

“And even so, Theaetetus, you have answered me the way one ought to — with a good will, and not reluctantly, the way you did at first. “If we go on like this, one of two things will happen. “Either we shall find what we’re going out after. “Or we shall be less inclined to think we know things which we don’t know at all. “And even that would be a reward we couldn’t fairly be dissatisfied with.”

. . .

“There,” said Sophia. “That is the book. That one sentence is what the whole of the next two days is for, and it is sitting in the middle of it where nobody ever looks.”



The Wooden Horse — the chapter's closing thought.

Chapter 35

THIRTY-FIVE. Thinking What Is Not





Thinking What Is Not — opening scene.

“Now I wonder whether it’s worth going back, at this stage, to an old point about judgement.” “What point?”

. . .

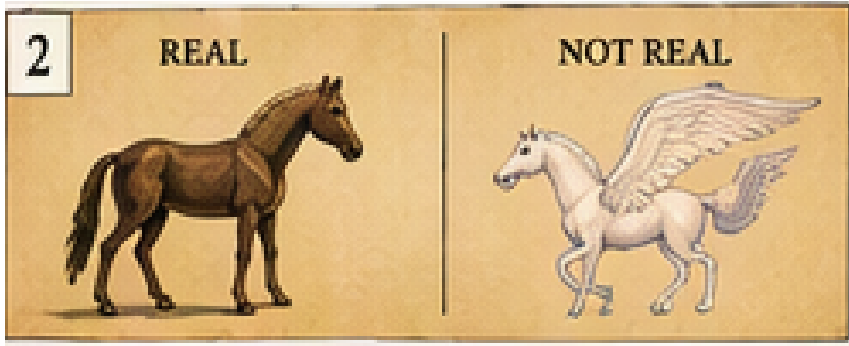
“I have something on my mind that has often bothered me before, and got me into great difficulty — both in my own thinking and in talking to other people. “I mean, I can’t say what it is, this experience we have, or how it arises in us.” “What experience?”

. . .

“Judging what is false.”

. . .

“Oh,” said Lela. “Yes,” said Sophia. “He doesn’t know.” “He has said so twice before this afternoon and both times you thought he was being modest.”



Thinking What Is Not — the chapter's central dialogue.

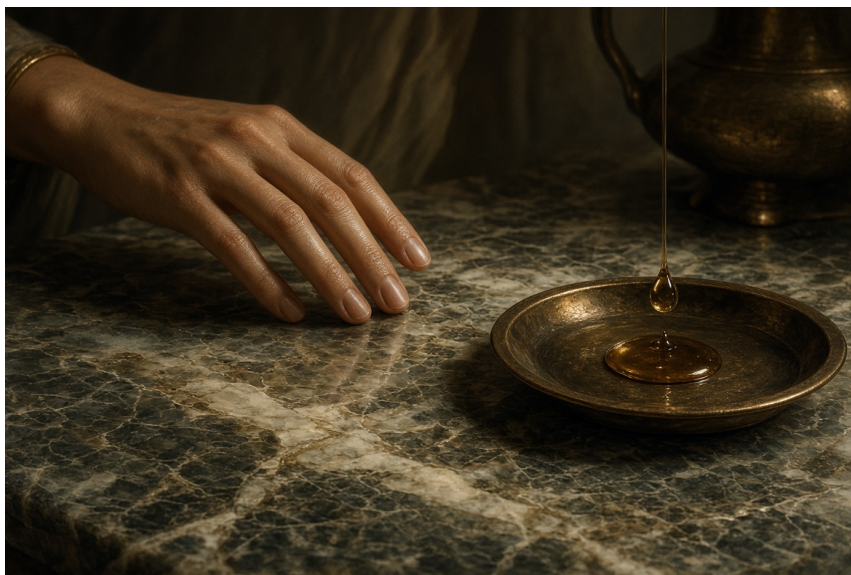
. . .

“Even now, you know, I’m still considering. I’m in two minds whether to let it go, or to look into it in a different way from the one we tried a while back.” “Why not, Socrates, if it seems the right thing? As you and Theodorus

were saying just now — and quite rightly — when you were talking about leisure. We aren't pressed for time in talk of this kind." "A very proper reminder."

. . .





Thinking What Is Not — the central concept made visible.

And then, for about an hour, they went round in a shape that neither of the girls had seen before, and that Lela eventually decided was less like an argument than like a man walking round a locked house trying every window.

. . .

“Look at it this way,” said Socrates. “A man either knows a thing or doesn’t know it. Let us leave learning and forgetting out of it for now. “Then whenever a man judges something, he must be judging either about something he knows, or about something he doesn’t.” “That must be so.” “And a man who knows a thing can’t fail to know it; and a man who doesn’t know it can’t know it.” “Of course.”

4





Thinking What Is Not — the guiding analogy.

. . .

“Then does a man who judges falsely think that one thing he knows is a different thing he knows — knowing them both and being ignorant of neither?” “That’s impossible.” “Or does he think that something he doesn’t know is a different thing he doesn’t know? Does a man who knows neither Theaetetus nor Socrates take it into his head that Socrates is Theaetetus?” “I can’t see how.”

. . .

5





Thinking What Is Not — the argument unfolding step by step.

“Or that something he knows is something he doesn’t know? Or that something he doesn’t know is something he does?” “That would be monstrous.”

. . .

“Well then,” said Socrates. “What is left? “How can there be false judgement at all? Because it’s impossible outside those cases, and we don’t know a thing and not know it, and we don’t know two things and mix them up. “So false judgement is nowhere. And it plainly is somewhere, because it happens every day.”

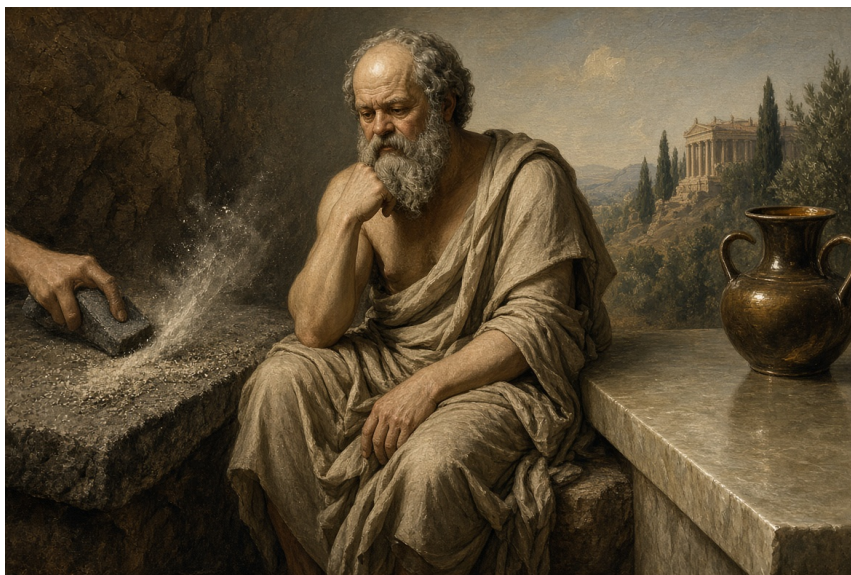
. . .

Danae, with total confidence: “This is stupid.”

6

WE CAN THINK
ABOUT THINGS
THAT DO NOT EXIST





Thinking What Is Not — the competing interpretation.

. . .

“Say why,” said Sophia. “Because it isn’t knowing and not knowing. It’s — you can half know something.” She sat up. “I know Yiayia’s neighbour. I know her from the back and I don’t know her from the front. I waved at a completely different woman in the shop at Easter and she waved back and I still don’t know who she was. “He’s made it into a switch with two positions and it isn’t a switch.”

. . .





Thinking What Is Not — Lela and Danae reconstruct the idea.

“That,” said Sophia, “is exactly what he is about to say, and he is going to take four attempts to get there, and he is going to invent two of the most famous pictures in philosophy on the way. “And the reason he takes four attempts and you took nine seconds is that you were allowed to say I half know her, and he is trying to find out what knowing is, so he is not allowed to use it.”

. . .

Danae lay back down. “That’s horrible,” she said, with feeling. “Yes,” said the owl. “It is the hardest rule in the subject and it is the whole of the subject.”

8





Thinking What Is Not — the historical layer.

. . .

He tried it another way. Perhaps false judgement was thinking what is not. “But can a man think what is not? About anything, or by itself?” “He can’t.” “Because a man who sees, sees something. And a man who touches, touches something. And a man who thinks, thinks something.” “Certainly.” “And a man who thinks nothing thinks nothing at all — and to think nothing is not to think.” “So it seems.” “Then a man cannot think what is not. Not about the things that are, and not by itself. “And so false judgement is not thinking what is not. And that road is shut too.”

9

TRUE
THOUGHT



FALSE
THOUGHT



BOTH ARE THOUGHT

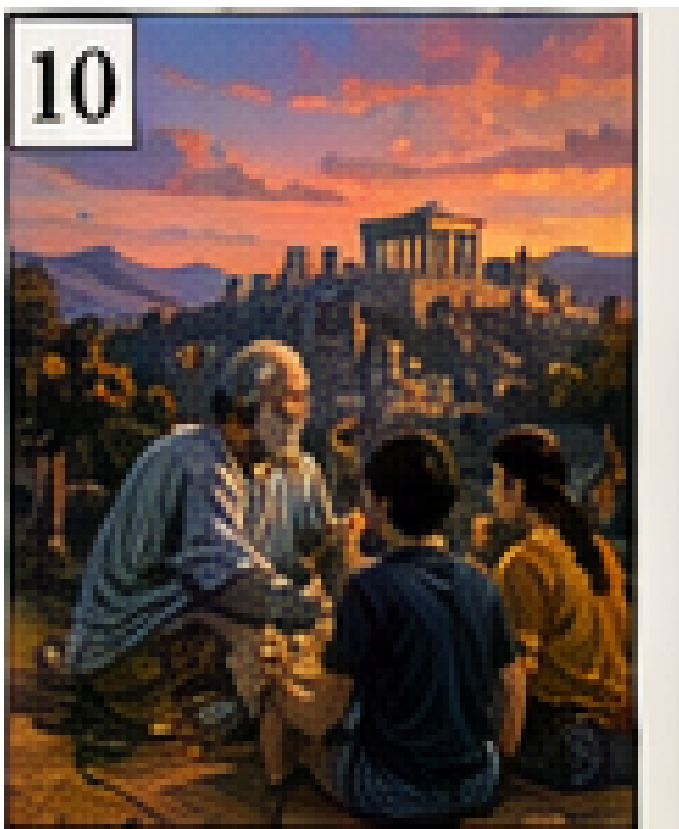


Thinking What Is Not — a wordless conceptual plate.

. . .

He tried it a third way. Perhaps false judgement was a kind of substitution — thinking that one thing that is, is another thing that is. Mistaking the ugly for the beautiful. Putting one real thing in the place of another. And that seemed the most promising thing anybody had said all afternoon, until Socrates pointed out, very gently, that a man who does this must have both things in mind at once; and that he must then be thinking that the beautiful is the ugly, which nobody has ever managed to do, however stupid; and that road, too, closed.

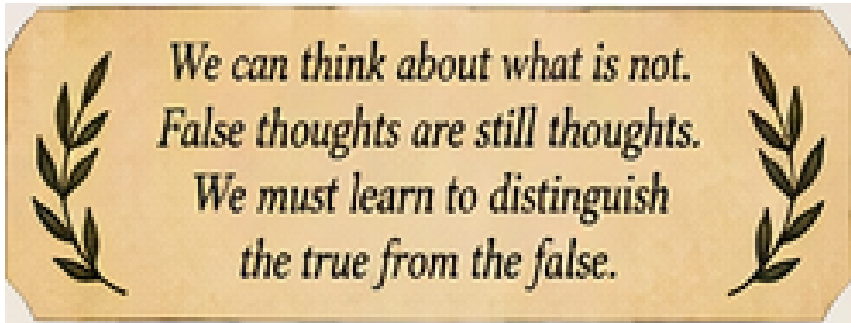
. . .





Thinking What Is Not — the chapter's narrative and philosophical synthesis.

“He’s tried everything,” said Lela. “He has tried everything. That is what this hour has been.” “And there’s nowhere left.” “There is nowhere left,” said Sophia, “using only what he has got. “So now he is going to do the thing that separates him from every clever person you will ever meet. He is going to stop arguing and make something up.”



Thinking What Is Not — the chapter's closing thought.

Chapter 36

THIRTY-SIX. The Wax





The Wax — opening scene.

“Then I must be bold,” said Socrates, “and tell you what I think knowing is.” “Do.”

. . .

“Imagine,” he said, “that there is in our souls a block of wax. “Larger in one person, smaller in another. Purer wax in one case, dirtier in another. In some men rather harder, in others softer; and in some, of just the right consistency.”

. . .

Danae sat straight up.

. . .





The Wax — the chapter's central dialogue.

“And let us say it is a gift from Memory, the mother of the Muses. “And that whenever we want to remember something we have seen, or heard, or thought of ourselves — we hold this wax under the perception or the thought, and take a stamp of it, the way we take the impressions of signet rings. “And whatever is impressed on the wax, we remember and we know, for as long as the image stays there. “And whatever is rubbed out, or cannot be impressed in the first place, we forget and do not know.”

. . .

“Oh,” said Danae. “Oh, that’s good.” “Yes,” said Sophia. “That’s — Lela, that’s exactly what it’s like.” “I know.” “That’s what it feels like inside. You get shown something and it goes in, or it doesn’t go in, and you can tell at the time which one it’s doing —“

. . .

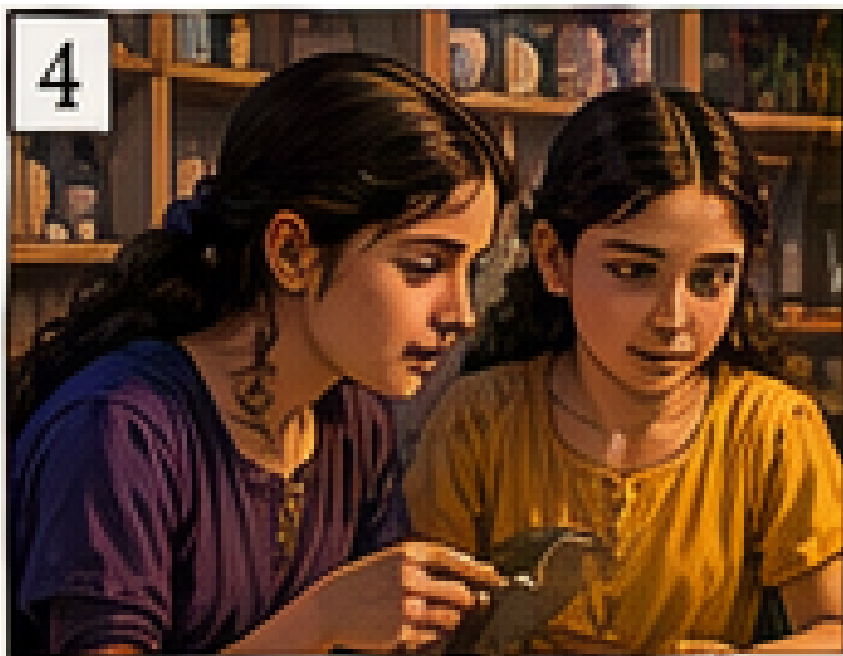


The Wax — the central concept made visible.

“And now,” said Sophia, “you understand why people have been repeating this particular image for two thousand three hundred years, in every language there is, mostly without knowing where they got it. “Every time anybody says a thing is impressed on the memory, or stamped on the mind, or that an experience left its mark, or that a

child's mind is impressionable — they are quoting this afternoon. “There is a machine in your grandmother’s house that stores pictures, and the men who built it borrowed a word from this passage, and did not know they had.”

. . .





The Wax — the guiding analogy.

And then Socrates explained false judgement with it, and it worked. A man sees somebody in the distance. He has the imprint of Theodorus in his wax, and the imprint of Theaetetus. He looks up, and the thing he sees does not fit into its own imprint cleanly — it is too far away, or the light is bad — and he puts it into the wrong one. The way, Socrates said, a man puts his feet into the wrong shoes in the dark. And that is false judgement. Not thinking what is not. Not knowing and not knowing at once. Simply putting a present thing into the wrong stored shape.

. . .

6





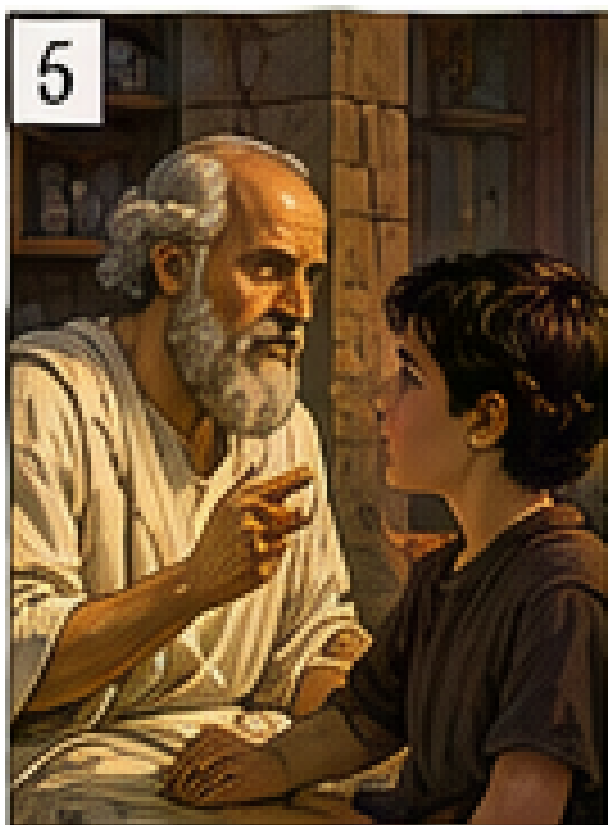
The Wax — the argument unfolding step by step.

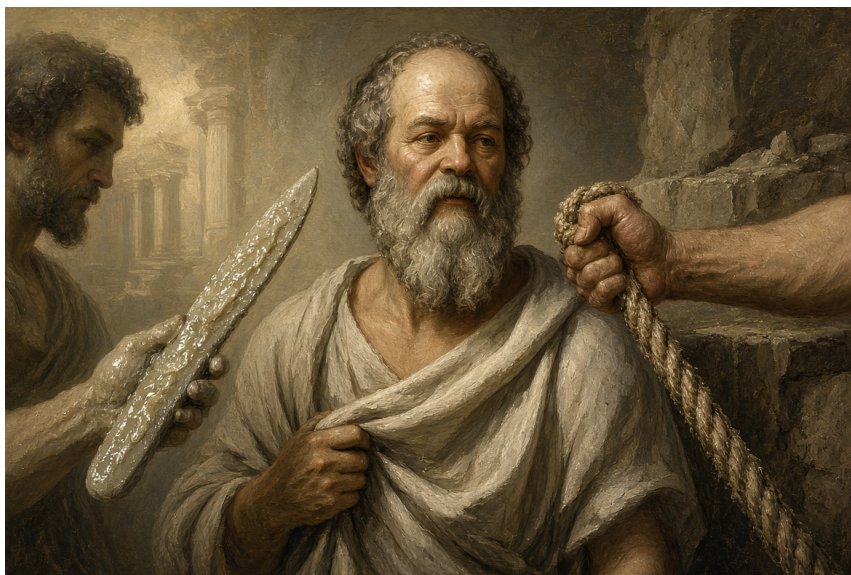
“When the soul brings the proper stamps and the things together directly,” said Socrates, “and in straight lines, the judgement is true. “When it does it crosswise and crookedly, the judgement is false.”

. . .

“Well,” said Theaetetus. “Isn’t that beautiful, Socrates?” “Ah — when you’ve heard what’s coming next, you’ll say so all the more. “Because true judgement is beautiful, right enough, and error is ugly.”

. . .





The Wax — the competing interpretation.

“And here is why the two things happen. “In some men the wax in the soul is deep, and plentiful, and smooth, and worked to just the right consistency. And when the things that come in through the senses are stamped on this heart of the soul — as Homer calls it, hinting at the likeness to wax — the marks that are made in it last, because they are clear and have enough depth. “Men like that learn easily and remember what they learn. They don’t get the marks out of line with what they are seeing. They judge truly. “Because the marks are distinct and there is plenty of room for them, they quickly put each thing into its own impression. “And these are the people we call wise.”

. . .

8

FROM IMPRESSION TO RECALL



experience

leaves an
an imprint

which can
be recalled



The Wax — Lela and Danae reconstruct the idea.

“But it’s a different matter when a man’s heart is shaggy — the kind of heart our marvellously knowing poet praises. Or when it is dirty, and of impure wax. Or when it is very soft, or very hard. “Where the wax is soft, men are quick to learn and quick to forget. Where it is hard, the opposite. “Where it is shaggy and rugged — a stony thing with earth and filth mixed all through it — the impressions come out indistinct. And so they do if the wax is hard, because then they have no depth; and so they do if it is soft, because then they run together and get blurred. “And if on top of all that the impressions are crowded on each other for lack of room — because it is only some little scrap of a soul — then they are more indistinct still. “All such people are liable to false judgement. When they see or hear or think of anything, they can’t quickly put each thing to each mark. They are slow, and they put things to marks that don’t belong to them — misseeing, mishearing, misthinking

most of it. “And these are the ones we describe as being in error about the things that are. And ignorant.”



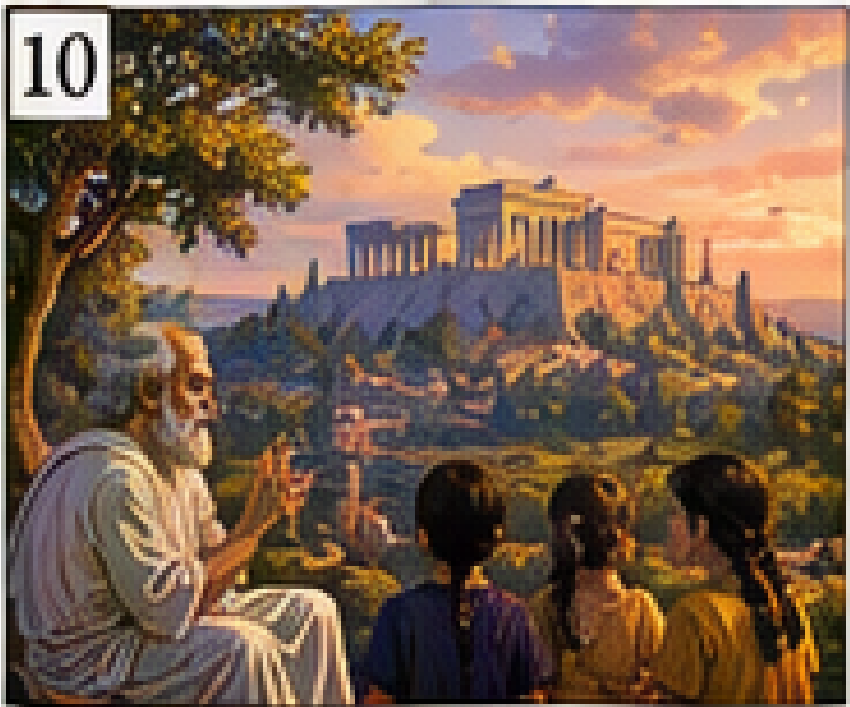


The Wax — the historical layer.

. . .

The picture ran on for a moment.

. . .





The Wax — a wordless conceptual plate.

“Mine’s soft,” said Danae. “Danae—” “It is, though. That’s me. Quick to learn and quick to forget, that’s — I did the whole of the alphabet in a weekend when I was five and I can’t remember what I had for lunch.” She was not upset; she was extremely interested. “What’s yours?”

. . .

Lela thought about it for a while. “Hard,” she said. “I think mine’s hard.” “That’s why you’re slow.” “Thank you, Danae.” “No, but it’s the same paragraph.” Danae was frowning at the picture. “It’s not a nice one and a nasty one. It’s — everybody gets a different bit of wax and nobody chose theirs, and the good wax people get called wise and the bad wax people get called stupid, and that’s just what their soul is made of.”



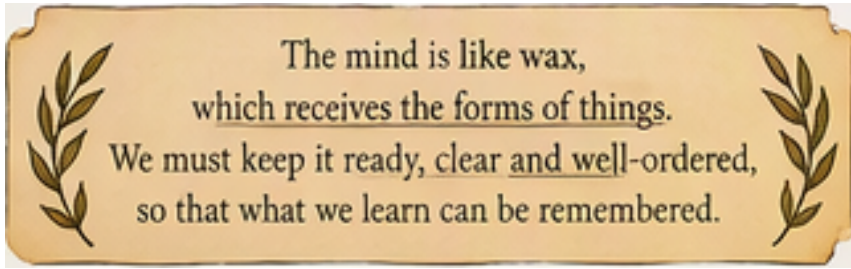
The Wax — the chapter's narrative and philosophical synthesis.

. . .

Sophia said nothing at all for a moment. “Say the rest of it,” she said. “What rest of it?” “You have not finished the thought. You never do. Finish it.”

. . .

Danae looked at the ground. “Well, then it isn’t fair,” she said. “Is it. If it’s the wax.”



The Wax — the chapter's closing thought.

Chapter 37

**THIRTY-SEVEN. Eleven and
Twelve**





Eleven and Twelve — opening scene.

“Then are we to say that false judgements do exist in us?”
“Yes. Most emphatically.” “And true ones, of course?”
“And true ones.” “And we think we have now reached a satisfactory agreement, when we say that these two kinds of judgement certainly exist?” “There’s no earthly doubt about it, Socrates.”

. . .

“Theaetetus,” said Socrates. “I’m afraid a talkative man is really an awful nuisance.”

. . .

“Why? What are you talking about?”

. . .

“I’m annoyed at my own stupidity. My own real talkativeness. “What else could you call it, when a man

keeps dragging arguments up and down because he is too slow-witted to come to any conviction, and won't be pulled off any of them?" "But why should you be annoyed?"





Eleven and Twelve — the chapter's central dialogue.

. . .

“I’m not only annoyed. I’m alarmed. “I’m afraid of what I shall say if somebody asks me: So, Socrates — you’ve discovered false judgement, have you? You’ve found that it doesn’t arise in our perceptions in relation to each other, nor in our thoughts, but in the fitting of perception to thought? “And I shall say yes, I expect, and look rather pleased with myself, as though we had found out something rather fine.”

. . .





Eleven and Twelve — the central concept made visible.

“And then he will say: Then according to you, when a man has in his mind only the thought of eleven, and nothing else — and never perceives eleven of anything — is it possible for him to think that eleven is twelve? “Go on, Theaetetus. You answer him.”

EUCLID · Elements VII — unit; number

El.VII.Def.1 — unit LIGHT

A unit is (that) according to which each existing (thing) is said (to be) one.

“A unit is that according to which each existing thing is said to be one.”

1 ARISTOTLE: Alexander, before we speak of numbers, we must understand the very idea of "one."

2 Behold this single stone. It is **ONE**.

3 This "one" is what we call a **UNIT**—that according to which each existing thing is said to be one."

4 When we put units together, we can count: three stones = $1 + 1 + 1$.

5 See how each stone is first taken as one, because of the **unit**.

6 From repeated units, **numbers** arise: 2, 3, 4, and so on.

7 If we have apples, each apple is taken as one apple—**one unit**—relative to the collection.

8 **UNIT**
"the idea of one"
↓
repeat units
↓
NUMBERS
(2, 3, 4, 5, ...)

9 Remember this well, Alexander: a **unit** gives the meaning of one, and **numbers** are made of units.

For Euclid, "number" means a positive integer greater than one. $1 = \text{unit (not a number)}$ $2 = 1 + 1$ $3 = 1 + 1 + 1$ $4 = 1 + 1 + 1 + 1$...

E1.VII.Def.2 — *number* LIGHT

413

EUCLID, BOOK VII — DEFINITION 2: NUMBER

"A number is a multitude composed of units."

1 Alexander, we begin with one.	2 Add another unit.	3 Add another.
This single stone is a UNIT. It is ONE.	Now we have 1 + 1. This multitude of units is called 2.	Now we have 1 + 1 + 1. This multitude of units is called 3.
4 Add one more.	5 And another.	6 $ \begin{aligned} 2 &= 1 + 1 \\ 3 &= 1 + 1 + 1 \\ 4 &= 1 + 1 + 1 + 1 \\ 5 &= 1 + 1 + 1 + 1 + 1 \\ &\dots \dots \\ n &= \underbrace{1 + 1 + \dots + 1}_{n \text{ times}} \end{aligned} $
$1 + 1 + 1 + 1 = 4$. A number is many units taken together.	$1 + 1 + 1 + 1 + 1 = 5$. And so on, without end...	Every number is made by repeating the unit.
7 Look at our soldiers.	8 Whatever we count—stones, soldiers, apples—each is counted as one unit.	9 Remember this, Alexander: A unit gives the idea of one. But a number is born when units become a multitude.
One soldier is a unit. Many soldiers together give us a number.	A NUMBER IS A MULTITUDE COMPOSED OF UNITS.	
UNIT = ONE (not yet a number)	→	NUMBER = MANY ONES TOGETHER (a multitude composed of units)

El.VII.Def.2 — number

Why here: Soft VII. (light)

4

ARE THEY
JUST MORE STONES
OR
ARE THEY THE SAME
NUMBER
WHEREVER THEY ARE?



Eleven and Twelve — the guiding analogy.

Note. Soft VII. (light)

. . .

“Well — I should say a man could think that eleven things he saw were twelve. But not the eleven and twelve he has in his mind.”

. . .

“Are you sure? “Then take somebody, on his own, thinking about five and seven. I don’t mean seeing five men and seven men, or anything of that kind. I mean five and seven themselves — the records of them, as we say, in the wax; the things we say it’s impossible to judge falsely about. “Has anybody ever sat down and asked himself what they come to, and one man said twelve, and another said eleven? Or does everybody say twelve?”





Eleven and Twelve — the argument unfolding step by step.

. . .

“Heavens, no,” said Theaetetus. “Plenty of people say eleven. “And if you take a larger number, they go wrong more often. Because I take it you mean this to apply to numbers generally.”

. . .

“You are right to take it so. “And consider whether what happens then is anything other than a man thinking that twelve itself — the one in the wax — is eleven.” “It looks like it.”

6



XII

Different appearances,
the same number.



Eleven and Twelve — the competing interpretation.

. . .

“Then haven’t we come back round to where we started? “Because a man who has this happen to him is thinking that one thing he knows is another thing he knows. “And we said that was impossible. It was the very thing that forced us to say that false judgement could not exist — because otherwise the same man would have to know and not know the same things at the same time.”

. . .

The picture went on for a second and then Lela said, out loud, to nobody: “It broke.”





Eleven and Twelve — Lela and Danae reconstruct the idea.

. . .

“It broke,” said Sophia. “But it worked. It worked completely. It worked for the man in the distance and the wrong shoes and the — it explained everything.” “It explained everything you can be wrong about by looking,” said the owl. “And the moment he asked about a thing that nobody looks at — five and seven, sitting in your head with no eyes involved anywhere — the whole beautiful machine had nothing to say. “There is no seeing in seven. There is nothing to misfit it to. And people get it wrong every day of the week.”

. . .

8

ONE NUMBER, MANY FORMS



The number remains the same
through different representations.



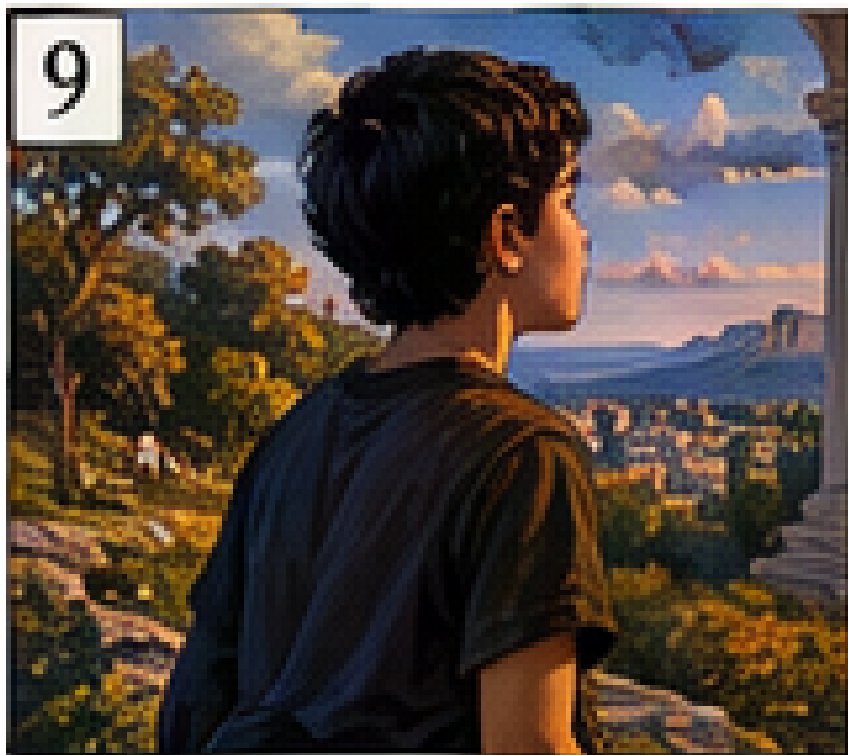
Eleven and Twelve — the historical layer.

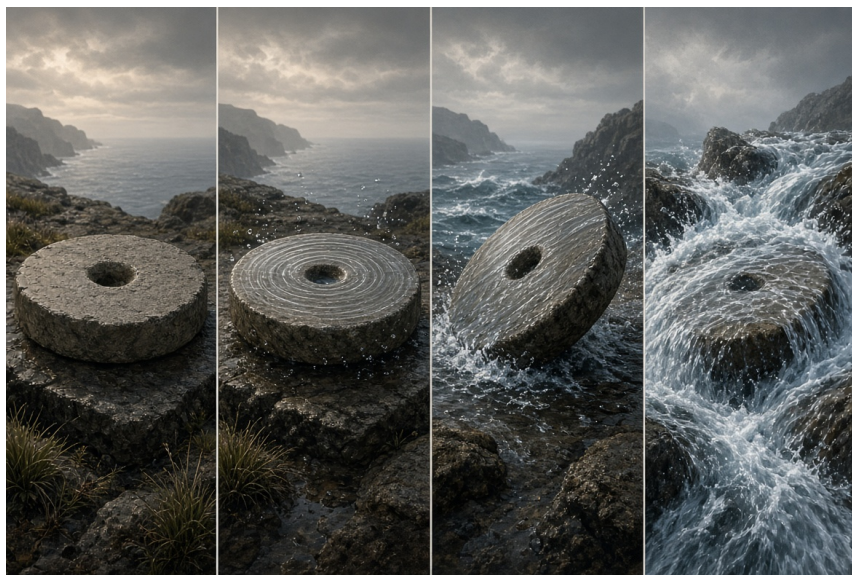
Danae said, in a small flat voice: “So the wax is wrong.” “The wax is not enough. That is different and he will keep some of it.” “But I liked the wax.” “I know,” said Sophia. “So did he. He spent a page making it beautiful and then he walked round it once more and found the hole himself, and he did it in front of a boy of fifteen instead of going home and keeping quiet about it. “That is the entire difference between a philosopher and a man who has a theory.”

. . .

“Well, my friend,” said Socrates, “what are we to do? “There’s nothing for it. Let us be shameless, and try once more — and see whether there is anything in it.” “What do you want to do?”

9





Eleven and Twelve — a wordless conceptual plate.

. . .

“I want to ask you this,” said Socrates. “What is it, to learn something? “Because I have a feeling that we have been using the word know all afternoon as though we had any right to it. “And we are trying to find out what knowing is.”

. . .

In the garden of the Academy, Aristotle said: “He has noticed.” “He noticed an hour ago,” said Plato. “He has been using it on purpose and waiting to see whether anybody else would say so, and nobody has. “And now he is going to say it himself, and then invent a cage full of birds, and that will not work either.”

10

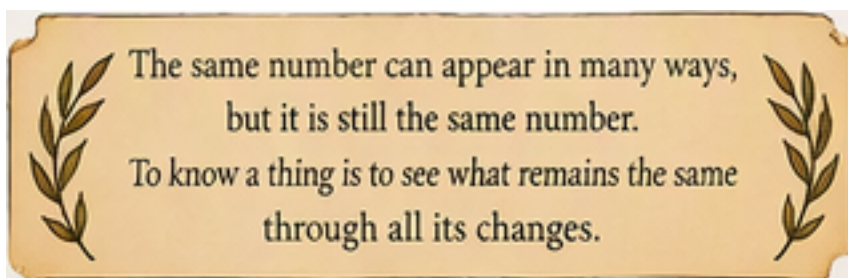




Eleven and Twelve — the chapter's narrative and philosophical synthesis.

. . .

The young man put down his stylus and rubbed his eyes with the heels of his hands, which, Lela thought, watching from an olive grove two thousand three hundred years away, was the single most familiar thing she had seen anybody do all summer. “Does anything work?” said Aristotle. “No,” said Plato. “That is the book.”



Eleven and Twelve — the chapter's closing thought.

Chapter 38

THIRTY-EIGHT. The Aviary





The Aviary — opening scene.

“You are offering me an impossible choice, Socrates.” “I’m afraid the argument won’t allow us both. Still — we must stop at nothing. Suppose now we were to set about being quite shameless?” “How?” “By consenting to say what knowing is like.”

. . .

“And why should that be shameless?”

. . .

“You don’t seem to realise that our whole discussion, from the beginning, has been an inquiry about knowledge — on the assumption that we do not yet know what it is.” “Oh, but I do.” “Well then. Don’t you think it a shameless thing, that we, who don’t know what knowledge is, should pronounce on what knowing is like? “As a matter of fact, Theaetetus, for some time past our whole method has been

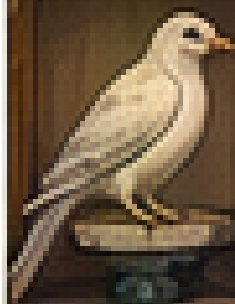
tainted. Time and again we have said we are acquainted with and we are not acquainted with, we know and we do not know — as if we could understand one another to some extent while we are still ignorant of what knowledge is. “Here’s another, if you like. At this very moment we have used the words to be ignorant of and to understand, as though these were quite proper expressions for us, when we are deprived of knowledge.”

. . .

“But how are you going to carry the discussion on at all, Socrates, if you keep off those words?”

. . .

3



PERCEPTION



MEMORY



JUDGMENT



The Aviary — the chapter's central dialogue.

“Quite impossible, for a man like me. “But if I were one of the experts in contradiction, I might be able to. If one of those gentlemen were here he would have commanded us to refrain, and would keep coming down on us heavily for exactly the faults I’m speaking of. “Since we are no good anyway — why don’t I make bold and tell you what knowing is like? It might be of some help.” “Then do be bold, please. And if you don’t keep off those words, we’ll forgive you all right.”

. . .

“He apologised,” said Lela. “He did not apologise,” said Sophia. “He did something much rarer. He said out loud what was wrong with his own method, went on using it, and told you exactly how much to trust him. “Nobody does that. Watch for it for the rest of your life and see how often you catch anybody doing it.”

. . .

“Well then. Have you heard what people say nowadays that knowing is?” “I dare say I have. But I don’t remember at the moment.” “They say, of course, that it is the having of knowledge.” “Oh, yes. That’s true.” “Let us make a small change. Let us say the possession of knowledge.”





The Aviary — the central concept made visible.

. . .

“And how would that be different from the first way of putting it?” “Perhaps it isn’t at all. But I’ll tell you what I think the difference is, and then you must help me examine it.” “All right. If I can.”

. . .

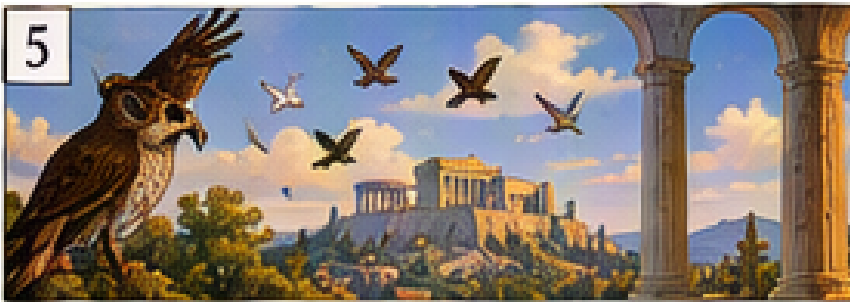
“To possess doesn’t seem to me the same as to have. “Suppose a man has bought a coat, and it’s at his disposal, but he isn’t wearing it. We wouldn’t say he has it on. But we would say he possesses it.” “Yes. That would be correct.”

. . .

“Oh,” said Danae. “Oh.” “Yes,” said Sophia. “He’s going to do it again, isn’t he. He’s going to make another one.” “He is going to make another one.”

. . .

“Now look here,” said Socrates. “Is it possible, in this way, to possess knowledge and not have it? “Suppose a man were to hunt wild birds — pigeons, or something — and make an aviary for them at his house, and look after them there. In a sense, I suppose, we might say he has them all the time. Because of course he possesses them.” “Yes.”





The Aviary — the guiding analogy.

. . .

“But in another sense he has none of them. “It is only that he has acquired a certain power in respect of them, because he has got them under his control in an enclosure of his own. “That is to say: he has the power to hunt for any one he likes, at any time, and take it and have it whenever he chooses, and let it go again. And this he can do as often as he likes.” “That is so.”

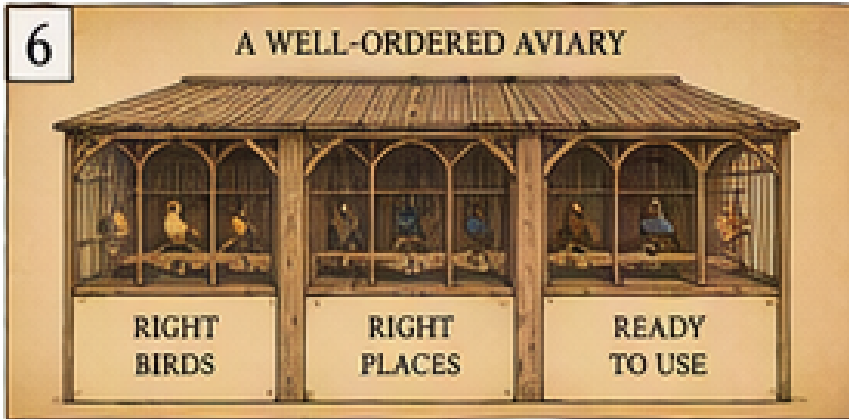
. . .

“Well, a little while ago we were equipping souls with I don’t know what sort of a waxen device. “Now let us make, in each soul, a sort of aviary of all kinds of birds. Some in flocks, separate from the rest. Some in small groups. And others flying about singly, here and there, among all of them.”

. . .

“All right,” said Theaetetus. “Let us suppose it made.
What then?”

. . .





The Aviary — the argument unfolding step by step.

“Then we must say that when we are children this receptacle is empty. And that by the birds we are to understand pieces of knowledge. “When anyone takes possession of a piece of knowledge and shuts it up in the pen — we should say that he has learned, or has found out, the thing of which this is the knowledge. “And knowing, we should say, is this.” “That’s given, then.”

. . .

Danae had both hands over her mouth.

. . .

“What,” said Lela. “It’s the tip of my tongue,” said Danae, through her fingers. “Lela. It’s the tip of my tongue. That’s what he’s doing. That’s the whole thing he’s doing.”

. . .

“Say it properly,” said Sophia.

. . .

Danae took her hands down. “When you know somebody’s name and you can’t get it,” she said. “That’s the whole thing. That’s the — you have got it, because two minutes later it comes and you go oh, Marina, and you didn’t learn it in those two minutes, you had it all along. So it was in there. But you didn’t have it. You couldn’t get at it. “So there’s two different things. Having it in there and being able to get it out.” She looked at the owl. “And nobody ever told me those were two different things and I’ve known it since I was about four.”





The Aviary — the competing interpretation.

. . .

“That,” said Sophia, “is what the next page is. You have arrived at it about nine minutes early, which is becoming a habit with you.”

. . .

“Now think,” Socrates was saying. “When he hunts again for any one of the pieces of knowledge that he chooses, and takes it, and has it, and then lets it go again — what words are appropriate? “The same as before, when he first took possession? Or different ones? “You’ll see my point more clearly this way. There’s an art you call arithmetic, isn’t there?” “Yes.” “Think of it as a hunt for pieces of knowledge concerning everything odd and even.” “All right. I will.”

. . .

“It’s by virtue of this art, I suppose, that a man both has pieces of knowledge about numbers under his control, and also hands them over to others?” “Yes.” “And we call it teaching when a man hands them over to others; and learning when he gets them handed over to him. And when he has them, through possessing them in this aviary of ours — that we call knowing.” “Yes. Certainly.”





The Aviary — Lela and Danae reconstruct the idea.

. . .

“In the garden,” said Sophia, “write that down.”

. . .

Aristotle was already writing it down.

. . .

“Now give your attention to what’s coming,” said Socrates. “It must be true that a man who has completely mastered arithmetic knows all numbers. Because there are pieces of knowledge covering all numbers in his soul.” “Of course.” “And a man so trained may go on to do some counting — either counting the numbers themselves to himself, or counting something else, one of the outside things that have number?” “Yes, surely.” “And counting

we shall take to be simply a matter of considering how large a number actually is?” “Yes.”

. . .

“Then it looks as if this man were considering something which he knows as if he did not know it. Since we have granted that he knows all numbers. “I’ve no doubt you’ve had such puzzles put to you.” “I have, yes.”

. . .





The Aviary — the historical layer.

“Then, using our image of possessing and hunting for the pigeons, we shall say there are two phases of hunting. “One before you have possession, in order to get possession. “And another when you already possess, in order to catch and have in your hands what you acquired before. “And in this way, even with things you learned and got the knowledge of long ago and have known ever since — it is possible to learn them, these same things, all over again. You can take up again and have that knowledge of each of them which you acquired long ago, but had not ready to hand in your thought.” “True.”

. . .

“That’s revision,” said Lela.

. . .

She said it flatly, the way you report a fact. “That’s what revising is. Everybody says you’re learning it again and

you're not, you're — it's in there, you're going and getting it. That's why it feels different from the first time. It doesn't feel like learning, it feels like looking for something in a cupboard."

. . .





The Aviary — a wordless conceptual plate.

“Here it seems,” said Socrates, “that a man who knows something is setting out to learn again, from himself, things which he already knows.” “But that would be a very odd thing, Socrates.” “Then are we to say that it’s things he doesn’t know that such a man is going to read and count — remembering that we’ve granted him knowledge of all letters and all numbers?” “That wouldn’t be reasonable either.”

. . .

“Then would you like us to take this line? “Suppose we say we don’t mind at all about the names. Let people drag the terms knowing and learning around to their heart’s content. “We have determined that to possess knowledge is one thing, and to have it is another. Accordingly, we maintain that it’s impossible for anyone not to possess what he has possession of — and so it never happens that a man

does not know something he knows. “But he may yet make a false judgement about it.”

. . .

“Ah,” said Sophia. “There. Now.”

. . .

“This is because it’s possible for him to have, not the knowledge of this thing, but another piece of knowledge instead. “When he’s hunting for one piece of knowledge, it may happen — as they fly about — that he makes a mistake and gets hold of one instead of another. “It was this that happened when he thought eleven was twelve. He got hold of the knowledge of eleven that was in him, instead of the knowledge of twelve. “As you might catch a ring-dove instead of a pigeon.”

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The Aviary — the chapter's narrative and philosophical synthesis.

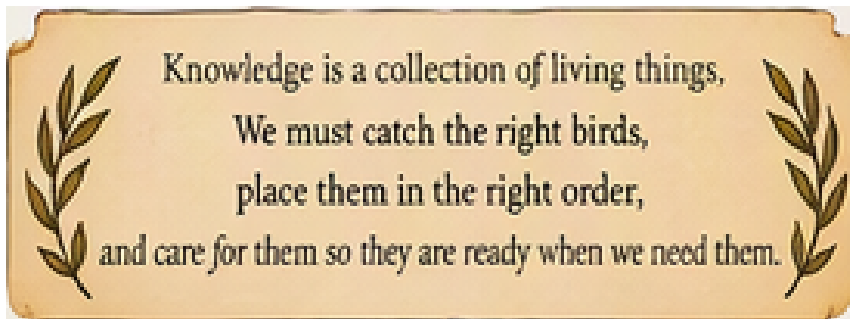
. . .

“Yes,” said Theaetetus. “That is reasonable, now.”

. . .

“He’s fixed it,” said Lela. “He has fixed it,” said Sophia.
“That’s — the thing that broke, that’s mended. Five and seven, it’s all in your head, nobody’s looking at anything,

and you still get it wrong, because the birds are all in there at once and you grabbed the wrong bird.” “Yes.” “That’s better than the wax.” “It is better than the wax,” said the owl, “and it will last about four minutes.”



The Aviary — the chapter's closing thought.

Chapter 39

THIRTY-NINE. The Birds of Ignorance





The Birds of Ignorance — opening scene.

“We have now got rid of this not knowing what one knows,” said Socrates. “Because we now find that at no point does it happen that we do not possess what we possess, whether we’re in error about anything or not. “But it looks to me as if something else, rather more alarming, is by way of coming upon us.” “What’s that?”

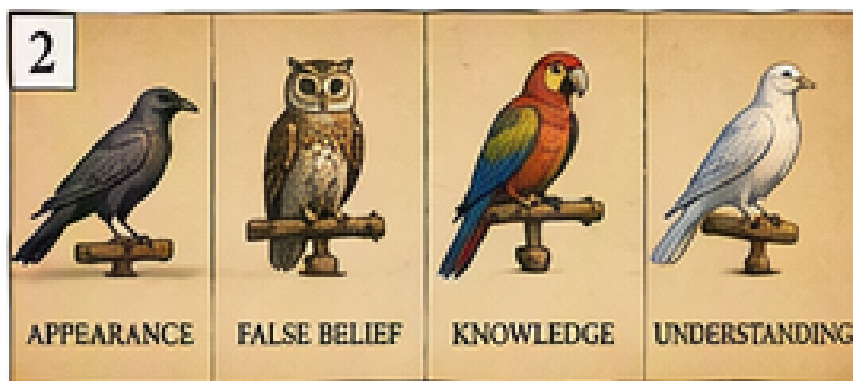
. . .

“What is involved, if false judgement is going to be a matter of an interchange of pieces of knowledge.” “What do you mean?”

. . .

“To begin with, it follows that a man who has knowledge of something is ignorant of this very thing — not through any want of knowledge, but actually in virtue of his knowledge. “Secondly, that he judges that this is something else,

and that the other thing is it. “Now surely this is utterly unreasonable. It means that the soul, when knowledge becomes present to it, knows nothing and is wholly ignorant. “According to this argument there’s no reason why an accession of ignorance shouldn’t make a man know something, or an accession of blindness make him see something — if knowledge is ever going to make a man ignorant.”





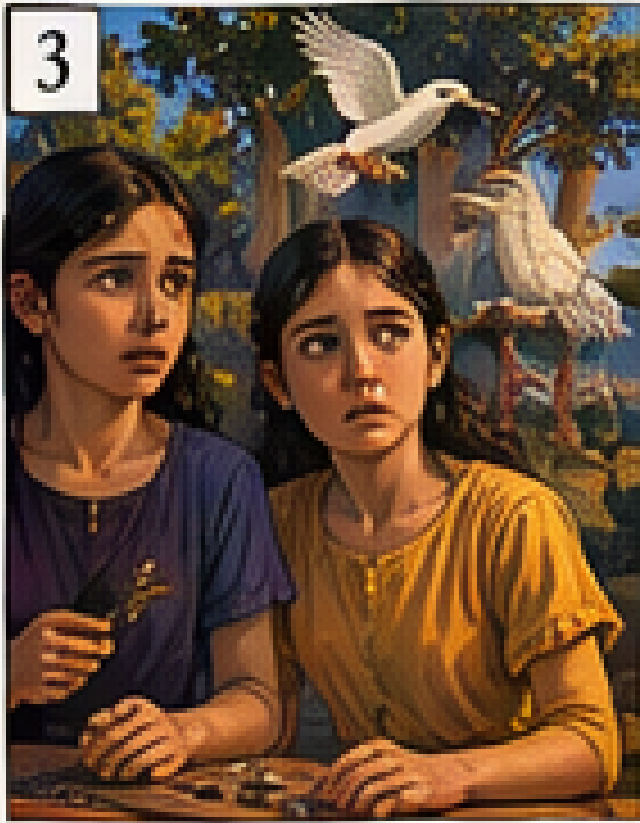
The Birds of Ignorance — the chapter's central dialogue.

. . .

Lela made a small noise of pure outrage.

. . .

“It’s the birds,” she said. “It’s not — it isn’t the knowing that’s wrong, it’s that he made the birds be the pieces of knowledge, so every time you grab one you’re grabbing knowledge, so being wrong means grabbing knowledge and it’s —” She stopped. “You could fix that,” she said, in a different voice. “You could really easily fix that.”





The Birds of Ignorance — the central concept made visible.

. . .

“Yes,” said Sophia. “Watch.”

. . .

“Well, perhaps, Socrates,” said Theaetetus, “it wasn’t a happy thought to make the birds only pieces of knowledge. “Perhaps we ought to have supposed that there are pieces of ignorance also flying about in the soul along with them. “And what happens is that the hunter sometimes catches a piece of knowledge, and sometimes a piece of ignorance, concerning the same thing. And the ignorance makes him judge falsely, while the knowledge makes him judge truly.”

. . .

Lela sat back very slowly. “I just said that,” she said. “You said it four seconds before he did,” said Sophia. “You

are fourteen and he is fifteen and neither of you has ever heard of the other. That is what this book is like. That is why people keep reading it.”





The Birds of Ignorance — the guiding analogy.

. . .

“I can hardly refrain from expressing my admiration of you, Theaetetus,” said Socrates. “But do think again about that. “Let us suppose it is as you say. Then, you maintain, the man who catches a piece of ignorance will judge falsely. Is that it?” “Yes.” “But presumably he will not think he is judging falsely?” “No. Of course he won’t.”

. . .

“He will think he’s judging what’s true. And his attitude towards the things he’s in error about will be as if he knew them.” “Of course.” “He will think he has hunted down and has a piece of knowledge — and not a piece of ignorance.” “Yes. That’s clear.”





The Birds of Ignorance — the argument unfolding step by step.

. . .

“So, after going a long way round,” said Socrates, “we are back at our original difficulty. “And our friend the expert in refutation will laugh.”

. . .

“My very good people, he will say. Do you mean that a man who knows both knowledge and ignorance is thinking that one of them which he knows is the other which he knows? “Or is it that he knows neither, and judges the one he doesn’t know to be the other which he doesn’t know? “Or that he knows one and not the other, and judges that the one he knows is the one he doesn’t know? Or does he think that the one he doesn’t know is the one he does? “Or are you going to start all over again, and tell me there’s another set of pieces of knowledge concerning pieces of

knowledge and ignorance, which a man may possess shut up in some other ridiculous aviaries or waxen devices — which he knows so long as he possesses them, though he may not have them ready to hand in his soul? “And in this way end up forced to come running round to the same place over and over again, and never get any further?”

6

CONFUSION



When the birds are not ordered,
we cannot find what we need.



The Birds of Ignorance — the competing interpretation.

. . .

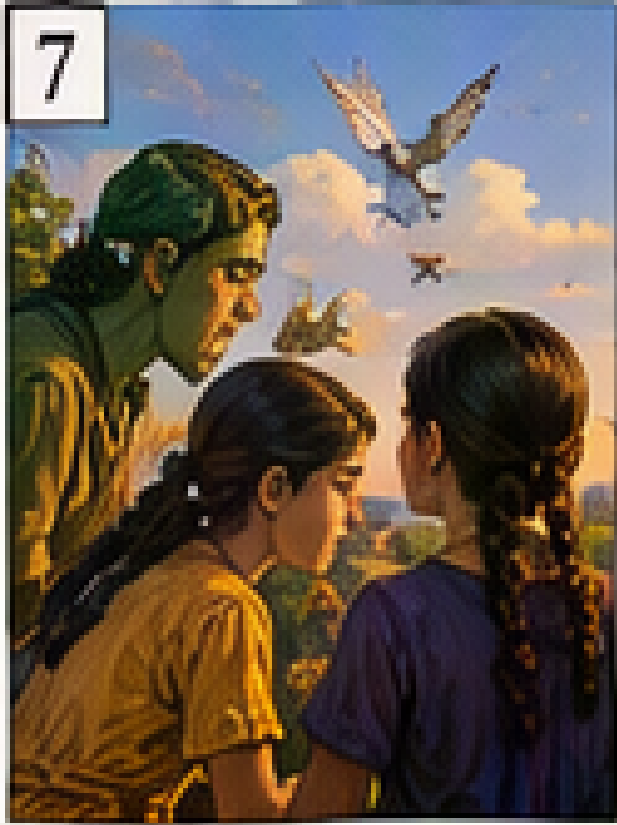
“What are we going to say to that, Theaetetus?”

. . .

“Oh, dear me, Socrates,” said Theaetetus. “I don’t know what one ought to say.”

. . .

Nobody in the orchard said anything either.





The Birds of Ignorance — Lela and Danae reconstruct the idea.

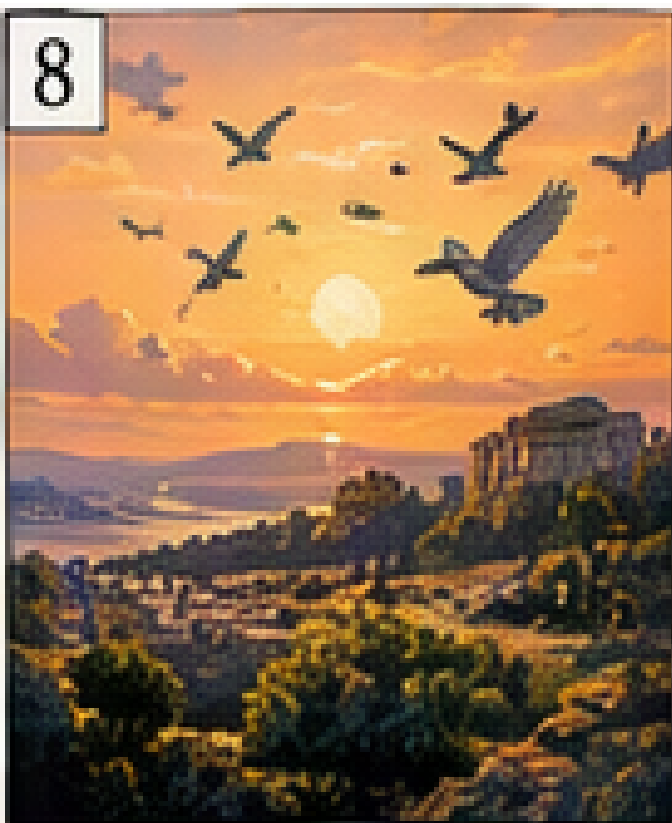
. . .

The bees were working the lavender at the low end of the wall. Somewhere down the road a car went past with its windows open and music in it, and got smaller, and stopped being audible, and the afternoon closed over the place where it had been.

. . .

“He put a cage in a cage,” said Danae eventually. “Yes.” “You’d have to put another cage in that one.” “Yes.” “And another one in that one.” “Yes,” said Sophia. “That is what the man in the imaginary crowd has just pointed out, and it is why Socrates stops. Not because he is tired. Because the road is circular and he has finally seen the shape of it.”

. . .





The Birds of Ignorance — the historical layer.

“Then don’t you think, my boy,” said Socrates, “that the argument is perhaps dealing out a little proper chastisement — and showing us that we were wrong to leave the question about knowledge and proceed to inquire into false judgement first? “While, as a matter of fact, it’s impossible to know this until we have an adequate grasp of what knowledge is.”

. . .

“Well,” said Theaetetus, “at the moment, Socrates, I feel bound to believe you.”

. . .

In the garden of the Academy the young man from Stagira put his stylus down on the bench beside him, very precisely, as though it were breakable. “That is the whole afternoon,” he said. “That is the whole afternoon.” “Two

hours. The wax, the birds, the shoes, the ring-dove. And the result is we should not have started here.”



The Birds of Ignorance — a wordless conceptual plate.

. . .

“Yes,” said Plato. “And you let it stand. You could have cut all of it. You are the one holding the pen. You could have had him go straight from the boy’s second answer to the third and nobody would ever have known there was anything in between.”

. . .

“I could have.” “Why didn’t you?”

. . .

Plato was quiet for a moment. “Because the thing I am trying to hand you is not the answer,” he said. “There is

no answer in this book. You have read ahead; you know there isn't. "What I am trying to hand you is two hours of a man being wrong in an orderly way, on purpose, out loud, in front of a boy, without once pretending he had got somewhere. "You cannot learn that from a result. You can only learn it by sitting through it. "So you have sat through it. Write down that you sat through it."



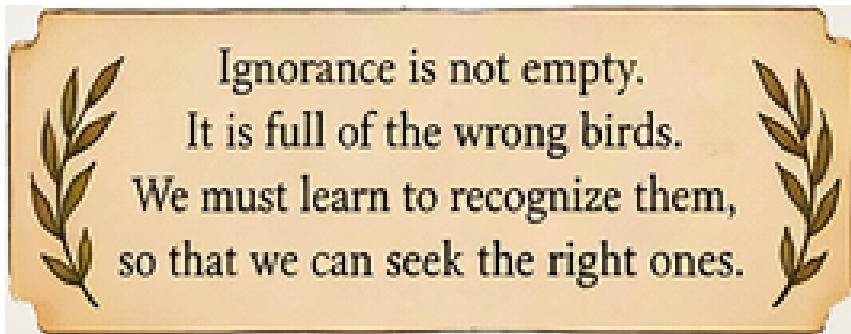
The Birds of Ignorance — the chapter's narrative and philosophical synthesis.

. . .

Aristotle picked the stylus back up.

. . .

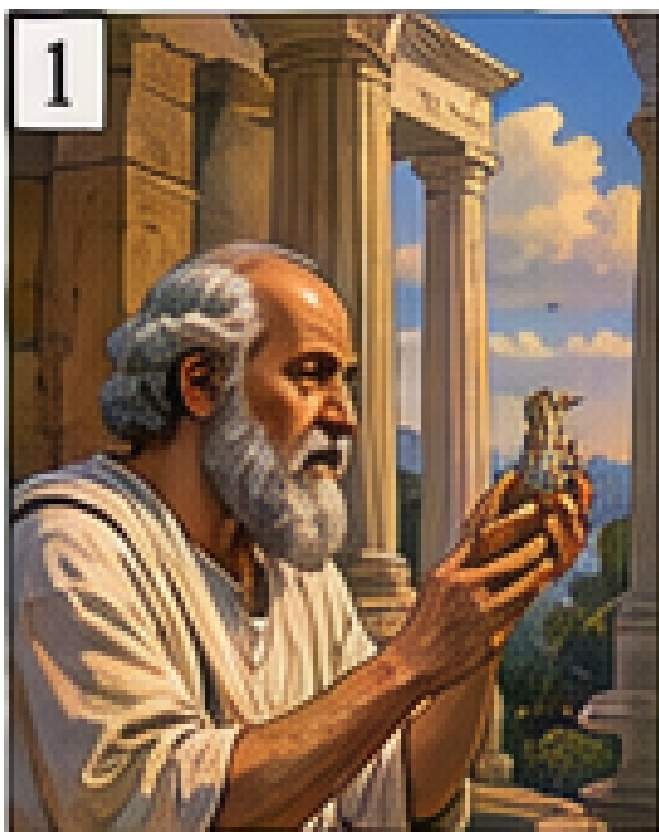
"Then, to go back to the beginning," said Socrates, "what are we going to say knowledge is? "We're not, I suppose, going to give up yet?" "Certainly not," said Theaetetus. "Unless you give up yourself."



The Birds of Ignorance — the chapter's closing thought.

Chapter 40

FORTY. It Will Show You





It Will Show You — opening scene.

“Tell me, then. How could we define it with the least risk of contradicting ourselves?” “In the way we were attempting before, Socrates. I can’t think of any other.” “In what way do you mean?”

. . .

“By saying that knowledge is true judgement. “Judging truly is at least something free of mistakes, I take it. And everything that results from it is admirable and good.”

. . .

“Well, Theaetetus — as the man who was leading the way across the river said: it will show you.”

. . .

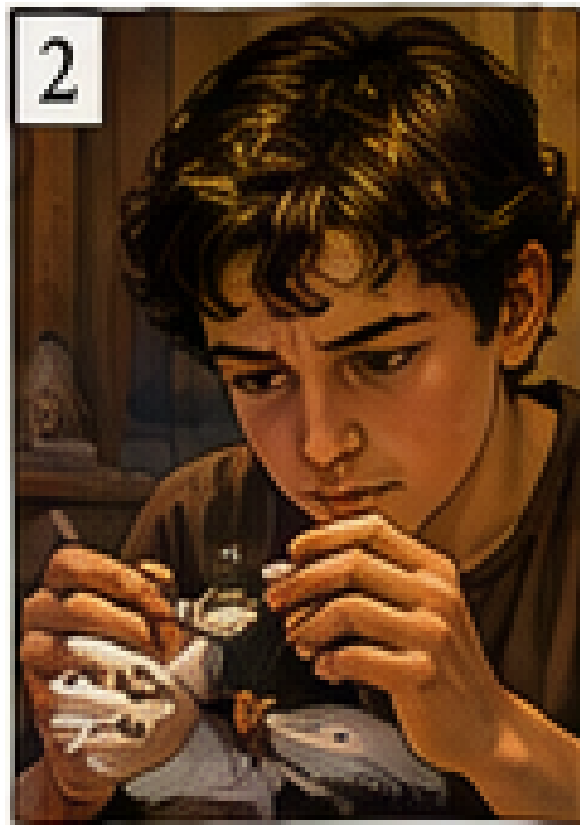
“What?” said Danae.

. . .

“It is a proverb,” said Sophia, “and it is about two thousand four hundred years old, and it goes like this. “Some travellers came to a river they wanted to cross at the ford. And one of them asked the guide: is the water deep? “And the guide said: it will show you.”

. . .

Danae considered this. “Meaning get in.” “Meaning get in.”





It Will Show You — the chapter's central dialogue.

. . .

“If we go on and track this down,” Socrates was saying, “perhaps we may stumble on what we’re looking for. If we stay where we are, nothing will come clear.” “You’re right. Let’s go on and consider it.”

. . .

“Well — this won’t take long to consider, anyway. “There is a whole art indicating to you that knowledge is not what you say.”

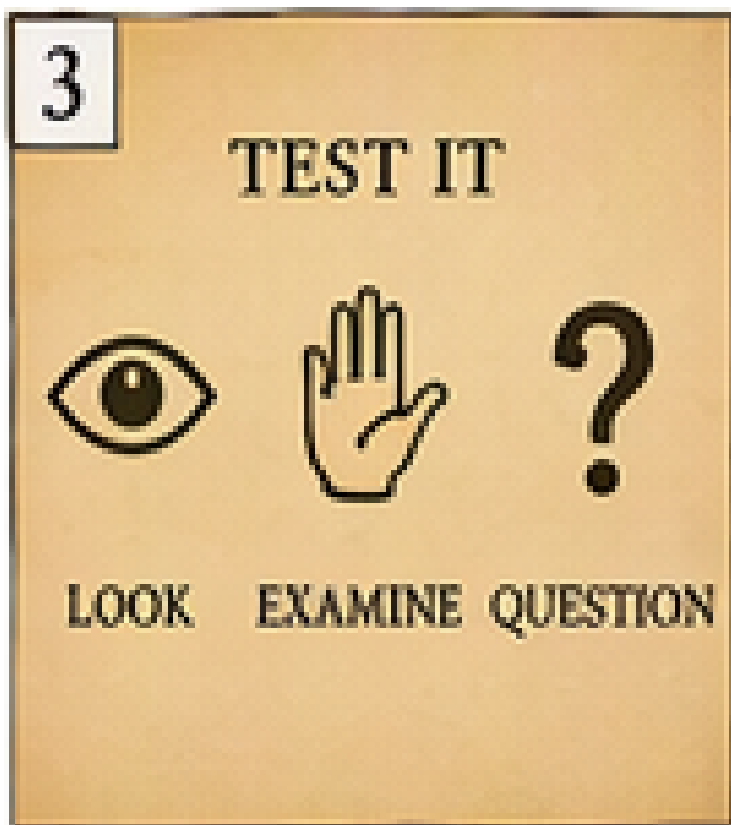
. . .

“How’s that? What art do you mean?”

. . .

“The art of the greatest representatives of wisdom,” said Socrates. “The men called orators and lawyers. “These men, I take it, use their art to produce conviction not by teaching people, but by making them judge whatever they themselves choose.”

. . .





It Will Show You — the central concept made visible.

Lela's head came up.

. . .

"Or do you think there are any teachers so clever that, within the short time allowed by the clock, they can teach adequately, to people who were not eye-witnesses, the truth of what happened to people who have been robbed or assaulted?"

. . .

"No," said Theaetetus. "I don't think they possibly could. But they might be able to persuade them." "And by persuading them you mean causing them to judge, don't you?" "Of course."

. . .

"Sophia."

. . .

“Yes,” said the owl.

. . .

“Sophia, the clock. The short time allowed by the clock.”
“Yes.” “That’s the water clock. That’s the one in the court-
room. That’s the one they —” Her voice did something odd.
“That’s the one they turned over for him. There was a jar
of water and it ran out and that was how long he had.
Danae, that’s the same clock.”





It Will Show You — the guiding analogy.

. . .

“I know,” said Danae, in a very small voice. “I remember.”

. . .

“Then suppose a jury has been justly persuaded of some matter which only an eye-witness could know, and which cannot otherwise be known,” said Socrates. “Suppose they come to their decision upon hearsay, forming a true judgement. “Then they have decided the case without knowledge — but, granted they did their job well, being correctly persuaded?” “Yes. Certainly.”

. . .

“But, my dear lad, they couldn’t have done that, if true judgement were the same thing as knowledge. “In that

case the best juryman in the world couldn't form a correct judgement without knowledge. "So it seems they must be different things."





It Will Show You — the argument unfolding step by step.

. . .

The picture ran on. Nobody in the orchard was looking at it.

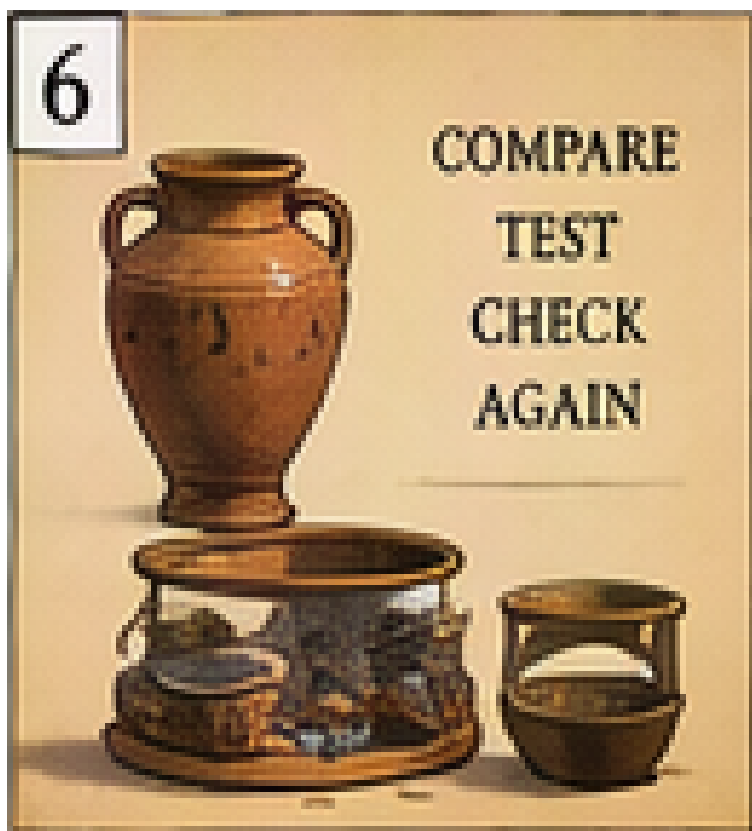
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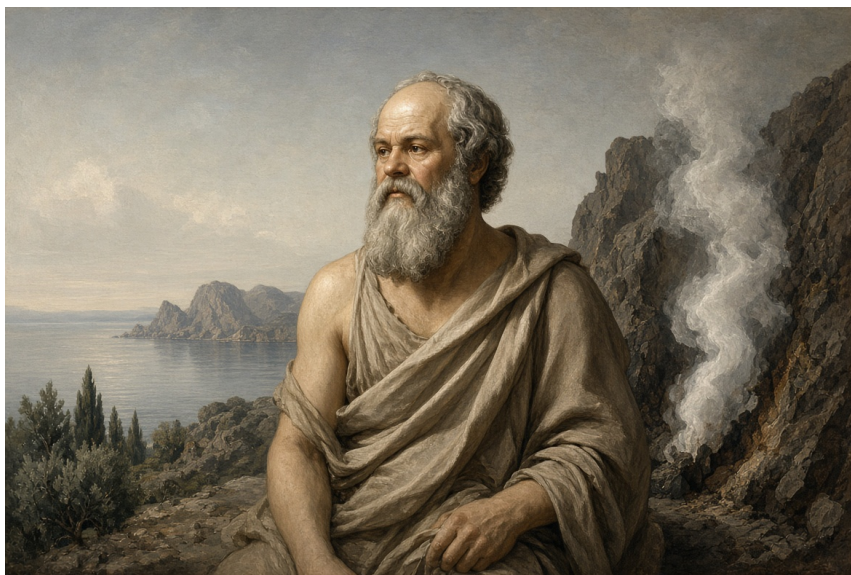
“Say it,” said Sophia gently. “You have been holding it since the spring.”

. . .

Lela’s hands were flat on the grass either side of her. “He’s standing in a room,” she said, “on the day he gets charged. On the actual day. And he explains — calmly, like it’s a nice interesting little point about definitions — he explains exactly how a jury can be completely persuaded and completely certain and completely convinced and still not know the first thing about what happened, because

nobody in the room was there, and there wasn't time, and it isn't the kind of thing you can teach in the time. "And then he walks out of the room. And that's what he walks into. And that's what it does to him."





It Will Show You — the competing interpretation.

. . .

“Yes,” said Sophia.

. . .

“Did he know?” “He knew what the art was. He had said so for thirty years; you have heard him say it. He did not know what would happen to him in ten weeks.” “But he knew the shape of it.” “He knew the shape of it,” said Sophia. “He is describing the shape of it here in order to make a point about the word knowledge, and he does not stop to notice that it is his own death, because he is in the middle of a sentence.”

. . .

Danae had come and sat against Lela’s arm without either of them appearing to arrange it.

...





It Will Show You — Lela and Danae reconstruct the idea.

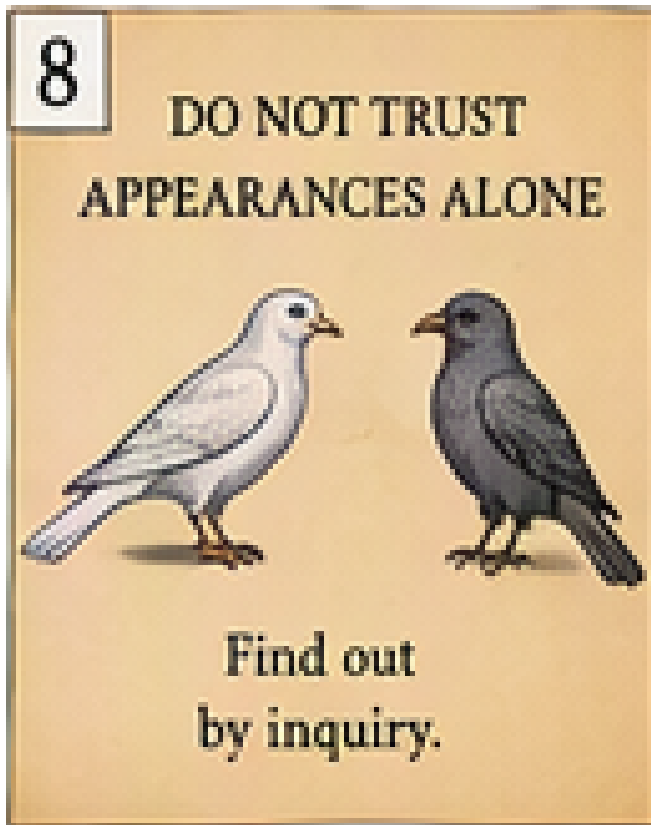
“Sophia,” said Danae. “Were they bad?” “Who?” “The jury. The ones who —” She pushed her chin out slightly. “The five hundred and one.”

. . .

“Most of them were not bad,” said the owl. “That is the part that is hard to hold, and you will spend the rest of your life putting it down and picking it up again. “They were farmers and potters and men who mended sails. They had three hours. They had no way of checking anything anybody told them. They were shouted at by professionals who had trained for years in producing exactly the state of mind they ended the day in. “And they went home believing, most of them sincerely, that they had judged truly. “And some of them were quite possibly right about several things, and had no knowledge of any of them, which is what this paragraph is about.”

. . .

In the garden of the Academy, Aristotle had stopped writing again.





It Will Show You — the historical layer.

. . .

“I want to write about this,” he said.

. . .

“About what?” “That art. Rhetoric. Persuasion.” He turned the tablet over in his hands. “Nobody has written it down properly. The teachers of it sell tricks. Nobody has ever sat down and asked what it actually is — what the parts of it are, what it works on, why a crowd moves and a man doesn’t, what makes a hearer trust a speaker before he has said anything at all.”

. . .

Plato looked at him for rather a long time.

. . .

“You want to write the handbook,” he said, “of the thing that killed him.”

. . .





It Will Show You — a wordless conceptual plate.

“I want to write the anatomy of it,” said Aristotle. He did not raise his voice; he never did. “You cannot defend yourself against a thing you have refused to study. He could not. He walked in there without the first idea how the room he was standing in worked — he says so himself, in the first sentence of the defence, and he says it as though it were a virtue. “It was not a virtue. It was the most expensive thing he ever did.”

. . .

The garden was very quiet.

. . .

“Say the rest of it,” said Plato, in a voice the girls had not heard him use.

. . .

“The art is not the crime,” said Aristotle. “The men were the crime. A knife is not a murder. If a good man refuses on principle to learn what the bad men are doing, the bad men do not stop doing it — they only stop being opposed.”

. . .

Plato said nothing at all. Then he turned the next page of the roll, and read on, and did not answer him, and both of them knew that he had not conceded and was not going to.

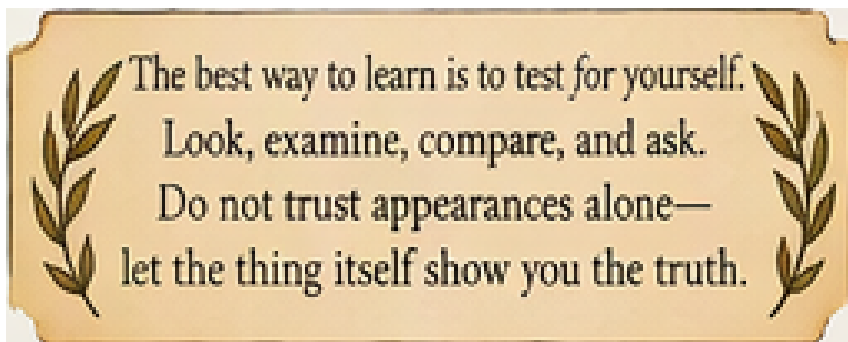




It Will Show You — the chapter's narrative and philosophical synthesis.

. . .

“He didn’t win,” said Lela, watching. “No,” said Sophia. “Neither of them won. That argument has been going for two thousand three hundred years and it is still going, and you will find it in every newspaper you ever read, and nobody has won it yet. “But look at what just happened, because you will not see it often. “The old man did not agree, and did not pretend to, and did not throw the boy out. “And the boy did not back down, and did not sulk, and picked his stylus up and went on copying his teacher’s book.”



It Will Show You — the chapter's closing thought.

Chapter 41

FORTY-ONE. A Dream in Return for a Dream

1





A Dream in Return for a Dream — opening scene.

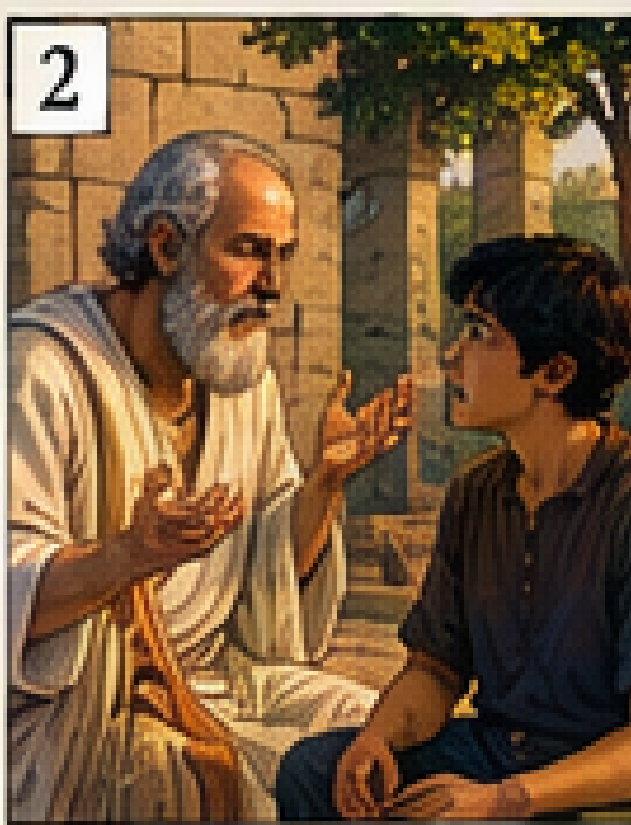
“Oh, yes, Socrates,” said Theaetetus. “That’s just what I once heard a man say. I had forgotten — but now it’s coming back to me. “He said that it is true judgement with an account that is knowledge. And that true judgement without an account falls outside knowledge. “And he said that the things of which there is no account are not knowable — yes, he actually called them that — while the things that have an account are knowable.”

. . .

“Third answer,” said Lela. “That’s the third one.” “That is the third one,” said Sophia. “Perception. True judgement. True judgement with an account. “And you are now in the last hour of the book, and you should know before it starts that every professional reader of this dialogue for the last hundred and fifty years has fought about what happens in it, and that the fight is not settled, and that the reason it is not settled is that the book stops.”

. . .

“Very good indeed,” Socrates was saying. “Now tell me — how did he distinguish these knowables and unknowables? I want to see whether you and I have heard the same version.” “I don’t know if I can find that out. But I think I could follow, if someone explained it.”



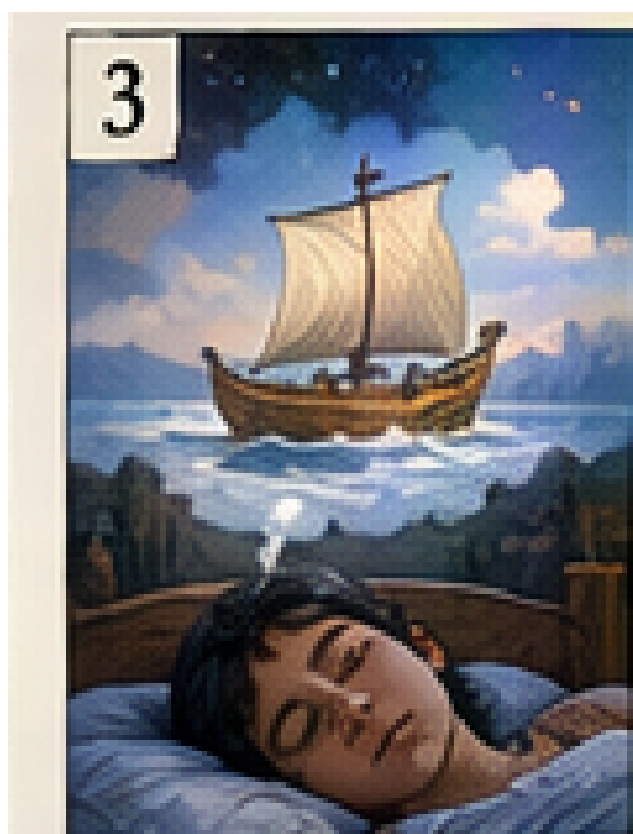


A Dream in Return for a Dream — the chapter's central dialogue.

. . .

“Listen, then, to a dream in return for a dream. “In my dream, too, I thought I was listening to people saying that the primary elements — as it were — of which we and everything else are composed, have no account. “Each of them, in itself, can only be named. It’s not possible to say anything else of it. Not even that it is, or that it is not. That would mean we were adding being or not-being to it, whereas we mustn’t attach anything, if we are to speak of that thing itself alone. “Indeed, we oughtn’t to apply to it even such words as itself, or that, or each, or alone, or this, or any other of the many words of this kind. Because these go the round and are applied to all things alike, being other than the things they’re added to.”

. . .





A Dream in Return for a Dream — the central concept made visible.

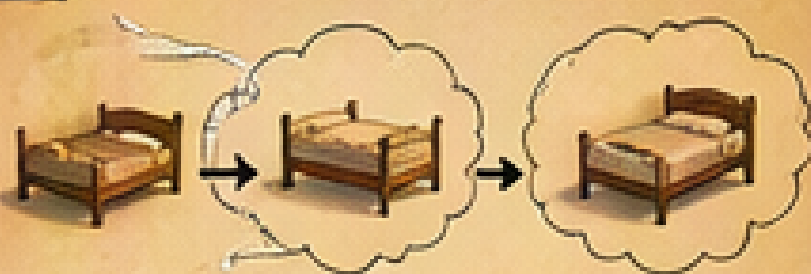
“He’s saying you can’t say anything about it at all,” said Danae. “He is saying you can only point at it and make its noise.”

. . .

“As it is, then, it’s impossible that any of the primaries should be expressed in an account. It can only be named — a name is all that it has. “But with the things composed of these, it’s another matter. “Here, just as the elements themselves are woven together, so their names may be woven together and become an account of something. An account being essentially a complex of names. “Thus the elements are unaccountable and unknowable — but they are perceivable. Whereas the complexes are knowable and expressible, and can be the objects of true judgement.”

. . .

4



THE BED

A DREAM
OF A BED

A DREAM
MADE IN A DREAM



A Dream in Return for a Dream — the guiding analogy.

“Now, when a man gets a true judgement about something without an account, his soul is in a state of truth as regards that thing — but he does not know it. Because someone who can’t give and take an account of a thing is ignorant about it. “But when he has also got an account of it, he’s capable of all this, and is made perfect in knowledge. “Was the dream you heard the same as this, or a different one?” “No — it was the same in every respect.”

. . .

“Do you like this, then? And do you suggest that knowledge is true judgement with an account?” “Yes. Certainly.”

. . .

“Theaetetus,” said Socrates. “Can it be that all in a moment, you and I have today laid hands upon something that many a wise man has searched for in the past — and gone grey before he found it?”

. . .

“He’s teasing,” said Lela. “He is not entirely teasing,” said Sophia. “That is the worst of him. You never get to be sure.”

. . .





A Dream in Return for a Dream — the argument unfolding step by step.

“Well, it does seem to me anyway, Socrates,” said Theaetetus, “that what has just been said puts the matter very well.” “And it seems likely enough that the matter is really so. For what knowledge could there be, apart from an account and correct judgement? “But there is one of the things said which I don’t like.”

. . .

“And what’s that?”

. . .

“What looks like the subtlest point of all,” said Socrates. “That the elements are unknowable, and the complexes knowable.”

. . .

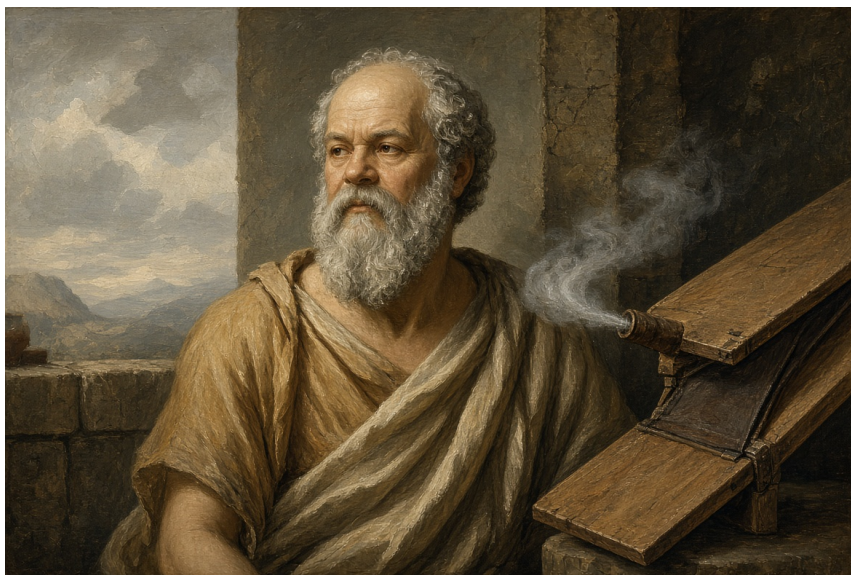
“And won’t that do?”

. . .

“We must make sure. Because, you see, we do have as hostages for this theory the original models that were used when all these statements were made.” “What models?”

. . .





A Dream in Return for a Dream — the competing interpretation.

“Letters,” said Socrates. “The elements of language. And syllables. “It must have been these the author of our theory had in view. It couldn’t have been anything else.”

. . .

“No,” said Theaetetus. “He must have been thinking of letters and syllables.”

. . .

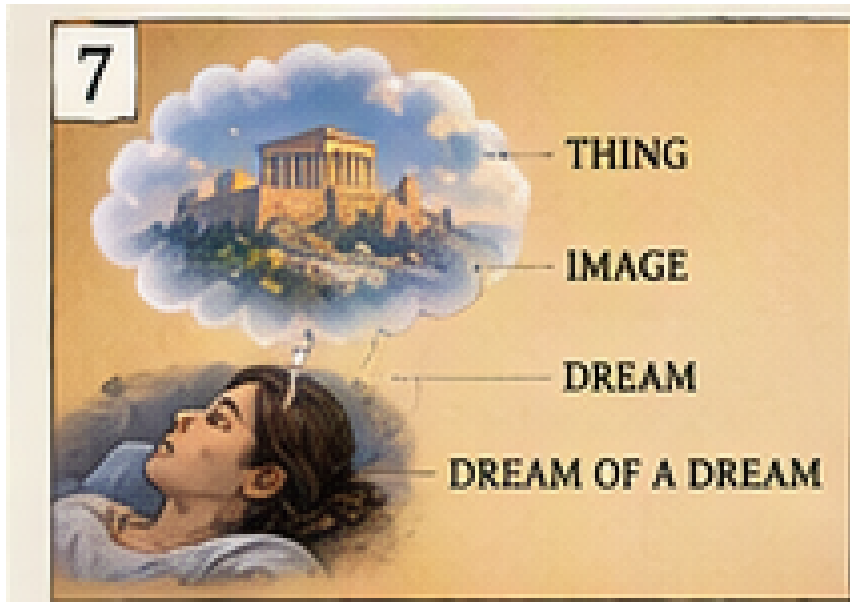
“He’s going to do it with the alphabet,” said Danae, and there was something in her voice that was not quite pleasure and not quite dread. “He’s going to break it with the alphabet.”

. . .

“Let’s take them and examine them, then. Or rather, let us examine ourselves, and ask whether we really learned

our letters in this way, or not. “To begin with: one can give an account of the syllables, but not of the letters. Is that it?” “Well — perhaps.”

. . .





A Dream in Return for a Dream — Lela and Danae reconstruct the idea.

“It most certainly looks like that to me. “At any rate — supposing you were asked about the first syllable of Socrates. Tell me, Theaetetus: what is SO? “What would you answer to that?”

. . .

“That it’s S and O.” “And there you have an account of the syllable.” “Yes.”

. . .

“Come along, then. Let us have the account of S in the same way.”

. . .

“How can anyone give the letters of a letter?” said Theaetetus. “S is just one of the voiceless letters, Socrates

— a mere sound, like a hissing of the tongue. B again has neither voice nor sound, and that's true of most of them. "So the statement that they themselves are unaccountable holds perfectly good. Even the seven clearest have only voice. No sort of account whatever can be given of them."

. . .





A Dream in Return for a Dream — the historical layer.

“He’s right,” said Danae, sitting bolt upright. “He’s completely right. You can’t say what S is. You can only do it.” She did it: a small sharp hiss between her teeth. “There isn’t anything else. There’s nothing underneath it. There’s just the noise.”

. . .

“So here, my friend,” said Socrates, “we have established a point about knowledge.” “We do appear to have done so.”

. . .

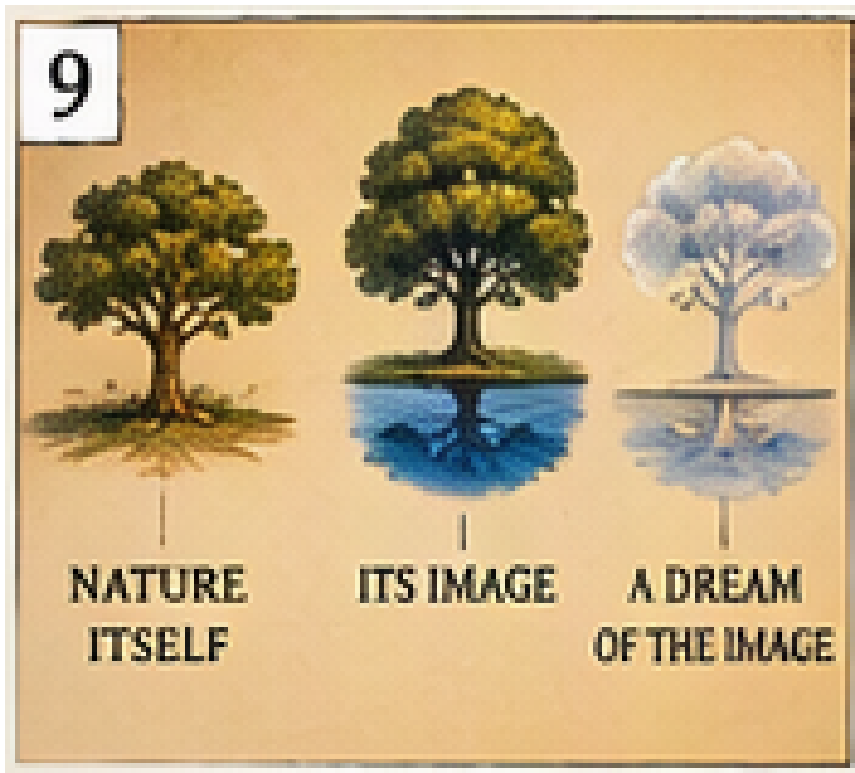
“Well then. We have shown that the syllable is knowable, but the letter is not. Is that all right?” “It seems the natural conclusion, anyway.”

. . .

“Look here. What do we mean by the syllable? “The two letters — or, if there are more, all the letters? Or do we

mean some single form, produced by their combination?”
“I think we mean all the letters.”

. . .





A Dream in Return for a Dream — a wordless conceptual plate.

“Then take the case of the two letters, S and O. These two are the first syllable of my name. “If a man knows the syllable, he must know both the letters?” “Of course.” “So he knows S, and he knows O.” “Yes.”

. . .

“But can it be that he is ignorant of each one, and yet knows the two of them — without knowing either?”

. . .

“That would be a strange and unaccountable thing, Socrates.”

. . .

“And yet, supposing it’s necessary to know each in order to know both — then it’s absolutely necessary that anyone who is ever to know a syllable must first get to know the

letters. “And in admitting that, we shall find that our beautiful theory has taken to its heels and got clean away from us.”

. . .

“And very suddenly, too,” said Theaetetus.

. . .

“Twelve lines,” said Lela.

. . .

“Twelve lines,” said Sophia. “The wax took two pages to die. The birds took a page and a half. This one took twelve lines, and it was killed by the first two letters of his own name.”

10





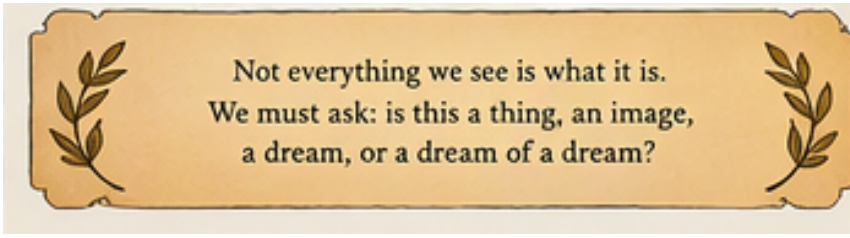
A Dream in Return for a Dream — the chapter's narrative and philosophical synthesis.

. . .

“Yes,” said Socrates. “We’re not keeping a proper watch on it. “Perhaps we ought not to have supposed the syllable to be the letters. Perhaps we ought to have made it some single form produced out of them — having its own single nature. Something different from the letters.”

. . .

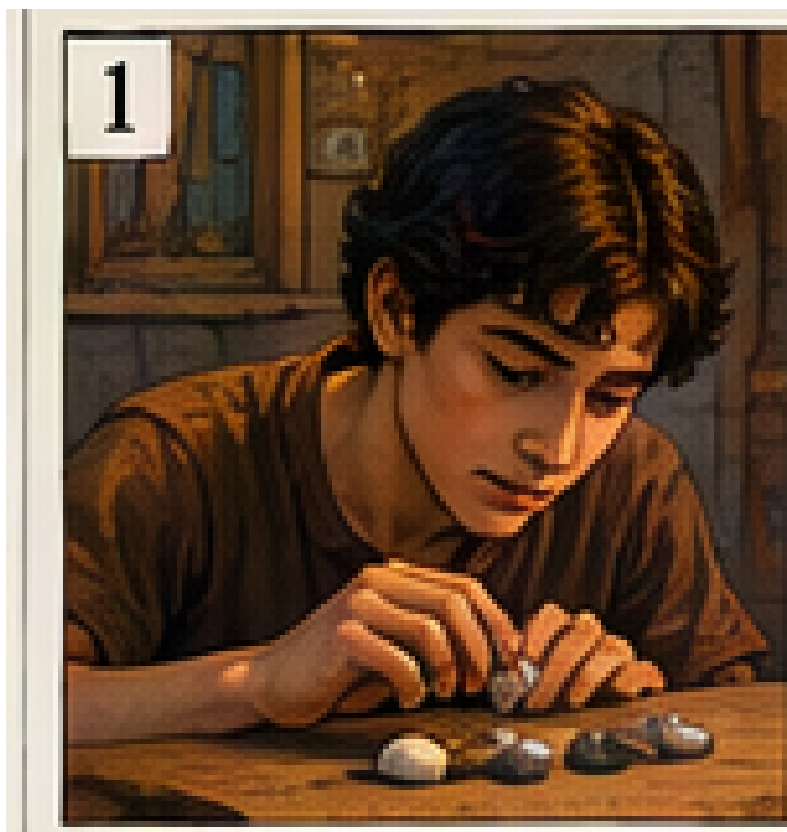
“Here we go,” said Danae, and lay back in the grass with her hands behind her head, and looked up through the leaves, entirely content. “He’s making another one.”



A Dream in Return for a Dream — the chapter's closing thought.

Chapter 42

FORTY-TWO. Whole and Sum





Whole and Sum — opening scene.

“Then let it be as we’re now suggesting,” said Socrates. “Let the complex be a single form, resulting from the combination of the several elements when they fit together. And let this hold both of language and of things in general.” “Yes. Certainly.” “Then it must have no parts.”

. . .

“Why is that, now?”

. . .

“Because when a thing has parts, the whole is necessarily all the parts. “Or do you mean by the whole also a single form arising out of the parts, yet different from all the parts?” “I do.”

. . .

“Now — do you call sum and whole the same thing, or different things?”

. . .

“I don’t feel at all certain,” said Theaetetus. “But as you keep telling me to answer up with a good will, I’ll take a risk and say they’re different.” “Your good will, Theaetetus, is all that it should be. Now we must see whether your answer is too.”

. . .

“That’s not fair,” said Danae. “No,” agreed Sophia. “It is, however, extremely funny, and the boy laughed.”

. . .

He had. Under the plane tree in the wrestling-school, the boy with the snub nose was laughing, and Theodorus was rubbing his forehead with the flat of his hand like a man who has been in a long meeting.





Whole and Sum — the chapter's central dialogue.

. . .

“Well now. Is there any difference between all the things and the sum? “For instance, when we say one, two, three, four, five, six. Or twice three. Or three times two. Or four and two. Or three and two and one. “Are we speaking of the same thing in all these cases, or different things?” “The same thing.” “That is — six?” “Precisely.”

EUCLID · Elements VII, Definitions 16 and 2 — six, counted every way

El.VII.Def.16 — *plane number* MODERATE

And when two numbers multiplying one another make some (number) then the (number so) created is called plane, and its sides (are) the numbers which multiply one another.

EUCLID, BOOK VII — DEFINITION 16: PLANE NUMBER

“When two numbers multiplying one another make some other number, then the number so created is called plane, and its sides are the numbers which multiply one another.”

1 Today we learn how numbers can have shape.

DEFINITION 16
When two numbers multiplying one another make some other number, then the number so created is called plane, and its sides are the numbers which multiply one another.

2 Take the numbers 3 and 4.
Let 3 multiply 4.

$4 + 4 + 4 = 12$
(4 taken three times)

Therefore, $3 \times 4 = 12$.

3 According to Definition 16, the number 12 is called **PLANE**, because it is made by two numbers multiplying one another.
Its sides are the numbers which multiply.

So 12 is a **plane number** with sides 3 and 4.

4 Why do we call it “plane”?
Because we can arrange 12 objects in a rectangle on a flat surface.

It has length 4 and breadth 3.
It is a **rectangle** — a figure in the plane.

5 Another example.
Let 5 multiply 6.

$5 \times 6 = 30$

30 is a **plane number** with sides 5 and 6.

6 Yet another example.
Let 2 multiply 7.

$2 \times 7 = 14$

14 is a **plane number** with sides 2 and 7.

7 In general, whenever $a \times b = c$,

c is a **PLANE NUMBER**, and its sides are a and b .

8 Many numbers can be plane numbers.
For example:

$2 \times 5 = 10$ $3 \times 8 = 24$ $4 \times 9 = 36$

Each can be pictured as a rectangle with its two sides.

9 Remember, Alexander.

A **plane number** is a number produced by two numbers multiplying one another. Its sides are those two numbers.

This is the first step in seeing numbers not only as quantities, but also as **figures**.

El.VII.Def.16 — plane number

El.VII.Def.2 — number STRONG

And a number (is) a multitude composed of units.

EUCLID, BOOK VII — DEFINITION 2: NUMBER
 "A number is a multitude composed of units."

1 Alexander, we begin with one. This single stone is a UNIT. It is ONE.	2 Add another unit. Now we have $1 + 1$. This multitude of units is called 2.	3 Add another. Now we have $1 + 1 + 1$. This multitude of units is called 3.	
4 Add one more. $1 + 1 + 1 + 1 = 4$. A number is many units taken together.	5 And another. $1 + 1 + 1 + 1 + 1 = 5$. And so on, without end...	6 Every number is made by repeating the unit.	
7 Look at our soldiers. One soldier is a unit. Many soldiers together give us a number.	8 Whatever we count—stones, soldiers, apples—each is counted as one unit.	9 Remember this, Alexander: A unit gives the idea of one. But a number is born when units become a multitude. A NUMBER IS A MULTITUDE COMPOSED OF UNITS.	
UNIT = ONE (not yet a number) → NUMBER = MANY ONES TOGETHER (a multitude composed of units)			

El.VII.Def.2 — number

Why here: *Theaetetus* 204b–e. Socrates runs six as three twos, two threes, four and two, three and two and one — every factorisation and every partition — to force the question whether the sum is the whole. VII.Def.16 is the definition that makes the factorisations legitimate; the partitions are Def.2 alone.



Whole and Sum — the central concept made visible.

. . .

“Then with each expression, haven’t we spoken of all the six?” “Yes.” “And when we speak of them all, aren’t we speaking of a sum?” “We must be.” “That is, six?” “Precisely.”

. . .

“Then in all things made up of number, at any rate, by the sum and all of them we mean the same thing.” “So it seems.”

. . .

“Now let’s talk about them this way. The number of an acre is the same thing as the acre, isn’t it?” “Yes.” “Similarly with a mile.” “Yes.” “And the number of an army is the same as the army. And so always with things of this sort — their total number is the sum that each of them is.” “Yes.”

. . .

“But is the number of each anything other than its parts?” “No.”

. . .

“Now, things that have parts consist of parts?” “That seems true.” “And it’s agreed that all the parts are the sum — seeing that the total number is to be the sum.” “That is so.”

. . .





Whole and Sum — the guiding analogy.

“Then the whole does not consist of parts. “Because if it did, it would be all the parts — and so would be a sum.”

. . .

“It looks as if it doesn’t.”

. . .

Lela had her chin on her knees. “I hate this bit,” she said. “Why?” “Because I can’t see where it goes wrong and I’m sure it goes wrong.”

. . .

“It does not go wrong,” said Sophia. “That is why you cannot see where. What is happening is that he is squeezing a word until it splits, and the word is whole, and it does split, and in about ninety seconds Theaetetus is going to give up trying to hold the two halves apart.”

. . .

“But can a part, as such, be a part of anything but the whole?” “Yes. Of the sum.”

. . .

“You are putting up a good fight, anyway, Theaetetus. “But this sum, now — isn’t it just when there’s nothing lacking that it’s a sum?” “Yes. Necessarily.” “And won’t this very same thing — that from which nothing anywhere is lacking — be a whole? While a thing from which something is absent is neither a whole nor a sum, the same consequence having followed from the same condition in both cases at once?”

6





Whole and Sum — the argument unfolding step by step.

. . .

“Well,” said Theaetetus, “it doesn’t seem to me now that there can be any difference between whole and sum.”

EUCLID · Elements I — whole > part; equals added

E1.I.CN.5 — whole > part MODERATE

And the whole [is] greater than the part.

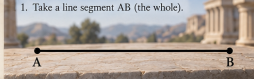
EUCLID'S
ELEMENTS
BOOK I

COMMON NOTION 5
 Καὶ τὸ ἅλὸν τοῦ μέρους μείζον [έστιν].
 And the whole is greater than the part.

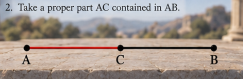
THE WHOLE
IS GREATER
THAN
THE PART.

LENGTH — A LINE CONTAINS A PROPER PART

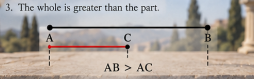
1. Take a line segment AB (the whole).



2. Take a proper part AC contained in AB.



3. The whole is greater than the part.



AREA — A FIGURE CONTAINS A PROPER PART

1. Take a square (the whole).



2. Take a proper part contained in it (a triangle).



3. The whole is greater than the part.


>


Square (whole) Triangle (part)
 area(square) > area(triangle)

WEIGHT — A QUANTITY CONTAINS A PROPER PART

1. Take a full sack of grain (the whole).



W (whole)

2. Remove a proper part (a handful).



P (part)

3. The whole is greater than the part.


>


W (whole) P (part)
 weight(whole) > weight(part)

LOGICAL
ROLE

This licenses inequality by containment.
 Used in Propositions I.6, I.16, I.18, I.19, I.20, I.21, I.24, and I.25 (and many others).

EVERY PROPER
PART IS LESS
THAN THE WHOLE

El.I.CN.5 — whole > part

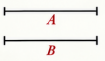
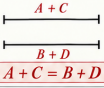
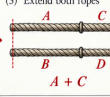
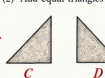
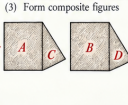
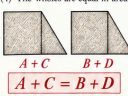
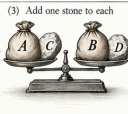
El.I.CN.2 — equals added LIGHT

And if equal things are added to equal things then the wholes are equal.

Euclid's *Elements* — Book I

Common Notion 2

Καὶ ἐὰν ἴσοις ἴσα προστεθῇ, τὰ ὅλα ἔστιν ἴσα.
 And if equal things are added to equal things, the wholes are equal.

1. Abstract rule (for any magnitudes)			
(1) Equal magnitudes A and B 	(2) Equal magnitudes C and D 	(3) Add C to A , and D to B 	(4) Therefore $A + C$ equals $B + D$ 
$A + C = B + D$			
2. Length			
(1) Two equal ropes 	(2) Add equal pieces 	(3) Extend both ropes 	(4) The extended ropes are equal 
$A + C = B + D$			
3. Area			
(1) Two equal squares 	(2) Add equal triangles 	(3) Form composite figures 	(4) The wholes are equal in area 
$A + C = B + D$			
4. Weight			
(1) Equal weights A and B 	(2) Add equal stones C and D 	(3) Add one stone to each 	(4) The balance is preserved 
$A + C = B + D$			


 TRUTH THROUGH REASON *Logical role: the addition of equals.* GEOMETRY FOR THE MIND 

El.I.CN.2 — equals added

Why here: CN.5 part-whole. Moderate.

Note. CN.5 part-whole. Moderate.

. . .

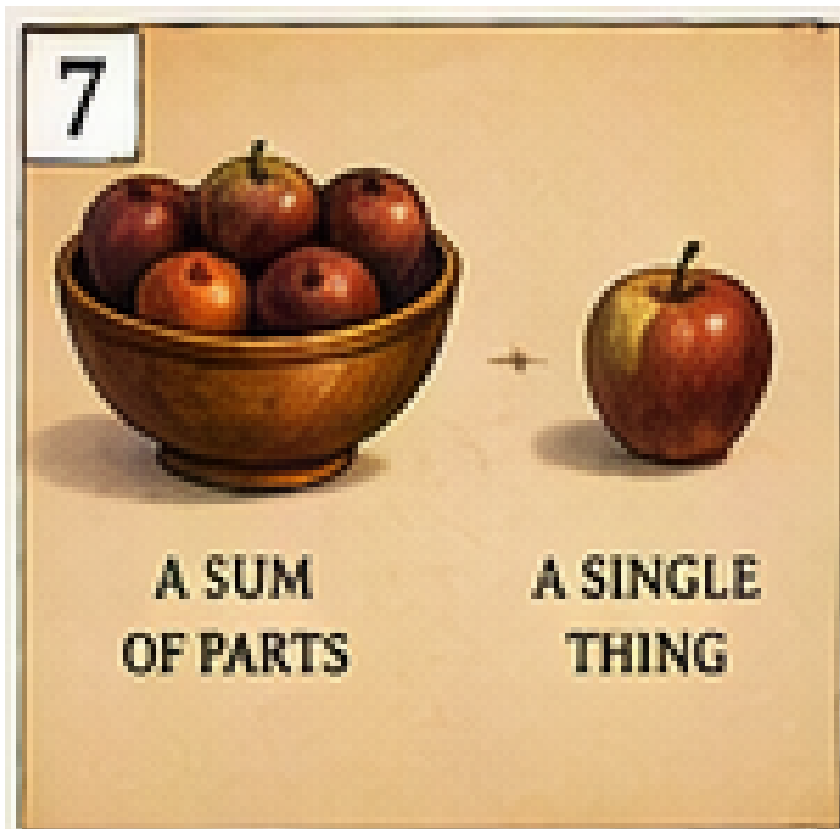
“There,” said Sophia. “Ninety seconds.”

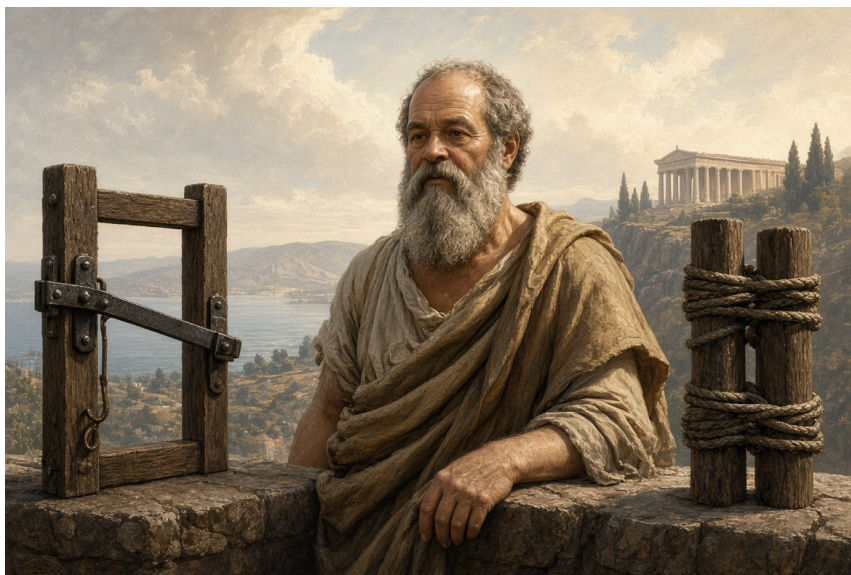
. . .

“Very well. Now, weren’t we saying that in the case of a thing that has parts, both the whole and the sum will be all the parts?” “Yes. Certainly.”

. . .

“Now come back to the thing I was trying to get at just now. “Supposing the syllable is not just its letters — doesn’t it follow that it can’t contain the letters as parts of itself? “Alternatively — if it is the same as the letters, it must be equally knowable with them.” “That is so.”





Whole and Sum — the competing interpretation.

. . .

“Well — wasn’t it just in order to avoid that result that we supposed it different from the letters?” “Yes.”

. . .

“Then, if the letters are not parts of the syllable — can you tell me of any other things, not its letters, that are?”

. . .

“No, indeed,” said Theaetetus. “If I were to admit that it had component parts, Socrates, it would be ridiculous, of course, to set aside the letters and look for other components.”

. . .

“Then, Theaetetus — according to our present argument, a syllable is an absolutely single form, indivisible into parts.” “It looks like it.”

. . .

“And now watch,” said Sophia. “Because the trap has been open the whole time and neither of them has stepped in it yet.”

. . .





Whole and Sum — Lela and Danae reconstruct the idea.

“Now, my friend — a little while ago, if you remember, we were inclined to accept a certain proposition which we thought put the matter very well. “I mean the statement that no account can be given of the primaries of which other things are constituted, because each of them is in itself incomposite. And that it would be incorrect to apply even the term being to it, or the term this, because these terms signify different and alien things. “And that that is the reason a primary is an unaccountable and unknowable thing. “Do you remember?” “I remember.”

. . .

“And is that the reason it’s also single in form and indivisible into parts? Or is there some other reason? I can see none myself.” “No. There really doesn’t seem to be any other.”

. . .

“And hasn’t the complex now fallen into the same class as the primary — seeing that it has no parts, and is a single form?”

. . .

“Yes,” said Theaetetus. “It certainly has.”

. . .

“Oh,” said Lela. “Oh. That’s — it’s the same thing now. He’s made the syllable the same kind of thing as the letter.”

. . .

9



PARTS



ORDER



A WHOLE



Whole and Sum — the historical layer.

“Yes,” said Sophia. “And so the theory says the syllable is knowable and the letter is not, and the theory has just proved that they are the same kind of thing. “Which means it says both of them are knowable, or neither is. And there was only ever one reason anybody believed it, which was that letters felt simple and syllables felt complicated.”

. . .

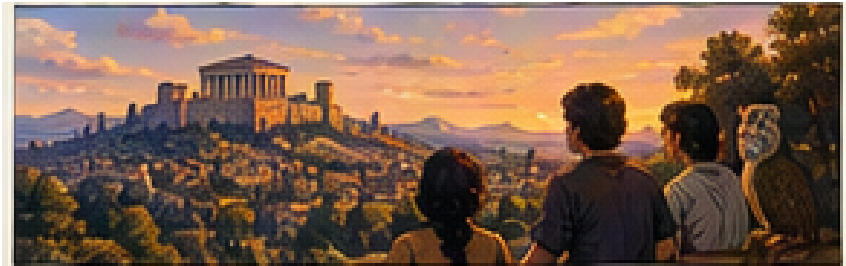
“Well then,” Socrates was saying. “If the complex is both many elements and a whole, with them as its parts — then complexes and elements are equally capable of being known and expressed, since all the parts turned out to be the same thing as the whole.” “Yes, surely.” “But if, on the other hand, the complex is single and without parts — then complexes and elements are equally unaccountable and unknowable. Both of them for the same reason.” “I can’t dispute that.”

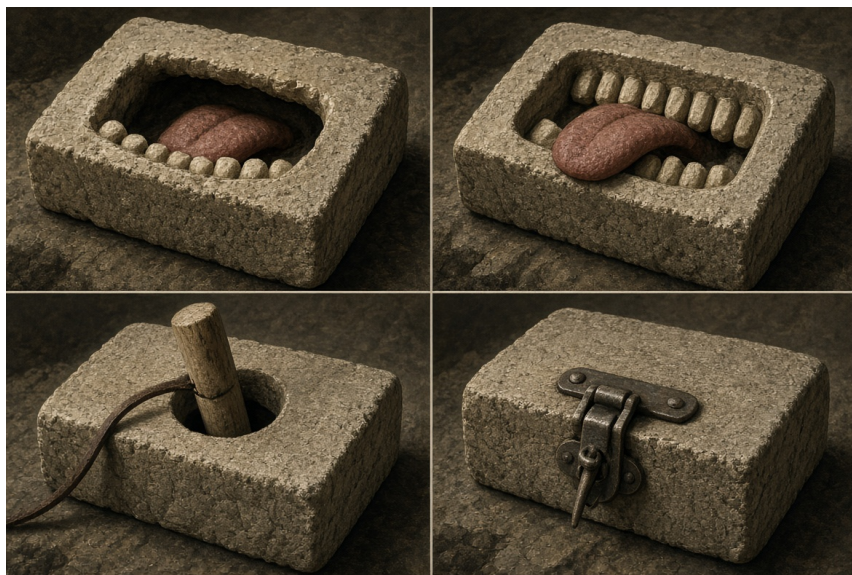
. . .

“Then if anyone tries to tell us that the complex can be known and expressed while the contrary is true of the element — we had better not listen to him.” “No. We’d better not, if we go along with the argument.”

. . .

“And more than this. “Wouldn’t you more easily believe somebody who made the contrary statement — because of what you know of your own experience in learning to read and write?”





Whole and Sum — a wordless conceptual plate.

. . .

“What kind of thing do you mean?”

. . .

“I mean that when you were learning, you spent your time precisely in trying to distinguish, by eye and by ear, each individual letter in itself — so that you shouldn’t be bewildered by their different positions in written and spoken words.” “That’s perfectly true.”

. . .

“And at the music-teacher’s — wasn’t the finished pupil the one who could follow each note and tell which string it belonged to? The notes being generally admitted to be the elements in music.” “Yes. That’s just what it amounted to.”

. . .

“Then if the proper procedure is to take such elements and complexes as we ourselves have experience of, and make an inference from them to the rest — we shall say that the elements are much more clearly known, and that knowledge of them is more decisive for the mastery of any branch of study than knowledge of the complex. “And if anyone maintains that the complex is by nature knowable and the element unknowable, we shall regard this as tom-foolery — whether it’s intended to be or not.” “Oh, quite.”

. . .

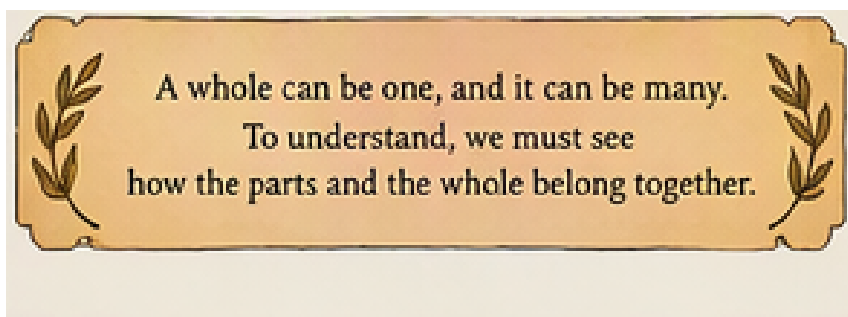


Whole and Sum — the chapter's narrative and philosophical synthesis.

Danae said: “He’s turned it round the whole way.” “He has turned it round the whole way.” “It said letters are the bit you can’t know. And he’s just said letters are the bit you know best, and that’s why they make you do them for a year.”

. . .

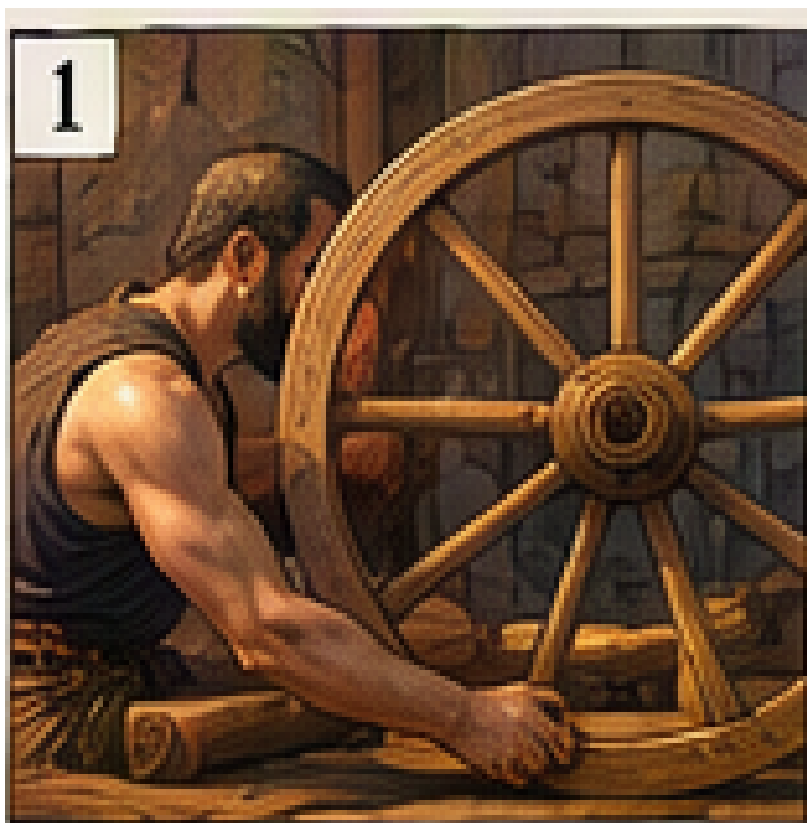
“Yes,” said Sophia. “And you may notice, since you have both been through it, that he is right. “Nobody ever learned to read by being handed a word. You were handed the letters, one at a time, for a year, until the letters were the most solid things in your head. And then the words came free. “Everything that is hard to know is made of things that are easy to know. That is not a small remark. It is most of how anybody learns anything, and the fashionable theory in this book denies it, and he has just killed the theory with a fact from a classroom.”



Whole and Sum — the chapter's closing thought.

Chapter 43

**FORTY-THREE. One Hundred
Are the Timbers of a Wagon**





One Hundred Are the Timbers of a Wagon — opening scene.

“I think that might be proved in other ways too,” said Socrates. “But we mustn’t let them distract us from the problem before us. “We wanted to see what can be meant by the proposition that it’s in the addition of an account to a true judgement that knowledge is perfected.” “Well, yes. We must try to see that.”

. . .

“Come then. What are we intended to understand by an account? “I think it must be one of three meanings.”

. . .

“Three,” said Lela, and reached for the notebook she had stopped pretending she did not bring out to the orchard.

. . .

“The first would be: making one’s thought apparent vocally, by means of words and verbal expressions — when a

man impresses an image of his judgement upon the stream of speech, like reflections upon water, or in a mirror. “Don’t you think this kind of thing is an account?”

. . .





One Hundred Are the Timbers of a Wagon — the chapter's central dialogue.

“Yes, I do,” said Theaetetus. “At least, a man who does this is said to be giving an account.”

. . .

“But isn’t that a thing everyone is able to do, more or less readily? I mean, indicate what he thinks about a thing, if he isn’t deaf or dumb to begin with? “And that being so — anyone at all who makes a correct judgement will turn out to have it together with an account. “And correct judgement without knowledge will no longer be found anywhere.”

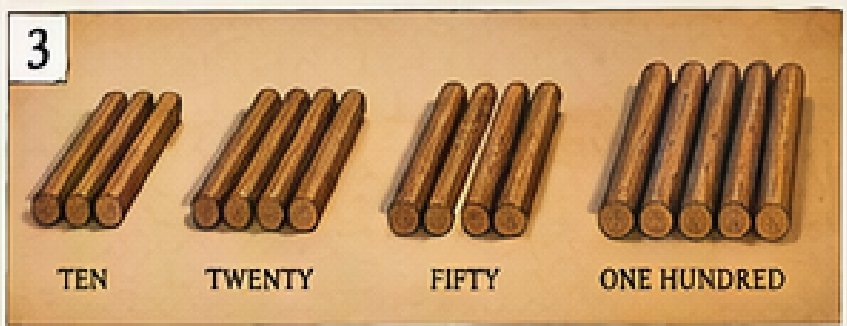
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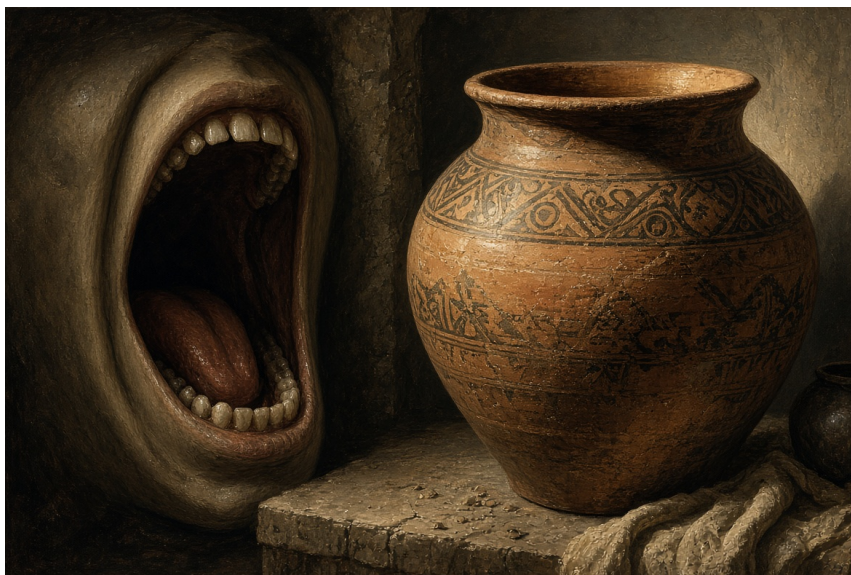
“True.”

. . .

“One down,” said Sophia. “Four lines. That one dies for being too easy: if account only means saying it out loud, then everybody who is right about anything knows everything they are right about, and the word knowledge stops doing any work at all.”

. . .





One Hundred Are the Timbers of a Wagon — the central concept made visible.

“Well then,” said Socrates, “we mustn’t be too ready to condemn the author of the definition for talking nonsense. Perhaps he didn’t mean this. “Perhaps he meant: being able, when questioned about what a thing is, to give an answer by reference to its elements.” “As for example, Socrates?”

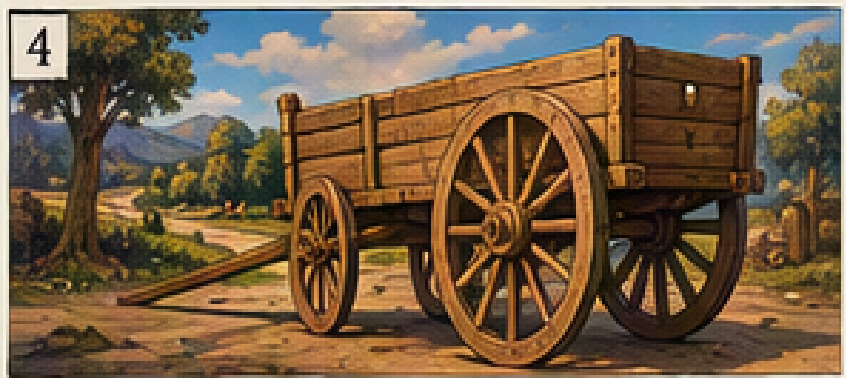
. . .

“As for example, what Hesiod is doing when he says: one hundred are the timbers of a wagon. “Now, I couldn’t say what they are. And I don’t suppose you could either. “If you and I were asked what a wagon is, we should be satisfied if we could answer: wheels, axle, body, rails, yoke.”

. . .

“Yes, surely.”

. . .





One Hundred Are the Timbers of a Wagon — the guiding analogy.

“But he might think us ridiculous — just as he would if we were asked what your name is, and replied by giving the syllables. “In that case he’d think us ridiculous because, although we might be correct in our judgement and our expression of it, we should be fancying ourselves as scholars: thinking we knew, and were expressing, a scholar’s account of the name Theaetetus. “Whereas in fact nobody gives an account of a thing with knowledge until, in addition to his true judgement, he goes right through the thing element by element.”

. . .

“That’s the hundred bits of the cart,” said Danae. “That is the hundred bits of the cart.” “Five isn’t enough. You have to know all hundred and what they’re all called.” “That is the proposal.”

. . .

Danae thought about this with her eyes shut. “I think that’s true,” she said. “I think that’s actually true. Yiayia knows how to make the thing with the pastry and I’ve watched her do it about forty times and I still can’t do it, and it’s because she knows about nine hundred little bits and I know about six.”





One Hundred Are the Timbers of a Wagon — the argument unfolding step by step.

. . .

“Hold on to that,” said Sophia, “because it is going to be taken away from you in a page and a half, and I want you to notice that it does not go away completely.”

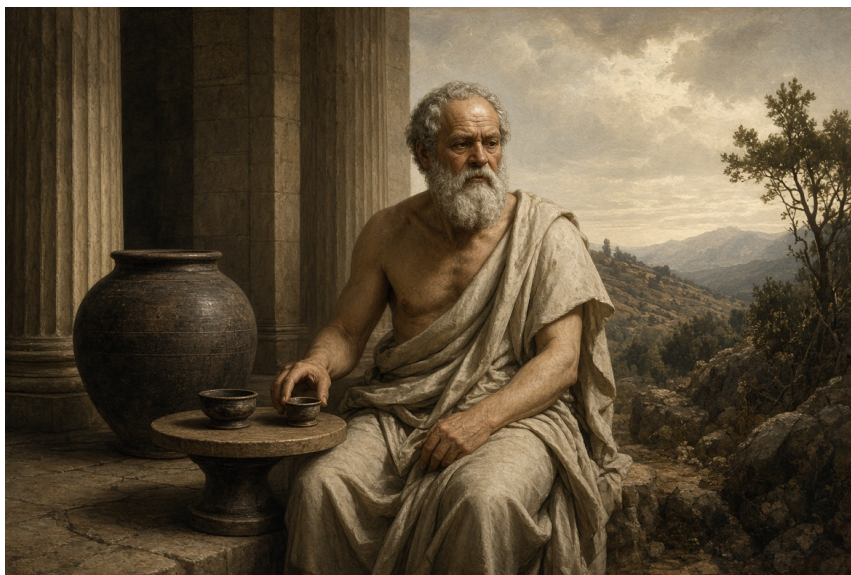
. . .

“And do you at the same time think,” Socrates was saying, “that a man has knowledge of anything when he believes the same thing now to be part of one thing, and now part of something else? Or when he judges that now one thing and now something different belongs to one and the same object?” “No. Indeed I don’t.”

. . .

“Then have you forgotten that at first, when you were learning to read and write, that’s just what you and the other boys used to do?”





One Hundred Are the Timbers of a Wagon — the competing interpretation.

. . .

“You mean,” said Theaetetus, “that we used to think that sometimes one letter and sometimes another belonged to the same syllable — and used to put the same letter sometimes into its proper syllable and sometimes into another?” “That’s what I mean.” “Well, I certainly haven’t forgotten. And I don’t think people at that stage can be said to have knowledge yet.”

. . .

“Well. Suppose now that somebody at this sort of stage is writing the name Theaetetus. “He thinks he ought to write THE — and does so. “Then suppose another time he’s trying to write Theodorus, and this time he thinks he should write TE — and proceeds to do so. “Are we going to say that he knows the first syllable of your names?”

9



MANY
PARTS



MAKE
A WHOLE



THAT
WORKS



One Hundred Are the Timbers of a Wagon — Lela and Danae reconstruct the idea.

. . .

“No. We’ve admitted that anyone at that stage hasn’t yet got knowledge.”

. . .

“And is there anything to prevent the same person being in that situation about the second, and the third, and the fourth syllables?” “No. Nothing.”

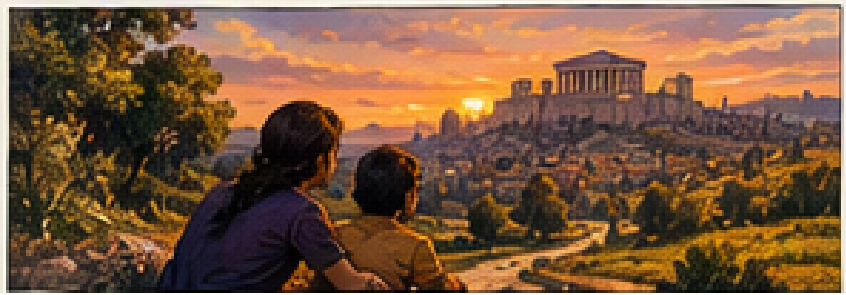
. . .

“Now, at the time when he does this, he’ll be writing Theaetetus not only with correct judgement, but with command of the way through its letters. That must be so whenever he writes them out one after another in their order.” “Yes. Clearly.”

. . .

“And still without knowledge, though with correct judgment. Isn’t that our view?” “Yes.”

. . .





One Hundred Are the Timbers of a Wagon — the historical layer.

“Yet possessing an account of it, along with his correct judgement. He was writing it, you see, with command of the way through its letters — and we agreed that that is an account.” “True.”

. . .

“So here, my friend, we have correct judgement together with an account, which we are not yet entitled to call knowledge.”

. . .

“Yes,” said Theaetetus. “I’m afraid that’s so.”

. . .

“He spelled it right,” said Danae, sitting up. “That’s not fair either. He spelled the whole thing right, letter by letter, in order, all the way through —” “And got the same syllable

wrong in the other name the following week,” said Sophia.
“Yes.”

. . .



One Hundred Are the Timbers of a Wagon — a wordless conceptual plate.

“So he didn’t know it.” “He did not know it. He produced it correctly. Those are not the same thing and you have known they were not the same thing since you were six, because you have sat next to children who could spell a word on Tuesday and not on Thursday, and everyone in the room could tell the difference between them and the child who actually had it.”

. . .

“Everyone can tell,” said Danae slowly. “That’s the weird thing. Everyone in the room can always tell.” “Yes,” said

the owl. "Everyone can always tell. Nobody can say what they are telling. That is this book."

. . .

"So it was only the poor man's dream of gold that we had," said Socrates, "when we thought we'd got the truest account of knowledge. "Or is it early days to be harsh?"

. . .

"What's the poor man's dream of gold?" said Danae. "You are asleep," said Sophia, "and you are poor, and in the dream there is gold, and it is the real weight of it in your hands that you feel. And you wake up."

. . .

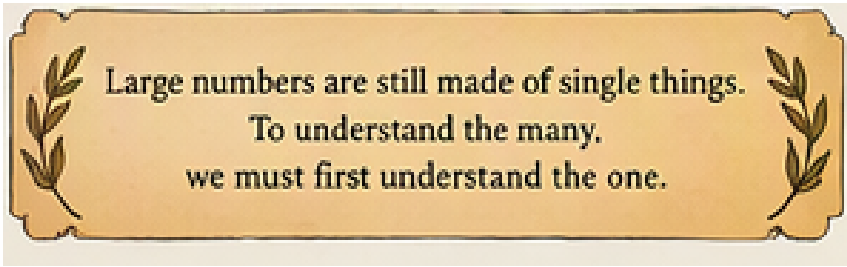


One Hundred Are the Timbers of a Wagon — the chapter's narrative and philosophical synthesis.

“Perhaps this isn’t the way to define account,” said Socrates. “We said that the man who defines knowledge as correct judgement together with an account would choose one of three meanings. Perhaps the last is the one.”

. . .

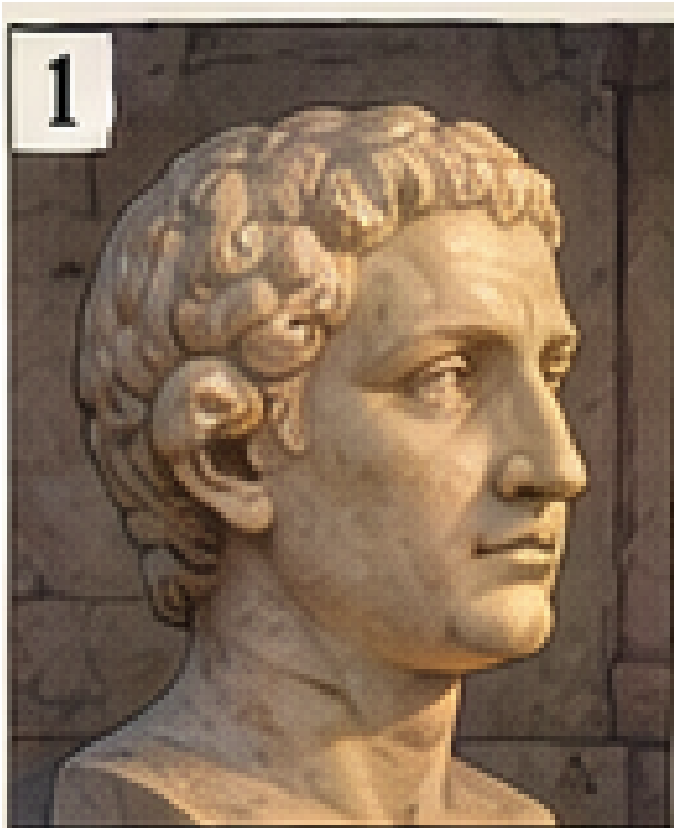
“Yes — you’re right to remind me,” said Theaetetus. “There’s one possibility still left. “The first was a kind of vocal image of thought. The one we’ve just discussed was the way to the whole through the elements. “Now — what’s your third suggestion?”



One Hundred Are the Timbers of a Wagon — the chapter's closing thought.

Chapter 44

FORTY-FOUR. The Snub Nose





The Snub Nose — opening scene.

“What the majority of people would say,” said Socrates. “Namely — being able to tell some mark by which the object you’re asked about differs from all other things.”

. . .

“Can you give me an example of such an account of something?”

. . .

“Well — take the sun, if you like. “You’d be satisfied, I imagine, with the answer that it is the brightest of the bodies that move round the earth in the heavens.” “Oh yes. Quite.”

. . .

“Now I want you to get hold of the principle this illustrates. “It’s what we were just saying: that if you get

hold of the difference that distinguishes a thing from everything else, then — so some people say — you'll have got an account of it. "On the other hand, so long as it's some common feature that you grasp, your account will be about all those things which have this in common."





The Snub Nose — the chapter's central dialogue.

. . .

“I see,” said Theaetetus. “I think it’s very good to call this kind of thing an account.”

. . .

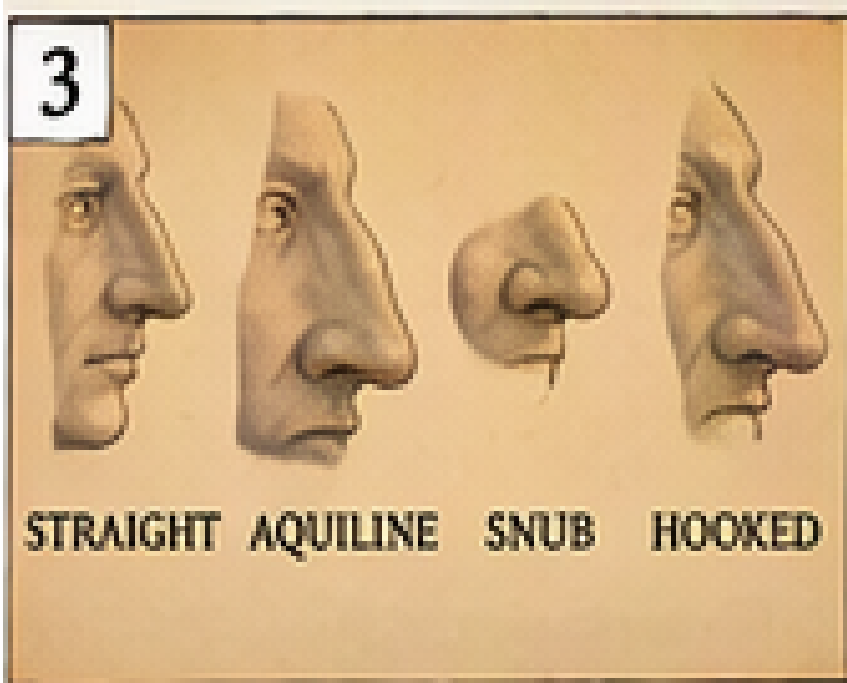
“This one’s right,” said Lela.

. . .

She said it with real conviction, sitting up straight for the first time in an hour. “This one’s actually right. That’s what knowing a thing is. It’s not being able to burble about it and it’s not knowing the hundred bits. It’s being able to say the thing about it that isn’t true of anything else.”

. . .

“It is the best of the three,” said Sophia, “by a long way, and it is the one that most people alive today would give if you woke them up and asked them. “And it is going to die in under a page, and it is going to die of him and the boy having the same nose.”





The Snub Nose — the central concept made visible.

. . .

“Then if a man with correct judgement about any one of the things that are grasps in addition its difference from the rest — he has become a knower of the thing he was a judger of before.” “That’s our present position, anyway.”

. . .

“Well, at this point, Theaetetus, as regards what we’re saying, I’m for all the world like a man looking at a shadow-painting. “When I’m close up to it I can’t take it in in the least — though when I stood well back from it, it appeared to me to have some meaning.”

. . .

“How’s that?”

. . .

4



SAME HUMAN NATURE
DIFFERENT FEATURES



The Snub Nose — the guiding analogy.

“I’ll see if I can explain. “Suppose I’ve formed a correct judgement about you. If I can grasp your account in addition, I know you. But if not, I’m merely judging you.” “Yes.” “And an account was to be a matter of expounding your differentness.” “That is so.”

. . .

“Then when I was merely judging — my thought failed to grasp any point of difference between you and the rest of mankind?” “Apparently.”

. . .

“What I had in mind, it seems, was some common characteristic. Something that belongs no more to you than to anybody else.” “Yes. That must be so.”

. . .

“Then tell me, in Heaven’s name — how, if that was so, did it come about that you were the object of my judgement, and nobody else?”





The Snub Nose — the argument unfolding step by step.

. . .

“There it is,” said Sophia, very quietly.

. . .

“Suppose my thought is: this is Theaetetus — one who is a human being, and has a nose and eyes and a mouth — and so on through the whole list of limbs. “Will this thought cause me to be thinking of Theaetetus rather than of Theodorus? Or of the proverbial remotest Mysian?” “No. How could it?”

. . .

“But suppose I think, not merely of the one with nose and eyes, but of the one with a snub nose and prominent eyes. “Shall I even then be judging you any more than myself — or anyone else who is like that?”

. . .

“Not at all.”

. . .

6

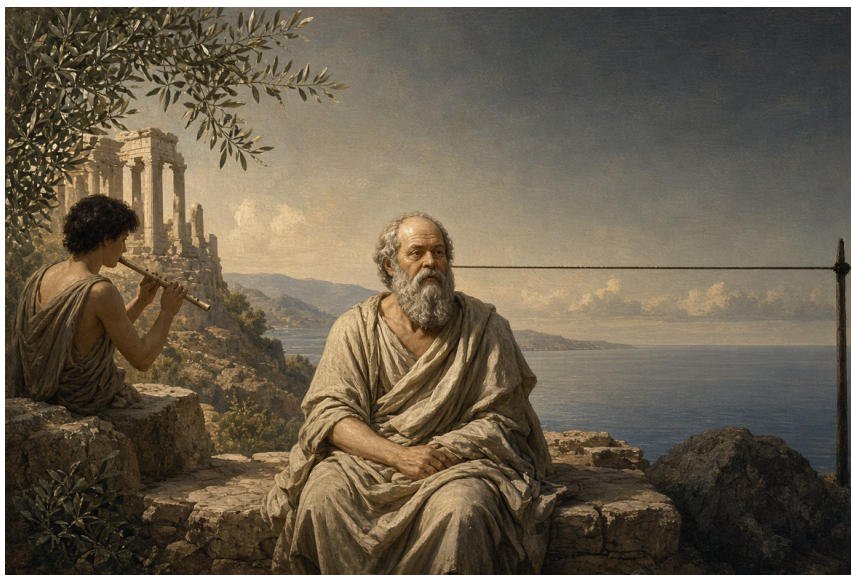
HOW DO WE DEFINE?

By appearance?

By function?

By family resemblance?

By what is essential?

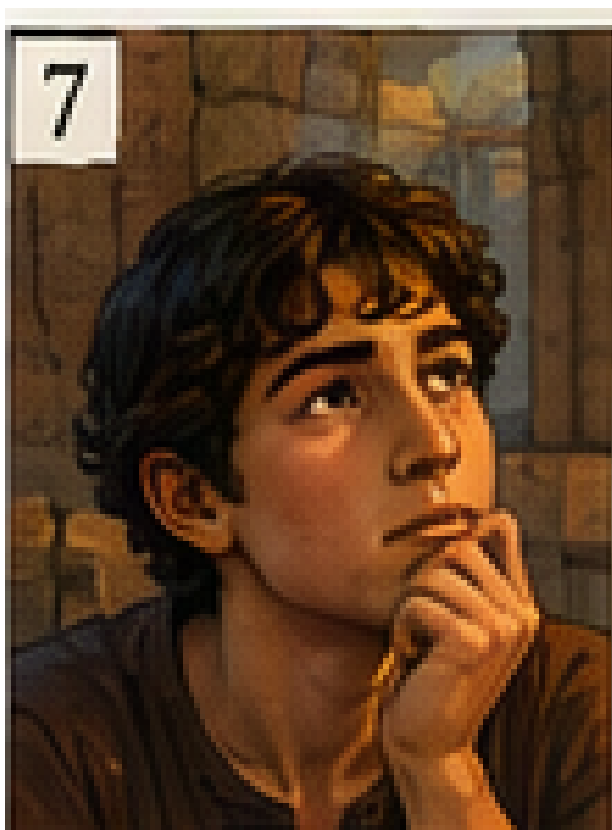


The Snub Nose — the competing interpretation.

The boy under the plane tree said it without a flicker; and Lela, watching from an olive grove two thousand three hundred years away, found that her eyes had gone hot without asking her permission.

. . .

“Sophia.” “Yes.” “They’ve got the same face.” “They have the same face. It is said in the first ten minutes of the book, by Theodorus, and it is the reason he brought the boy over: he is not handsome, he is like you, he has your snub nose and your prominent eyes, and I tell you this so that you are not startled. “And Socrates said: then I will look at him as one looks at oneself. “And here, at the very end, with two hundred pages between them, the old man builds the last argument of the book out of the one thing the two of them have in common, and takes his own face apart to do it, and neither of them mentions it.”





The Snub Nose — Lela and Danae reconstruct the idea.

. . .

“It won’t be Theaetetus who’s judged in my mind,” Socrates was saying, “until this snub-nosedness of yours has left imprinted and established in me a record that is different in some way from the other snub-nosednesses I’ve seen. “And so with the other details of your makeup. “And this will remind me, if I meet you tomorrow, and make me judge correctly about you.” “That’s perfectly true.”

. . .

“Then correct judgement also must be concerned with the differentness of what it’s about?” “So it seems, anyway.”

. . .





The Snub Nose — the historical layer.

“Then what more might this adding an account to correct judgement be? “If, on the one hand, it means that we must make another judgement about the way a thing differs from the rest of things — we’re being required to do something very absurd.”

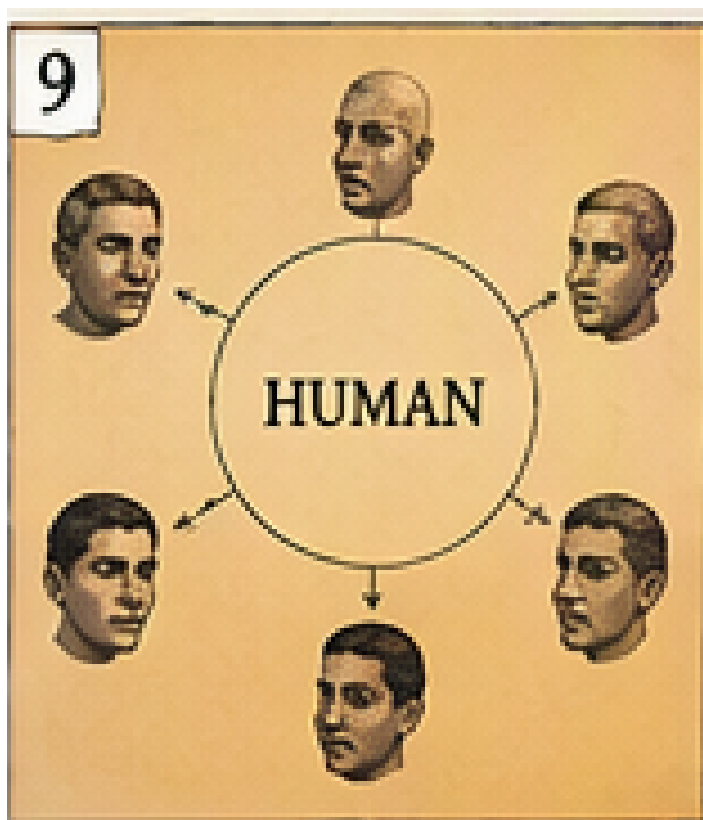
. . .

“How’s that?”

. . .

“Because we already have a correct judgement about the way a thing differs from other things. And we’re then directed to add a correct judgement about the way it differs from other things. “At that rate, the way a roller goes round, or a pestle, or anything else proverbial, would be nothing compared with such directions. “They might more justly be called a matter of the blind leading the blind. “To

tell us to add what we already have, in order to come to know what we're judging about, bears a generous resemblance to the behaviour of a man benighted."





The Snub Nose — a wordless conceptual plate.

. . .

“Whereas if, on the other hand — ?” said Theaetetus. “What else were you going to suggest, when you started this inquiry just now?”

. . .

“Well — if adding an account means that we’re required to get to know the differentness, and not merely judge it — then this most splendid of our accounts of knowledge turns out to be a very amusing affair. “Because getting to know is, of course, acquiring knowledge. Isn’t it?” “Yes.”

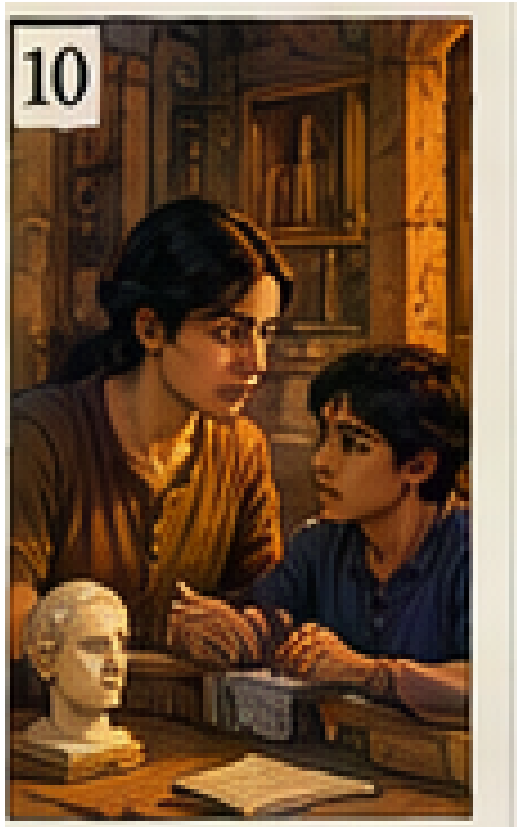
. . .

“So, it seems, the answer to the question what is knowledge will be: “Correct judgement, accompanied by knowledge of the differentness. “For this is what we’re asked to understand by the addition of an account.”

. . .

“Apparently so.”

. . .





The Snub Nose — the chapter's narrative and philosophical synthesis.

“And it’s surely just silly to tell us, when we’re trying to discover what knowledge is, that it is correct judgement accompanied by knowledge — whether of differentness, or of anything else.”

. . .

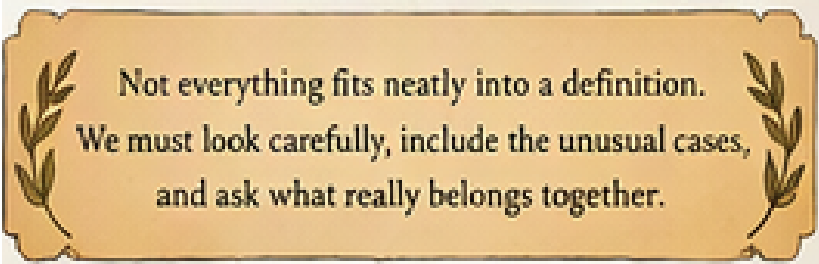
Nobody in the orchard moved.

. . .

“And so, Theaetetus — knowledge is neither perception, nor true judgement, nor an account added to true judgement.”

. . .

“It seems not,” said Theaetetus.



Not everything fits neatly into a definition.
We must look carefully, include the unusual cases,
and ask what really belongs together.

The Snub Nose — the chapter's closing thought.

Chapter 45

FORTY-FIVE. Wind-Eggs





Wind-Eggs — opening scene.

“Well now, dear lad. Are we still pregnant — still in labour with any thoughts about knowledge? “Or have we been delivered of them all?”

. . .

“As far as I’m concerned, Socrates,” said Theaetetus, “you’ve made me say far more than ever was in me. Heaven knows.”

. . .

“Well then. Our art of midwifery tells us that all of these offspring are wind-eggs, and not worth bringing up.”

. . .

“Undoubtedly.”

. . .

“What’s a wind-egg?” said Danae. Her voice had gone very small.

. . .

“An egg with nothing in it,” said Sophia. “The country people said the hen had been got with child by the wind. You keep it warm for three weeks and nothing comes out, because there was never anything in it.”

. . .

“That’s horrible.” “Yes.” “That’s — he spent the whole day. He’s fifteen. He worked the whole day and he was clever the whole day and he did everything right and at the end the man says none of it was anything.”





Wind-Eggs — the chapter's central dialogue.

. . .

“Wait,” said Sophia. “Do not do what everybody does. There are four more sentences and they are the four the whole day was for.”

. . .

“And so, Theaetetus — if ever in the future you should attempt to conceive, or should succeed in conceiving, other theories — they will be better ones, as the result of this inquiry. “And if you remain barren, your companions will find you gentler and less tiresome. You will be modest, and not think you know what you don’t know. “This is all my art can achieve. Nothing more.”

. . .

Lela let out a breath she seemed to have been holding since the beginning of the chapter.

...





Wind-Eggs — the central concept made visible.

“You will not think you know what you don’t know,” she said. “Yes.” “Sophia, that’s — that’s what he said at the trial. That’s the whole thing he said at the trial. I don’t know and I don’t think I know.”

. . .

“Yes,” said the owl. “He has been saying it for fifty years and he is saying it now, in a wrestling-school, to one boy, with no audience, about a day’s work that came to nothing. “And what he is saying is not the day came to nothing. What he is saying is: there are two good outcomes of a day like this. Either you will think better things, or you will be a less insufferable person. There is no third outcome in which you learn nothing, unless you decide there is.”

. . .

“I do not know any of the things that other men know,” Socrates was saying — “the great and inspired men of today and yesterday. “But this art of midwifery my mother and I had allotted to us by God. She to deliver women; and I to deliver men that are young and generous of spirit, all that have any beauty.”





Wind-Eggs — the guiding analogy.

. . .

And then he stood up, and shook out his cloak, and said:

. . .

“And now I must go to the King’s Porch, to meet the indictment that Meletus has brought against me. “But let us meet here again in the morning, Theodorus.”

. . .

The picture went out.

. . .

It did not fade. Sophia did not do anything gentle with it. One moment there was a courtyard with dust in the

light and an old man pulling his cloak straight, and the next there was the orchard, and the wall, and the bees in the lavender, and the long gold light coming sideways through the olives the way it did at six o'clock in August.

. . .

Nobody said anything for quite a long time.

. . .





Wind-Eggs — the argument unfolding step by step.

“That’s where our book starts,” said Lela.

. . .

“That is where your book starts.” “That’s the next thing that happens. He walks out of there and he goes to the Porch and he meets Euthyphro on the steps and Euthyphro’s prosecuting his own father and they have the argument about holiness, and that’s —” She stopped and pressed the heels of her hands against her eyes. “That’s twenty minutes later.”

. . .

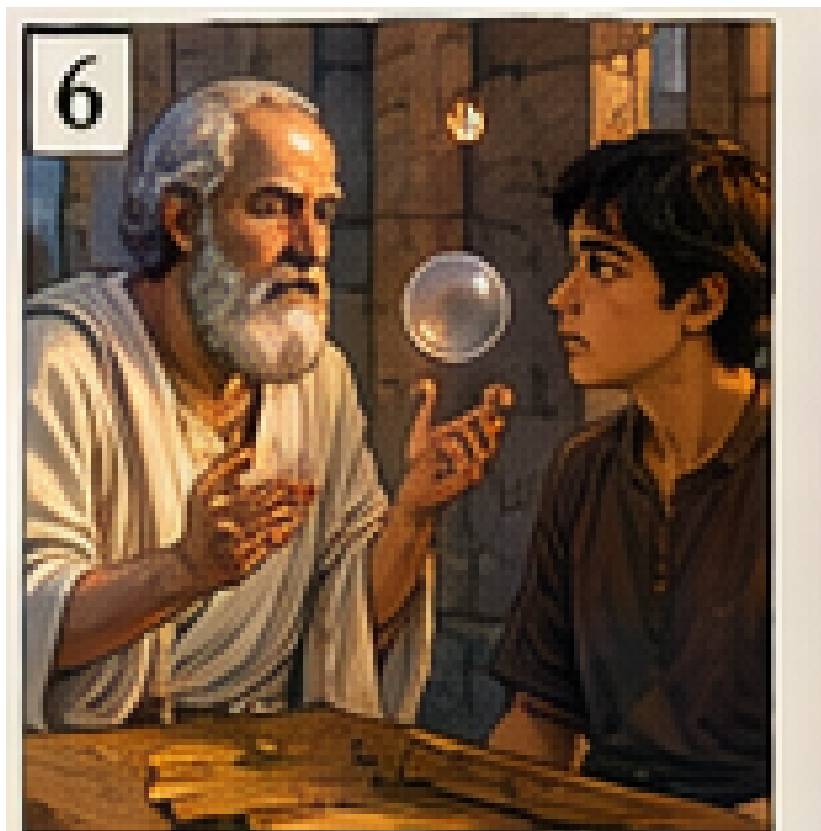
“About twenty minutes later,” said Sophia.

. . .

“We were there.” “You were there.” “We were standing on those steps. Danae had the — she had the stone in her

pocket, the one from the wall, she still has it —“ I’ve got it now,” said Danae. “It’s in my shorts.”

. . .





Wind-Eggs — the competing interpretation.

“And this whole thing,” said Lela, “this whole enormous thing, the wax and the birds and the river and the flowing and the man who got it all wrong and the — all of it — that was that same day. That was that morning. That was the hours before.” “Yes.” “He’d already been charged. It was already happening. And he spent the morning of it arguing about whether knowledge is perception with a fifteen-year-old, for nothing, and got nowhere, and then went.”

. . .

“Yes,” said Sophia. “Now you know what the book is.”

. . .

In the garden of the Academy, Plato let the last of the roll run through his fingers and closed it.

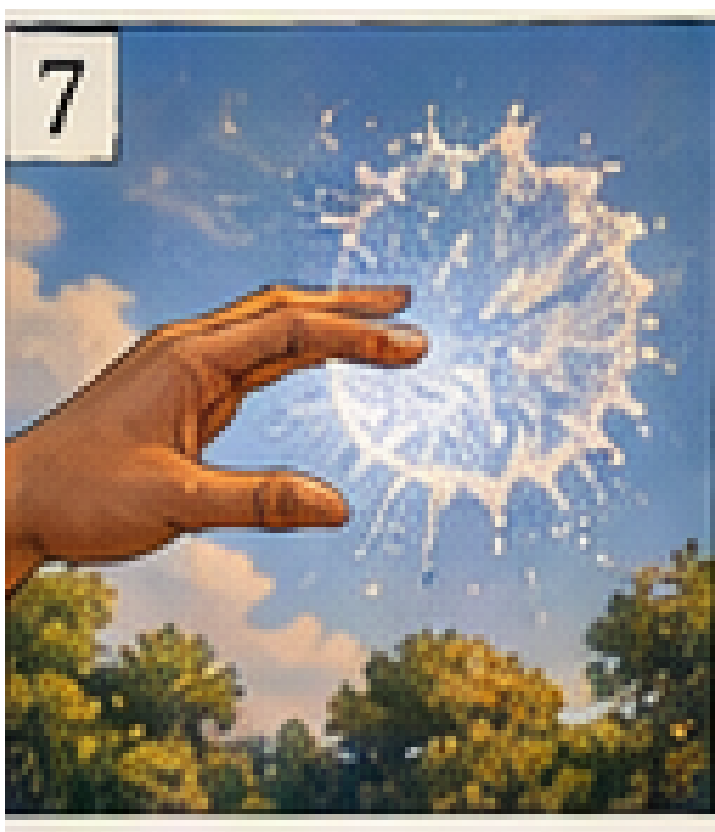
. . .

He did not say anything for a while. He was sixty-two and it had been a long afternoon, and the light was going there too, in a different century, in the same country.

. . .

“Ask,” he said.

. . .





Wind-Eggs — Lela and Danae reconstruct the idea.

“What was it for?” said Aristotle.

. . .

“That is the right question and you have asked it too quickly,” said Plato. “Ask it again in a moment. First, tell me who is speaking at the beginning of this book.”

. . .

Aristotle went back through the tablets on his knee. “Euclides,” he said. “And Terpsion. In Megara. Walking in from the country.” “And why is Euclides reading the book out?”

. . .

The young man stopped.

. . .

“Because he has just come from the harbour,” he said slowly. “Because he walked out with Theaetetus as far as Erineum. Because Theaetetus was being carried back from the camp at Corinth, wounded, with the sickness in the army in him as well, and he was going to die, and everybody knew it, and Euclides came home and got the book down.”





Wind-Eggs — the historical layer.

. . .

“Yes.”

. . .

“So the whole thing —” “The whole thing is a man who is dying being remembered on the day the news comes. “That is why it opens where it opens. That is why Theodorus says at the start that the boy will be a great man if he lives. That is why the boy is good, and modest, and quick, and generous, and is beaten all day long and does not once become sullen. “And that is why the last thing the old man says to him is your friends will find you gentler.”

. . .

Aristotle put the tablets down on the bench.

. . .

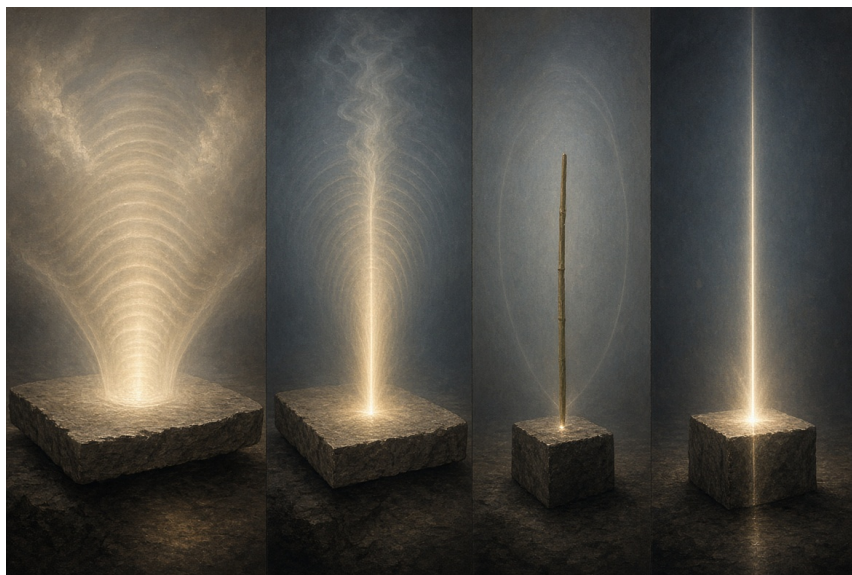
“Now ask me what it was for,” said Plato.

. . .

“What was it for?”

. . .





Wind-Eggs — a wordless conceptual plate.

“Nothing was found out,” said Plato. “That is true and I am not going to pretend otherwise; you can count the results on no fingers. “But a boy of fifteen who had never been asked anything difficult in his life was asked, for one afternoon, by the best man there has been at asking, and he stood up to it. And then he grew up, and he did the most beautiful mathematics anybody in this city has ever done, and he was decent to everybody the whole time, and he died at thirty-five on a stretcher coming back from a war he need not have gone to. “And this is what there is of him.”

. . .

He put his hand flat on the closed roll.

. . .

“That is what it was for.”

. . .

The young man from Stagira looked at the roll for a long moment.

. . .

“Tomorrow morning,” he said. “He says let us meet here again in the morning.” “He does.” “Did they?”

. . .

Plato smiled for the first time that day — briefly, and not very much, but Lela saw it from two thousand three hundred years away and elbowed her sister.





Wind-Eggs — the chapter's narrative and philosophical synthesis.

. . .

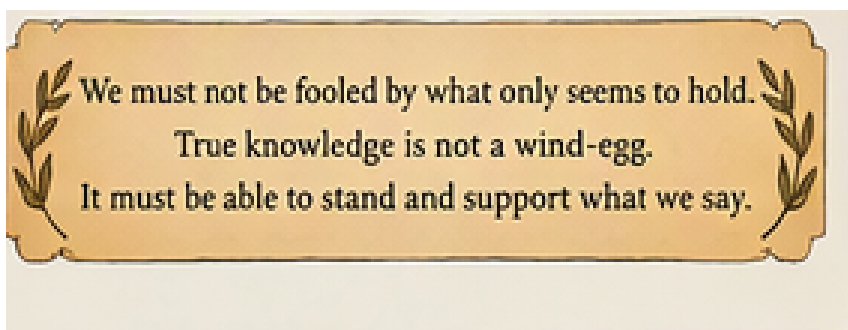
“They did,” he said. “Theodorus came back at dawn and brought a stranger with him, and the stranger was from Elea, and he had been a friend of Parmenides. “And they spent the whole of the next day trying to catch a sophist. “Come tomorrow and I will read it to you.”

. . .

“Sophia,” said Danae, into the dark blue evening, “is that the next book?”

. . .

“That is the next book,” said the owl.



Wind-Eggs — the chapter's closing thought.

Colophon

This annotated edition was compiled for Aris Skliros from the novel source and the sibling Euclid annotation layers (Theaetetus, Sophist, Statesman, Parmenides hypertexts). It does not claim authorship of Plato or Euclid. Correspondences only. Cite-first lists applied exactly.

Concordance of Euclid correspondences

Plato predates Euclid by roughly half a century; Theon of Smyrna and Nicomachus of Gerasa follow him by four hundred years. Every entry below records a *correspondence* between what is done on the page and the statement in the *Elements* that later systematises it. None is a citation by Plato, and none implies that any speaker in this book had read Euclid. Statements follow the Fitzpatrick bilingual edition of Heiberg's text; El.B.Def.N, El.B.Post.N, El.B.Prop.N are the canonical identifiers. Tiers: STRONG where the page performs the proposition itself, MODERATE where it performs a recognisable part of it, LIGHT where the pointer is thematic.

Reference	Locus	Tier	Page
El.X.Def.2	Elements X — commensurable in square; lengthsquare-number ratio	STRONG	45
El.VII.Def.16	Elements VII — plane number (oblong); square number	STRONG	53
El.VII.Def.1	Elements VII — unit; number	LIGHT	412
El.VII.Def.16	Elements VII, Definitions 16 and 2 — six, counted every way	MODERATE	521
El.I.CN.5	Elements I — whole $>$ part; equals added	MODERATE	530