Chapter 9

Zeno and Melissos

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1.   Zeno's life and book

Zeno was a younger fellow citizen and close personal friend of Parmenides. Plato says that they were lovers, and although Athenaeos was scandalized by this claim, there is no discoverable reason to doubt it.[i] They were probably both members of the Pythagorean community in Elea; and Zeno was perhaps as much as twenty-five years younger than Parmenides.[ii] In that case he was born between 520 and 515.[iii]

In philosophy, Zeno was essentially a "dialectician" (in Aristotle's sense). He probably wrote just one book, and he wrote it in prose.[iv] In Plato's historical fiction, Parmenides and Zeno have brought Zeno's book to Athens for the first time; and Zeno gives a public reading. He claims that he wrote the book when he was younger, and that it only got published because someone copied it without his knowledge.[v] Plato certainly wants us to take Zeno's views in a somewhat jesting spirit. But, with Plato, jesting is a serious business, so it is not clear just how we ought to regard that. (Ever since Aristotle, professional philosophers have been taking Zeno's paradoxes very seriously. Here we shall be more disposed to agree with Plato. This is only a historical interpretation, not an objective evaluation of the merits of his arguments.)

There is actually some evidence that, when away from his writing table, Zeno was no jester. He was probably as much in earnest about political virtue as Parmenides. His own visit to Athens does seem to be securely attested. But he was famous for proclaiming there that he preferred his own small native city because it produced virtuous citizens, and that he would never leave it (29 A 1, 28).[vi] This story is certainly connected with the other one, according to which Zeno plotted against a local tyrant, and died under torture, refusing to reveal who else was in the plot (A 1: 26, A 6, A 7).[vii]

Aristotle, who is the main source for our knowledge of Zeno's paradoxes, called him the discoverer (or inventor) of dialectic (A 1).[viii] Dialectic, for Aristotle, was the art of arguing against a position or thesis, from accepted (or probable) premisses, without maintaining a position of one's own; and this was just what Zeno did. He was probably defending the view of Parmenides about *true* being and *divine* knowledge. But he was concerned only to respond to attacks made from the ordinary human standpoint (of Opinion or Seeming) by showing that the whole world of sense experience was founded on contradictions. If we assume that there are really many things (minimally two opposites as in the analysis of human experience given by the Goddess to Parmenides) then quite contradictory conclusions can be derived from our hypothesis. That is why the Goddess said that the opposites should not be named — as substantial "things" — at all.

Zeno was certainly a faithful disciple of Parmenides. We have seen that in his own life he took human opinions quite seriously, just as Parmenides did. But he wanted to show that no sound rational arguments can be mounted from the human point of view against the rational theology of Parmenides, because there are no logically reliable starting-points in human experience. His arguments were focussed mainly on two fundamental presuppositions of our life: plurality and motion.[ix]

2.   **Against plurality**

In the *Parmenides*, Sokrates quotes the first "hypothesis" of Zeno's book thus: "If there are many, they must be both like and unlike" (*Parmenides* 127de). This hardly seems to be a serious problem, because it is so easy to modify the hypothesis to read "alike in one respect, and unlike in another." Zeno's arguments about "the many" only become serious when we take them to be directed at what Plato later called "the hypotheses of mathematics." Simplicios says that "Zeno showed that nothing has size, because each of the many is identical with itself and one."[x] Thus, a line consists of points that have position but *no* magnitude. A short line contains the same infinity of points as a longer one. Two points are alike in being points, and unlike in their positions; but how they get to have different positions is a mystery, because no addition of points can actually *produce* a line. Extended reality is infinitely divisible; and the point-units are indivisible. The indivisible point-units have position, but how any finite distance between two positions can be filled by points is not intelligible. (Hence, as Zeno rightly understood, the real problem is to understand "What the <mathematical> *one* is" (A 16).[xi]

Another "hypothesis" was that "If a many is, then it must be both infinitely large and infinitely small." For the many parts must be separate, and in that case an infinite number of distinct positions will fill an infinitely large space. But if the parts have *no* magnitude, then (on the other hand) an infinite number of them can be contained in an infinitely small space (B 1, B 2).[xii]

Finally, "If a many is, it must be both finite and infinite in number." Finite, because the many are neither more nor less than they are; infinite, because if they are separate, there are always others between them (B 3).[xiii]

Porphyry (so Simplicios tells us) credited one obviously Zenonian argument to Parmenides: If we continue division "forever," we must end with an infinity of "least things," or else with nothing. Arriving at nothing is absurd; but as long as there is something it can be divided. This division can never come to an end; and the only conclusion is that what is, is undivided, without parts, and one.[xiv]

None of these arguments pose any problem for the modern theory of the mathematical infinite, because a process of infinite division converges on a finite sum. (This will be dramatized, so to speak, in the "Achilles" paradox.) But it is reasonable to think that the problems raised were a serious headache for the Pythagorean mathematicians against whom they were (probably) first advanced. Pythagorean arithmetic was founded upon the hypothesis of real point-units (represented by pebbles). But after the work of Hippasos revealed the existence of incommensurable magnitudes, we find Archytas telling us that *geometry* is the "mother-city" of the sciences. This insight is reflected in the theory of *human* experience proposed by Philolaos; so it was probably older than Archytas. The way that Philolaos concentrates upon the complementary opposition of "Limit" and "the Unlimited" probably reflects the impact of Parmenides and Zeno together on the Pythagorean School.[xv]

3.   Against Motion, Place and Sensation

Zeno's arguments against motion attracted the serious attention of Aristotle. So (although Aristotle's book *Against Zeno* — like that of Herakleides Pontikos — has perished)[xvi] the arguments are fairly well preserved. They have come down to us with names. The first is the *Dichotomy* (A 25).[xvii] Nothing can move from point A to point B (if the points are really separated) because first it must go halfway, then half of the remaining distance, and half of the remainder (*ad infinitum*). The infinite series can never be completed; so the goal can never be reached.

The second is the *Achilles* (A 26).[xviii] This is simply the Dichotomy applied to two moving points. If Achilles gives the Tortoise a start, he can never catch it, because first he must get to where it started, and so on. Even if he runs a thousand times as fast as the Tortoise, the series remains uncompletable because it is infinite. (For these two, convergence on a finite sum *explains* the paradox.)

The third is the *Arrow* (A 27).[xix] The Dichotomy and Achilles depended on the infinite divisibility of the continuum; the Arrow depends on the determinacy of a position. At every instant, the flying Arrow is at a fixed position; and at every instant it occupies a space exactly equal to its own extent. Thus it is always still, and it never moves. The response of Aristotle to the Arrow problem is simply that the continuum of time is not made up of discrete "instants." There is no need to suppose that anyone had consciously tried to conceptualize time in this way, but the whole numbers are both discrete and successive. So Pythagoreans who wanted to explain the world of our experience "arithmetically" would find themselves in difficulty. The need for a shift to geometry as the "mother Science" — which was implicitly necessary already in order to accommodate the findings of Hippasos — was dramatically highlighted by the arguments of Zeno.

The fourth is the *Stadium* (A 28).[xx] In the Stadium there are three files of bodies. The first file is stationary, and the other two are parallel, but moving in opposite directions:

$$A\ A\ A\ A$$
$$B\ B\ B\ B \rightarrow$$
$$\rightarrow C\ C\ C\ C$$

At the moment when they are perfectly lined up :

$$A\ A\ A\ A$$
$$B\ B\ B\ B$$
$$C\ C\ C\ C$$

the leading B has passed 2 A's and 4 C's. But *ex hypothesi* the A's, B's and C's are "like" (i.e. equal). So 4 A's are equal to 2 A's (or the half is equal to its whole).

This "paradox" looks like an elementary mistake in logic. That a stationary A is "equal" to a moving B or C appears to us to be an obviously false assumption. But Zeno wanted to show that motion *produced* "contradictions"; and what constituted a "contradiction" had not yet been settled. (Once more we can see that the argument is valid against the hypothesis of minimal time-quanta. The logic is only "bad" because *any* time interval can be divided again.)

Zeno offered arguments against "place" that appear almost as unsatisfactory as the Stadium. The first of these simply makes the "hypothesis" of the Arrow paradox explicit: "If anything moves, then it moves either in the place where it is, or in the place where it is not." But the latter alternative is impossible; and in the place where it is, the thing is at rest (B 4).[xxi] (Here the point is that the *space* in which motion can occur must be continuous. It cannot be arithmetically analysed into discrete "places.")

But "place" itself is contradictory. The "place" that the Arrow is in, must itself be in another (greater) "place"; and that in another, and so on. But an infinity of "places" is impossible. So "place" does not exist (A 24).[xxii]

Apparently Zeno also raised problems about sensation. The one that we hear about may not have been in his book, because the full version of it comes to us as a problem raised for Protagoras in conversation. But that is quite probably a later piece of biographical fiction imposed upon the paradox, since Aristotle treats the problem as one of Zeno's paradoxes simply. It is the one called the *Millet Seed*. The impact of a falling body either makes a sound or it does not. Does one millet seed make a sound? If so, does half a seed? . . . a quarter? and so on (A 29).[xxiii] As an argument against the reliable truth of the "Way of Opinion" (or of "Seeming") this is a serious problem; and Protagoras himself may have used it against the pretensions of the natural philosophers.[xxiv]

Probably Zeno agreed with Parmenides that some opinions are better than others. But his primary concern was to show that Opinion was quite distinct from Truth, because, unlike Truth, it cannot be securely demonstrated.

4.   Life of Melissos

As far as we know Melissos of Samos never met Parmenides or Zeno. He was the first philosophical disciple "by the book." But he was even more remarkable as a philosophical man of

action. He was the admiral of the Samian fleet who inflicted a notable defeat upon the Athenians in 441 BCE (30 A 3).[xxv] If he was, perhaps, born about 485 BCE then he was rather younger than Empedokles and Anaxagoras. But he was a fairly close contemporary of them both.

Just when Melissos found time for the serious study of philosophy in what must have been a very busy life, we cannot be certain. But Plutarch reports that Themistokles admired his work. Themistokles died in exile in about 465 BCE. So if the report can be trusted (about which Plutarch himself is doubtful), then Melissos did his philosophical work as a fairly young man (A 3).[xxvi] We may plausibly suppose that there was a Pythagorean community on the natal island of the Master; the "Italian" sympathies of Melissos would have begun there. We should assume that he read Zeno, as well as Parmenides; and certainly he read Empedokles and Anaxagoras. But (on chronological grounds) it is rather more likely that the Atomists read *him*, than that he read them. It seems that he wrote just the one book, for which Simplicios gives the title "On Nature, or on Being." (Simplicios thought that the title stemmed from Melissos himself; and the latter half of it is certainly accurate — A 4.)[xxvii] Melissos wrote in plain prose, without any flourishes of poetic rhetoric. We do not know when he died.

5.   The One

Just how Parmenides conceived his "It Is" is not clear. Only "thought" can reach it; and "what is" is identical with "what thinks itself." But this divine being is something quite distinct from Parmenides, the human being, who lives in a small city, and is well aware that death is continually impending. Parmenides as a logical reasoner is somehow identical with the divine Being; but what is the relation of this Being to the *natural order* that earlier thinkers (from Thales to Xenophanes) had uncovered? Herakleitos was certainly wrong. Parmenides' reading of the Herakleitean unity of opposites — prejudiced as it is — enables him to identify the naming of two opposites in the first place as the basic error of the tradition. When we concentrate our attention on "Is" and "Is Not," as the primary pair, we can see that the naming of two opposites must be a

mistake. But the earlier tradition of physical theory also involves the emphasis on unity and continuity to which Parmenides gives absolute prominence. Has Parmenides worked out his relation to the tradition correctly?

Melissos thinks not. We can define his project as the formulation of a consistent theory of the relation between "eternity" and "time." Thus, Parmenides lays down the "eternity" of Being *logically*: "It was not nor shall it be, since *now it is* all at once" (28 B 8, 5). Melissos turns this round into temporal perpetuity: "It is, and always was and always shall be" (30 B 2). It is a truth about temporal coming to be that "Out of nothing, nothing comes"; and for this reason, we can say that what truly is must always have been; and that it always will be. For God himself there is no distinction of times; but for us, his eternity is the perpetuity of what has been in what will be.

This point is repeated again and again as an argument against any kind of change in what is absolutely real. The sorts of "rearrangement" that we shall encounter in Empedokles and Anaxagoras, cannot belong to the absolute standpoint of true Being (cf. B 1 and B 7).

The foundation of Parmenides' Way of Opinion was the "mixture" of light and dark, light and heavy, fire and earth. Empedokles took his clue for a way forward from this; but Melissos rules it out quite emphatically. He seems to have the very subtle theory of "mixture" advanced by Anaxagoras in mind, as well as the simpler, unexplained, concept of Empedokles. He accepts "mixture" as the only viable explanation of our sense-world. But the sense-world, he says, is all illusion (A 5).[xxviii] (He is reaffirming the position of the Goddess — and of Parmenides himself — against the new theorists of a reliable bridge between "Truth" and "Opinion.")

A physical interpretation for "Is Not" is provided by the Void of the Pythagoreans — as clarified by Xenophanes. Melissos explains carefully that the Void is impossible; and that motion is therefore impossible, because true Being is everywhere completely full. Reality is not "rare" and "dense" (as almost everyone after Anaximenes, except Parmenides, had repeated) but completely homogeneous (B 7, end).[xxix] Also it is quite indivisible, because division would involve separation

and hence movement. So all of Zeno's paradoxes can be avoided by the acceptance of Parmenides' doctrine (B 10). (It seems clear, beyond question, that Melissos has read Zeno; and he understands what Zeno was aiming at.)

The only real difficulty in interpreting Melissos concerns his doctrine of the "infinity" of "true Being." Parmenides had said that the "Is" must comprehend Limit; and this seems to mean that "time must have a stop." What truly is, must be a temporal whole "like a round ball." Melissos can hardly have meant to deny that, but he thought that it needed a better explanation. When he transformed logical eternity into temporal perpetuity, he clearly believed that the endlessness of time was more fundamental than the "completeness" of the "time cycle."[xxx]

If we try to avoid this disagreement between them by interpreting the "infinity" of Melissos spatially — which seems to be necessary in any case because there is no Void — we come up against the difficulty that Melissos explicitly said that "if it is One, it cannot have body. If it had thickness, it would have parts, and would no longer be one" (B 9).

The proper conclusion here is that the One of Melissos is "infinite," both spatially and temporally. It does not have "body" or "thickness," because there is no way of giving it a definite shape that can be divided. It is a temporal ball, that can roll over again, but not a spatial "sphere" that would have to be surrounded by the Void.[xxxi] It seems clear that Parmenides would have agreed about the "infinity" of the "Is" in both of these senses. He would have said that the "repetition" of the Pythagorean cosmic cycle belongs only to our human perspective. Properly speaking, the "Is" is outside of time. But when Melissos says that it "does not have body," he does not mean that it is "disembodied" (as Simplicios thought); he only means that it has no finite *shape* (no *demas* like that of a sphere). What has "thickness" or "body" can be *divided*; but no cut can be made that goes right through "What Is." One could never come to the end of the cutting, and there would be the same undivided "infinite" on both sides of the attempted division.

We shall not meet any properly "disembodied" realities until we get to Plato. Even the metaphysical — or "divine" — numbers of the pre-Platonic Pythagoreans were "forces" that had to express themselves in physical bodies. At least, that is what Aristotle thought, and it is hard to see how we can now know better than he did.

The most evident ground for saying that the One of Melissos is not "disembodied," is his careful argument that it does not suffer pain or sorrow. "For if it suffered pain, it would not wholly be; for a thing that suffered could not exist for ever. Nor would it have equal power with the healthy. Nor would it be the same, if it were in pain" (B 7; cf. B 2). Melissos is here completing the characterization of the God of Xenophanes — who already "did not breathe" (in contrast to the original Pythagorean One). Parmenides had added that what truly IS does not "see and hear"; and now Melissos is saying that it does not "feel." It is absolutely *alive*; and that means that it has an absolute "power" to *be*. But we cannot imagine what that absolute "life" and "being" are like. If we say that "God knows" or "God thinks" we do not know what we mean. Melissos does not talk about God's self-experience *positively* at all.

Aristotle regarded the arguments of Melissos as "crude." But Plato understood him better, and respected him more. In the *Theaetetus* he is given pride of place, after Parmenides himself. Zeno was personally close to Parmenides, but in Plato's eyes he does not rank so near to him.

6.   The Many

Melissos did not say much about the world of ordinary experience. But part of what he did say was important and influential. We have seen already that he held that "mixture" was the only hypothesis upon which the existence of a many was possible; but that the sensible appearance of a "many" was completely deceptive. He actually offered an argument about how a real many could exist.

"If there were a many," he said, "they would have to be such as I say that the One is" (B 8, 2-6).[xxxii] Thus, the four elements of Empedokles must somehow preserve their identical character; and, in fact, (as Anaxagoras thought) every sense-datum must have absolute being.[xxxiii] But this is not what the senses tell us. Things in experience go from hot to cold, and back again. What is alive dies, and life is spontaneously generated from non-living matter.[xxxiv] According to our ordinary assumption, everything wears away into nothing over time; and "earth and stone come into being out of water" (B 8, 3).[xxxv] But this cannot be right; for what is really hard cannot wear away. So our sense awareness is misleading; we are *not* perceiving what truly is. The real elements in a world of many things must truly be.

Empedokles (and perhaps Anaxagoras too) had already grasped this point. They responded in the two ways that Melissos suggests — one way very simple, and the other extremely complex.[xxxvi] But the explicit formulation of the argument by Melissos was clearly and directly influential upon the atomic theory of Leucippos. The atoms are a "many" which is infinitely various; but none of them are perceptible *at all*; and each of them is "such as I say that the One is." Even with respect to "infinity" this is true. Not only are they "infinitely many," but every atom is *absolutely* hard — or "infinite" in its power of self-maintenance; and that is (arguably) the most fundamental sense of "infinite" in Melissos.

But what makes Atomism a more satisfactory response to the Eleatic problem than either Empedokles or Anaxagoras, is the admission of the Void (or of "What is Not") as "real." This makes *motion* possible at the level of "real being"; and the whole realm of "what truly is" can be kept rigorously separate from the sphere of sensory coming to be and passing away. It was Melissos who showed Leucippos that *that* was absolutely necessary.

Notes

i.   28 A 5 (= 29 A 11); Plato, *Parmenides*, 127a-c and Athenaeos (for translation, see D. Gallop, 1984, 106).

ii.   28 A 4 (D. Gallop, 1984, 106). (If Zeno *did* come to Athens in about 450 BCE — and the young Sokrates talked to him, as he surely would have done — then Plato could have known the age-difference between them. That does not make him reliable — see the next note; but he is the best witness we have.)

iii.   28 A 5 (= 29 A 11). We have seen why Plato's date for Parmenides should not be trusted. It is quite possible that Plato simply manipulated their respective ages, in order to set up the "Golden Section" as the ratio between them. But for Zeno he is our best witness, because this time it is plain that Apollodoros (the source of the date in 29 A 1) is following his mechanical "forty years later" rule; and a forty year difference between Parmenides and Zeno is quite implausible. (Eusebios — in 29 A 3 — has applied the forty-year rule to his "Platonic" date for Parmenides. So it is clear that he got his Parmenides date from some neo-Platonic source, and not from the *Parmenides* itself. The Suda — 29 A 2 — has the "Platonic" dates for both.)

iv.   The Suda (29 A 2) says that Zeno also wrote a book about Empedokles. But if this supposed book was ever sent to the copiers, it is quite amazing that none of our surviving sources ever cites it. (The other three titles in the Suda probably refer to the one book we know about.)

v.   *Parmenides*, 126c-128e. (It is not clear how much of a book there ever was or how long it survived.)

vi.   If *this* story is literally true as told, then the visit of Zeno to Athens is as fictional as that of Parmenides; but it is more probable that Zeno's proud comment was made *in Athens*. It seems to me quite likely that it was Zeno alone who visited Athens when Sokrates was young. If *he* lived to be sixty-five, then (according to my proposed chronology) he could have visited Athens at a time when Sokrates was old enough to be interested. His visit is attested by the report of Plutarch that Pericles heard him give lectures in Athens (29 A 4 — *Pericles*, 4); and Simplicios knew the "millet seed" paradox as part of a discussion with Protagoras (29 A 29). (Zeno was apparently the first travelling philosopher to take money for instruction. This puts him on the borderline between the "amateur" philosophers and the "professional" Sophists; and that is perhaps just where he belongs — see 29 A 4 [Plato] *Alcibiades* I, 119 A.)

vii.   The details vary in the different accounts, and the story may be a fiction; but it fitted Zeno's known reputation.

viii.   This comes from Aristotle's lost dialogue on the *Sophist*. Plato called Zeno "the Eleatic Palamedes" (29 A 13, *Phaedrus* 261d). Palamedes was a Homeric hero famous for his cunning in battle.

ix.   Proclos (A 15) claims that there were forty *logoi* in Zeno's book. But he probably did not have it himself, and we do not know whether his source was reliable. My statement is correct as far as what remains to us is concerned. (But see my following comments on the "first hypothesis." The paradoxes that Aristotle reports may well be the seriously difficult

residue from a larger set of sophistical problems.)

x.   H.D.P. Lee, 1936, #2. (Compare A 21 — Eudemos, Lee #6.)

xi.   This is from Eudemos as cited by Simplicios.

xii.   See further Lee, 1936, ## 9, 10).

xiii.   See Lee, 1936, #11).

xiv.   See P. Curd, 1998, p. 173.

xv.   See Chapter 12 below. Pythagorean *metaphysics* continued to be arithmetically based (as we can see most vividly in the work of Eurytos). But the metaphysicians agreed that there was a gulf between divine and human numbers; so they were probably not seriously troubled by Zeno. (Eurytos *ought* to have been troubled; and one feels that Archytas, who certainly understood this, was gently *amused* about his attempt to build a bridge between the sensible and the intelligible worlds.)

xvi.   Referred to by Diogenes Laertios, V, 25 and 87 respectively.

xvii.   See further Lee, ## 19-25.

xviii.   See further Lee, ## 26, 27.

xix.   See further Lee, ## 28-34.

xx.   See further Lee, ## 35, 36.

xxi.   See further Lee, ## 17, 18. The authorities are late; they may just be rehashing the Arrow.

xxii.   See further Lee, ## 13-16. If we take the paradox in the way that I suggest, it becomes the difficulty of "conceiving" space as "infinite" — and that is a serious problem. (This argument of Zeno's is a powerful piece of evidence in favor of the view of G.E.L. Owen that the Parmenidean Being was a spatial infinite not a *physical* "Sphere." Parmenides and Zeno both understood that "infinite" space could not be effectively *divided*. Its "limit" was its perfect *homogeneity* everywhere — see Chapter 8, note 28.)

xxiii.   See further Lee, ## 37, 38). (In the story Zeno goes directly to "the ten thousandth part of a millet seed.")

xxiv.   It is not easy to see how this argument could ever have been used *against* Protagoras. But if it was in Zeno's book, Protagoras may have picked it up from there (and used it himself).

xxv.   This is from Aristotle, cited by Plutarch, *Pericles*, 26. (Pericles himself was not there in 441, but Plutarch claims that Melissos also defeated Pericles on another occasion.)

xxvi.   If the report of Stesimbrotos was right (in spite of Plutarch's scepticism) then Melissos was born before 490. We must remember that Themistokles *could* have met him, and known of his views, before his book was actually published. (This would also have been true for Themistokles' knowledge of Anaxagoras — see Chapter 11, note 3. Compare KRS, p. 391 n 1.)

xxvii.   If Simplicios is right, then the titled parody by Gorgias — for which see Chapter 15 — becomes all the more natural and apt; and if the Simplicios paraphrase is correct — rather than the text of 30 A 5 — then Melissos provided the very model from which Gorgias began. Compare passages **523** and **524** in KRS (p. 392 note 1).

xxviii.   This is from the pseudo-Aristotelian treatise on *Melissos, Xenophanes and Gorgias* — see 974a 21 - 974b 8); 30 B 8 — the four elements of Empedokles are mentioned in the second sentence. For the project of clarifying (and correcting) Parmenides to make good sense, Melissos has to have seen the poem of Empedokles, and (probably also) the book of Anaxagoras. In view of the testimony of Aristotle about them, it is hardly possible that they could both have been available to him by the time Themistokles died. So we must conclude that Themistokles did not see the final version of Melissos' book.

xxix.   Compare Parmenides B 8, 22-24.

xxx.   G.E.L. Owen (1960, in Furley and Allen, 1975, 66-67) suggests that Plato was restoring the Parmenidean emphasis at *Timaeus* 37e-38a.

xxxi.   The way that Empedokles interpreted the "sphere" made it vitally necessary to clarify the proper interpretation of Parmenides.

xxxii. This is what P. Curd (1998, 94-7) has called "predicational monism." She has shown that Parmenides can be read as a "predicational monist." But it is doubtful (in my view) that he *meant* to be one. (Clearly this is not what Melissos thought.) Predicational monism — which makes *many* real beings possible — provided the logical way forward for Parmenides' successors.

xxxiii. It seems safe to assume that Empedokles' poem had been performed at Olympia (and published in the normal way) by the time that Melissos wrote. Whether the book of Anaxagoras was out is much more uncertain (in spite of what I said above at note 28). See further note 36 below.

xxxiv. This false assumption was a given fact of observation for all ancient thinkers. It is one of the main reasons why Herakleitos (for instance) assumes that there is really a continuum between what is called "living" and what is called "dead."

xxxv. The reference may be to Xenophanes here (compare 21 B 37 which may refer to stalagmites).

xxxvi. The two responses are so different, that one feels that Melissos could not have *foreseen* them. He must have had the two systems in which they were expounded before him when he wrote. On the other hand, it is clear that Anaxagoras was responding not only to Parmenides but to Zeno. (Since Empedokles shows no sensitivity to Zeno's problems, there is good reason to believe that the order of publication was: Parmenides — Empedokles — Zeno — Anaxagoras — Melissos — Leucippos.)