In this chapter, I explore the parallel between the shape of Timaeus' discourse in Plato's dialogue and the shape of the world that he describes. There is, plainly, an analogy between Timaeus' act of describing a world in words and the demiurge's task of making a world of matter. This analogy implies a parallel between language as a system of reproducing ideas in words, and the world, which reproduces reality in particular things. It becomes clear that authority lies not in the retelling of a truth already told, nor in the description of a world already made, but in the creation of a likeness in words of the eternal Forms. The Forms serve as paradigms both for the physical world created by the demiurge, and for the world in discourse created by Timaeus: his discourse gains its validity not from faithfulness to the way things appear, or the way particular things 'actually happened', but in virtue of its attempt to express in words a likeness of the perfect and eternal reality.

I. Tales from the Past

The *Timaeus* opens with a discussion between Socrates and his friends about how to flesh out the description of the ideal republic that Socrates had offered the previous day. Four features of this opening discussion suggest a concern with the kind of authority attributable to a spoken discourse. One is the stress on the distance in time between past and present; the second is the emphasis on the number of times that a narrative has been retold in the intervening time; a third is the concern with whether the discourse tells of genuine historical facts, and what is the nature of the authority of poets and sophists who tell of these; the fourth is the interest in the extent to which language can accurately express a particular level of reality.

**Talk of Yesterday**

At *Republic* 592a-b, Glaucon speaks of the ideal state just described as 'the city we have just gone through the building of, the city that exists in words'. Throughout the *Republic*, Socrates speaks as if the participants in the dialogue were engaged in founding a real city, and as if its institutions were established and put to work there and then in the process of describing them in words. There is a remarkable absence of any distinction between the reality and its portrait in words. At the start of the *Timaeus*, jyci—ighb, by contrast, when Socrates and his companions recall the description of the republic that they had heard the day before, there is a self-conscious distance marked out between the present telling and that of which it told. This distance emerges in the repeated mention of what had taken place in the past, in the references to the discussion of the previous day, and in Critias' interest in recounting events.

remarkable not least because the *Republic* (R.) itself raises the issue of imitation in art and literature, while Socrates within the dialogue is portrayed as marking no significant distinction between portrayal and portrayed.

Note the repeated references to 'yesterday' by contrast both to today and to long ago. The word xQts ('yesterday') occurs twelve times in the first ten pages of the dialogue: 1732, hci, ci, 1937, 2obi, c6, 2562, 2634, 37, b4, c8, 67. See C. Osborne, 'Topography in the *Timaeus*', *Proceedings of the Cambridge Philological Society*, 214 (1988), 104—14: 106 and 107.

4 'Yesterday's conversation' described at the start of the *Timaeus* (Ti.) need not be R. itself. A. E. Taylor (A Commentary on Plato's 'Timaeus' (Oxford, 1928)) assumes that it is, inferring that the original conversation (recounted in R. as having happened 'yesterday') took place two days before Ti., and that the unnamed audience in R. is the group of people present the previous day in Ti. Socrates refers to 'words spoken by himself, i7ci-2, implying that the report had been a monologue. In R. Socrates is sole narrator, but he does report the contributions of others. In any case, Ti. puts us at more than one remove from the original conversation reported in R.

5 'Yesterday's conversation' described at the start of the *Timaeus* (Ti.) need not be R. itself. A. E. Taylor (A Commentary on Plato's 'Timaeus' (Oxford, 1928)) assumes that it is, inferring that the original conversation (recounted in R. as having happened 'yesterday') took place two days before Ti., and that the unnamed audience in R. is the group of people present the previous day in Ti. Socrates refers to 'words spoken by himself, i7ci-2, implying that the report had been a monologue. In R. Socrates is sole narrator, but he does report the contributions of others. In any case, Ti. puts us at more than one remove from the original conversation reported in R.

6 Terms that explicitly refer to verbal discourse: 'The words spoken by me', i7ci—2; 'spoken', i7c4; 'we said', i7d2; 'we said', 1835; 'It was said', ib8i, b8; 'it was said', i8c8; 'the things that were said', i8c7; 'as you say', i8d6; 'we said', i8d8, 1931; 'the things that were spoken', 1939; 'what was said', 19bi. Other terms also imply the same distance between description and reality, e.g. 'we recalled', i8ci.
Catherine Osborne

that may explain why he finds the description lifeless and unreal, and hopes that it can be made more vivid.7

Critias' tale of Atlantis has, however, had a longer tradition of being told and retold. Whereas Socrates' story was from the day before yesterday, this one is from ancient times; it was, it emerges, once told by Solon, who narrated it in the days of Critias' great-grandfather Dropides to the young Critias, grandfather of the present Critias, who later, as an old man, repeated it to the 10-year-old boy Critias, who is now recalling it in his manhood or old age.8 Generations have passed since this tale was originally devised, and again attention is focused on the distance between the present discourse and the reality9 that the tale describes, not least by the device of multiplying the number of previous tellings. In this case, the last recorded narration began 'yesterday' (2oc6, 2637) and was recapitulated at greater length and in more detail earlier 'this morning'.10

Perhaps even more significant is the stress on language. We are never allowed to forget that each telling of the tale was in words: however far we go back, access to these historical events of the past was always through discourse. The Greeks are said to be too young to have direct experience of the distant past, and to have developed too late to have written records, whereas the Egyptians do have written records which are the origin of the narrative that Critias is to tell (2331-5, as-c3). In either case, the tale is transmitted in words, whether spoken or written; even the Egyptians claim access to this period of history only via the written temple records. As in Socrates' recapitulation of the previous day's conversation, here again, in Critias' summary of his ancient tale, the references to verbal narration are peculiarly frequent.11 Thus if the problem with Socrates' account of the Republic was that the retelling made the verbal portrait less immediate, that problem is scarcely resolved in the long oral tradition of Critias' tale.

Poetry and the True Facts of History

Socrates expresses himself dissatisfied with his picture of the ideal state, comparing himself to someone who sees some fine creatures 'wrought by penwork'12 but lacking life and motionless; or creatures that were alive but not seen in action.13 Yet he would not prefer a description offered by a poet (or, for that matter, a sophist): he says that, while poets are fine at imitation, at representing things within their own experience (i.gd), the lifelike representation of his ideal city is not that sort of task. It involves dealing with something beyond one's own familiar upbringing, and 'the imitative tribe' of poets would set about the task in the wrong way, presumably because imitation is not the right approach if the subject is not available for imitation.14

Egyptians do have written records which are the origin of the narrative that Critias is to tell (2331-5, as-c3). In either case, the tale is transmitted in words, whether spoken or written; even the Egyptians claim access to this period of history only via the written temple records. As in Socrates' recapitulation of the previous day's conversation, here again, in Critias' summary of his ancient tale, the references to verbal narration are peculiarly frequent.11 Thus if the problem with Socrates' account of the Republic was that the retelling made the verbal portrait less immediate, that problem is scarcely resolved in the long oral tradition of Critias' tale.

Creative Discourse in the Timaeus

3

Socrates expresses himself dissatisfied with his picture of the ideal state, comparing himself to someone who sees some fine creatures 'wrought by penwork'12 but lacking life and motionless; or creatures that were alive but not seen in action.13 Yet he would not prefer a description offered by a poet (or, for that matter, a sophist): he says that, while poets are fine at imitation, at representing things within their own experience (i.gd), the lifelike representation of his ideal city is not that sort of task. It involves dealing with something beyond one's own familiar upbringing, and 'the imitative tribe' of poets would set about the task in the wrong way, presumably because imitation is not the right approach if the subject is not available for imitation.14

10 2ody—64, 2137—bi. Note that the chronology, if accurate, would make it impossible that the present Critias should be the same Critias 3s was involved with the Thirty Tyrants in 411 BC. J. K. Davies, Athenian Propertied Families 600-300 BC (Oxford, 19y i), 325, suggests that Plato has telescoped five generations to three. If I am right that the force of the present passage involves maximizing the number of tellings and the distance in time from the original telling, it seems far more plausible that the present Critias is the grandfather of the tyrant, portrayed here as an old man. See W. Welliver, Character, Plot and Thought in Plato's Timaeus—'Critias' (Leiden, iggy), app. A, 50-7.

11 Both Critias and Socrates are strongly committed to the claim that this tale portrays real fact, that the history is true, 208d, 2135, 28, 2664-5. But note that this does not make the reality appear closer to the account now being offered. On the contrary, we are acutely aware of the distance, both in time and in the proliferation of intervening narrators.

12 26ay-b2, 03-5. In this respect, it is the mirror image of Socrates' discourse, which was told at greater length yesterday and recapitulated more briefly today. Critias is also due to tell the tale more fully again in the Critias.
Thus, although Socrates compares his own description of the ideal state to a kind of picture, what he actually requires to supplement it appears to be not a picture of how things are or were, but a different kind of verbal contribution, one based not merely on prior experience of historical facts but on a general skill in philosophy and politics.  

Plato seems to be contrasting two kinds of authoritative discourse. One kind seeks to picture faithfully something from the past, offering a correct account of the way things actually happened. The other seeks to bring a living model into being here and now, an image of the ideal that is as immediate as any experience to which it might correspond. But Critias' tale of Atlantis, though offered as a contribution to Socrates' project, seems not to meet the second kind of criterion for authority. It is not a new contribution by experts in philosophy and politics, but it traces its authority to the work of a poet. The list of named narrators starts with Solon: the first thing that Critias tells us is that the occasion on which his grandfather told him the tale was the festival of the Apatouria, in which the children competed in reciting poetry. Many chose to recite the poems of Solon, which were a novelty at the time, and it is in this context, where Solon figures as poet, not as statesman, that Solon's telling of the tale is mentioned (21 be). Indeed, grandfather Critias' view was that, had Solon devoted his energies entirely to poetry instead of treating it as a trivial pursuit, and had he been able to put this story into verse instead of being diverted by political problems, he would have outshone even Homer and Hesiod (21bi—d3). So it was Solon as poet who first narrated the tale. Given that Socrates had, only a page before, expressed the view that poets were unsuited to the present task, and that he needed instead a philosophically aware politician such as Timaeus, it can hardly be accidental that Critias immediately responds by casting back to the work of a poet and, moreover, by implying that the poet's expertise in politics, so far from improving the quality of the narrative, had distracted the poet and prevented him from making something of the tale.  

What are we to make of this invocation of the authority of a poet? It seems possible, but unlikely, that Plato is using Critias to undermine the view initially expressed by Socrates (19d3-e2), that poets were unsuited to the task and could only portray that which was within their own experience; the alternative seems more promising, that Plato means us to see that Critias' tale is inadequate. Yet it is not immediately clear what makes it inadequate.  

Socrates had dismissed the poets for speaking only (or mainly) of that which is within their own experience, and it is plain that Critias claims for his tale a correspondence with the way that things really happened. It harks back to something that was 'a deed not merely told but really done'.  

Despite Socrates' apparent enthusiasm, at 2662-2731, for the true history of Atlantis, we are left with the impression that it does not live up to his demands in the way that Timaeus' tale tries to do, even though Timaeus, at 2gdz, aligns his own tale with the genre of myth from which Critias' historical narrative had been carefully distinguished (2664). However true Critias' account of historical events may be, it clearly will not thereby be a more accurate portrait of the perfect city, which, as we learnt in the Republic, may exist as a paradigm in heaven or only as a description in words, but whose significance does not depend on locating an example in space and time on earth (R. 592b4).

Levels of Discourse  

Critias' summary of the tale of Atlantis delays the introduction of Timaeus' contribution, which was to have been the first of the three friends' presentations. The effect of this digression is to contrast the narrative offered by Critias with the discourse about to be offered by Timaeus. Whereas Critias' tale had been the result of a long oral tradition, Timaeus' story is about to receive its first telling. Whereas Critias' concern was to remember the words he heard in his youth (26a-b), Timaeus, with the help of the gods, aims to communicate the contents of his own thoughts. His is not a story that has been told before; it is to

---

15 See 2oa6-bi. The task involves speaking, 17bs-6, 19C2-8, 2obi-y. Socrates specifies each time that he requires a verbal description, a discourse or logos (IQC3, 2ob3, ci).


17 τοῦτο...οὐχ οὐκ ἔσται. 18 Μη δὲ τὰ πάντα τοις θεοῖς καὶ τοις θείασις καὶ προτείνει, ὅτι ἐκεῖνα τὰ πάντα της φύσεως, ἐκεῖνα τὰ πάντα τῆς φύσεως...

18 We must call on all the gods and goddesses and pray that everything we say will be in accord with their intention and similarly with ours too. Let that be our prayer to the gods, but we must also invoke what is our own, whereby
Creative Discourse in the Timaeus

Catherine Osborne

be newly 'created' for this occasion by the philosopher, statesman, and scientist Timaeus (27C4).¹⁹

At the start of his speech, Timaeus claims that the status of an account is related to the status of that to which it refers, or, as he says, that which it interprets: 'We must make the same distinction concerning the image and concerning its pattern, in that words are themselves akin to the things that they are interpreting' (29B3–5). The point concerns the status of his own account: an account that interprets a subject that has permanent being can have the same permanence as the subject to which it correlates, in so far as it is possible for words to serve this role and to be immune to correction.²⁰ Words that interpret the realm of becoming, as Timaeus' words are to do, will have a degree of likelihood; they will be subject to revision like the subject-matter to which they are correlated. The notion of likelihood, coupled here with incorrigibility, might be taken to suggest that the account is only probable and might be either false or true. In Timaeus' tale, however, it seems to be linked with the idea that the story is not a candidate for truth, but an example or icon; it deliberately fabricates a new likeness that only partially resembles reality. It is 'likely', then, in a rather special sense, in which the term conveys the degree to which it is likened to, or exemplifies, the original rather than the probability regarding whether it might be true or false.²¹

Where in Plato's hierarchy does poetry, and the kind of narrative offered, fit? In the Republic, poetry had been condemned as a mere copy of the particular (R. 5953—602c). Here, we find a similar criticism of poets (skilled primarily in the representation of experience) at gd-e, but a further problem is also envisaged, in the retelling of a tale. A narrative may be a copy by you may learn and I may teach as well as possible in accordance with my own views on the subject in question' (27C6—d4).

¹⁹ Note the reference to Timaeus' expertise in astronomy and physics, 2733–4. Cf. 196.
²⁰ 2QB7–8. Note that here Timaeus appears to recognize that there may be a problem about describing eternal reality in words. Clearly, language cannot in fact be wholly timeless and changeless to match the Forms.
²¹ The conventional translation of the term as 'likely' captures this notion only if we stress the connection with 'likeness'; it seems that 'exemplary' might serve as a better translation, since the world exemplifies the forms, and the story exemplifies the ways things are, just to the extent that it serves as a moderately close illustration of how the paradigm might be instantiated.
imitation and indeed a picture', he says (Criti. io7b5–7). Critias sees that language appears to say things about the facts in the world, and that words can pick out or picture items in the world. He thinks of this relationship between things and what we say about them on the supposition that the things are the primary entities, available independently and directly as it were to our experience, and the words can represent them as a picture represents a scene. The independent set of objects must be available for discourse to portray, and serve as a standard to which we can appeal in judging the likeness it achieves. Critias suggests that we judge the value of a verbal description exactly as we would a representation in the visual arts, by assessing the accuracy of its likeness to the original. In these circumstances the task of one who portrays the gods or nature is, he claims, easier than the task of one who would portray human features, because the listener will have less competence, in the case of theology and nature, to judge how good the likeness is, because we are less familiar with the way that the facts are, independently of the description we have to assess (Criti. ioyb—63).

Clearly, Critias still, even after hearing Timaeus’ tale, assumes that discourse, if it is to be worth having, must accurately portray historical events from experience. In emphasizing the idea that discourse is a picture of the particular things to which it corresponds in the world Critias is shown to differ from Timaeus on the criterion for the success of such discourse. For Critias, the discourse must be true to its particular facts. For Timaeus, an account that describes things that have the status of particular things and events can never be reliable, and that kind of historical truth is irrelevant to its value. The discourse that has ‘likelihood’, that exemplifies what has permanent being but at the level of the particular, is the one worth aspiring to. Timaeus, too, thinks in terms of creating an image, but not, as Critias implied, an imitation or portrait (mimesis or apeikasia, Criti. iojb—6) of some particular items, but an icon (eikon) which presents a new vision of the world modelled on the Forms.23 The criterion for worth of the discourse lies not in a good match with an independently observed set of particular facts and things, but in its modelling of our world on the Forms. It does not picture facts but moulds reality to a likeness that exemplifies the Forms.

On Timaeus’ account, then, the match between the words and the world to which they correspond is not accidental; but it need not derive from an attempt to picture that world in discourse. It may derive from the fact that the things in the world get their relation to the Forms in just the same way as discourse gets its relation to the Forms, or that the world is modelled on an intelligible paradigm, and so is the world expressed in our language. Hence, it will be unsurprising that the intelligible paradigm instantiated in words will coincide with, and meticulously describe, the intelligible paradigm instantiated in matter. But it remains a possibility, on Timaeus’ account, that the description in words may help us to see the world as an intelligible image, no less than that the world enables us to judge that the discourse is valid. Things have no priority over words as the principal and authoritative example of intelligible reality; we do not need to compare the words with some previously known and experienced things; indeed the discourse may direct us to see the world as matching up to the story, rather than the reverse.

Timaeus’ account is manifold and lacking in perfect consistency, because it relates to changing things in the world of becoming (2QC5–6), but it is also exemplary or ‘likely’ in its ability to fashion a likeness or image of an eternal being.24 It would, therefore, be irrelevant to look at the things to check the accuracy of the account; it would retain the same exemplary status even supposing that there were no actual world to correspond.

Discourse about the Forms is invariable and reliable, but not in the sense in which Critias claimed that his story was historical and true, on the assumption that we could check it against the facts. For Timaeus, the reliability of discourse at the level of

---

23 29b3–c2; cf. 29d2, 92C7.
24 29b3–d3. What is at issue is the status of the correlated subject-matter, as permanent being, or likeness and becoming, not whether there is an independent reality for the discourse to be referring to.
the Forms, in so far as it is possible, derives from the consistency and permanence of the Forms, their genuine truth. He does not imply that we could stand back from both and see the Forms independently to assess the accuracy of the match, any more than he suggests that we should assess the accuracy of the match between his story of a world and the facts. The reliability stems not from the close match between one set of entities and a set of corresponding descriptions, a match which is presumably either inevitable or irrelevant, but from the nature of the truths that are embodied, to an equal degree, in the facts and in the discourse. In this sense, language is not really 'about' something available as a separate item in our experience. Since the credibility of the discourse depends on its exemplification of the Forms, discourse about particulars could have the same degree of credibility even when there happened not to be an event or state of affairs to match. Then, the discourse would be 'likely', exemplifying reality, just as it is when there does happen to correspond a matching state of affairs.

There is, of course, a possibility that the world that Timaeus describes might cease to exist. Timaeus says (38b-c) that the heavens and world-soul will remain in perpetuity, though they could, in theory, come to an end; while the mortal creatures are less permanent than the world-soul, 4ib-d. Evidently, for Timaeus the non-existence of the world would not alter the value of his discourse, while it would alter the truth-value of the discourse in Critias' view, since for him it would be true if and only if there is such a world in reality.

It is clear that the four ways in which Timaeus' tale is contrasted with the alternatives offered at the start of the *Timaeus* are closely related. The distance in time between the events described and the present telling of the tale assumes importance because it enables us to appreciate the place of language in the repetition of tales from an authority in the past. It shows that retelling a tale in the words of a past speaker cannot give greater authority to the words. This observation is then tied to the fact that the experience of historical facts and events on the part of the present speaker or his distant authority is not relevant to the value of the discourse as an expression of the world of truth and being. It emerges instead that a discourse that imitates or repeats a story or a world already made will itself be at a further remove from the genuine reality. Timaeus' story gains its credibility from the fact that it is neither traditional, nor historical or descriptive of the facts, but exemplary, 'likely', an image of something more eternal.

II. The Story of One World

Clearly, Timaeus' verbal account of the world must itself belong to the realm of becoming, and, like the world it describes, it occupies a place in time and space, it has a beginning and an end, and it is the work of a craftsman, a craftsman of discourse who aims to produce the best possible, given the limitations of his circumstances and materials, with his eyes on a model that is intelligible and true, just as the maker of the world is said to do (2836—bz). Timaeus' account of the cosmos occupies a position in the *Timaeus—Critias* group analogous to the position occupied by the physical world in relation to reality as a whole. Timaeus himself, who creates the world in discourse, clearly stands in the same relation to his 'best possible' story (29cy) as the demiurge does to his 'best possible' world (3032-7; cf. 92C5~9). Like the world created by the demiurge, Timaeus' story is unique. It is the only story that Timaeus tells, and this is his only appearance in Platonic dialogue.

In 31 a2—b3 Timaeus explores the reasons why there must be only one cosmic system, modelled on the perfect paradigm. The reasoning is based on something like the Third Man argument:

26 Timaeus' story is the main speech in *Ti.* but it is framed (in *Ti.-Criti.*) by the two versions of Critias' 'true history of Atlantis'. This means that Timaeus' creation is central and finite, framed by an account that claims greater reliability and truth; it is also focused outside itself as a mere preliminary to matters of political practice, as argued in Osborne, 'Topography', 107.

27 Apart, that is, from the opening paragraph of *Criti.* (icai-by), where he concludes his creation account.

28 The word is *ouranos*, which signifies a geocentric world including the heavenly spheres, sun, moon, planets, fixed stars, and so on. It is perhaps misleading to translate the term as 'universe', since we might suppose that there could be one universe containing a number of such systems of spheres. Timaeus' point is that there can only be one world.
Were we right to say that there was one cosmic system, or would it be more correct to speak of several or an infinite number? One, if it is to be created according to the paradigm. What encompasses all conceivable creatures could never be one of two. For there would have to be another creature, the one comprising those two, of which those two would be part, and then this world would more accurately be said to be modelled not so much on those two but on that one that encompasses them. Hence, in order that this world may be like the all-perfect creature in its solitude, for this reason the maker made not two nor an infinite number of worlds, but this is the one and only unique cosmic system that has or ever will come into being. (3ia2-b3)

Timaeus' point is this: there can be only one paradigm for a world, for that paradigm is to be complete, encompassing all the possibilities that are intelligible. In the event that there were two models available, the complete model would be that which comprised the two. In that event, clearly the best possible world would have to be modelled on the more complete paradigm, not on one of the two subordinate models; and, since we are describing the best work of a good creator, it could only be a representative of the more perfect of the available models.

Why should there not be more than one likeness of a single paradigm? Supposing there is one perfect paradigm of a cosmic system, would it not be better that the craftsman, if he is good, should produce as many copies as possible of the single model? Timaeus' response is that the copy is to resemble its model in being unique, as well as everything else. The model must be unique to be complete and perfect, and, if the copy aims to resemble it as closely as possible, it had better resemble it in this respect too.

Timaeus repeats the claim that the world is unique at 34b6: 'And he established one single and solitary universe, spherical and rotating, but capable by reason of its excellence of keeping itself to itself and needing no other, and indeed being enough of a friend and acquaintance of its own.' It seems clear from this that solitude is regarded as an excellence, and the need for company or plurality a sign of weakness. This explains why

Timaeus takes it that it is better that there should be just one unique world. Uniqueness is one of the perfections of the perfect paradigm.

Need Timaeus' account be unique in the same way? Timaeus makes two points on this issue. He observes that the subject-matter is plural and hence the descriptions will be plural (2QC4-7). This does not mean that there will be more than one account of the same world, nor that there will be a number of accounts of possible worlds. He means that the single cosmos is itself plural. 'Gods and the creation of the universe' are 'many things' (29C4), and the description of them will evidently be, in a sense, a number of descriptions, a number of logos. Given these plural descriptions, there may be a problem of consistency (29c6): ideally, we should seek an account that is fully coherent throughout; but that will not be possible when we are dealing with a plural and changing world. There is to be a plurality of logos, then, but only in the same way that our one universe is plural. Both world and word have the same kind of uniqueness in so far as they are the best possible image of intelligible reality.

Timaeus' second point is that we are to be satisfied so long as his descriptions are 'second to none in likelihood'. His account does not claim to be accurate in virtue of a correspondence to the way that things actually happened, but it is to be unbeaten as an example, most 'likely' (zgc^—7). As in the case of the world itself, it is clear that another account of equal value might be possible, but it would have no advantage over the present one: it too would be merely exemplary, and no better as an example than the present account. Hence, there can be no advantage in producing two descriptions, just as there could be no advantage to the demiurge in producing two worlds modelled with equal likeness to the eternal paradigm. Thus, Timaeus concludes that, given the exemplary story, there will be 'no need to look any further' (zgd^). The description of the world must resemble the world it describes not only in its uniqueness. Like its subject, it occupies a position in time and space, and several features suggest that the orderly arrangement of Timaeus' description matches the

---

29 We might say that Timaeus ignores the distinction between paradigms and particulars: in the case of paradigms, it seems evident that there could not be two exactly alike, but in material worlds there might be two numerically different but exactly alike.

30 But it would be right to be tolerant so long as we offer likely accounts that are no worse than any other (zgcy-S).
orderly arrangement of the world itself. In both cases, the image is constructed to be as complete and orderly as it can be, given the material (matter for the world, words for the discourse) out of which each is created. In what follows, I shall consider the resemblance between the account and the world it describes under three headings: time, shape, and matter.

**Time**

In the *Timaeus*, the world is described as if it had a beginning in time. What has a beginning is the ordered structure that the demiurge produces; in fact, both the world-soul and the world-body have a beginning in time, the former earlier than the latter. Three things have no beginning: one is the demiurge himself, about whose age and origins we are told little; a second is the paradigm to which the craftsman looks in modelling his world; and the third is the material out of which he models the likeness. These permanent things are not the subject of the account, however, and, as we shall see, there are reasons why they cannot properly be the subject of Timaeus' account.

Timaeus' account is concerned with what does have a beginning, and it is not surprising that the beginning of his tale is concerned with the beginning of the universe. The first question is to be about beginnings: 'As regards the whole universe— or world or whatever other name it might appropriately receive, let us name it that—we must first consider that subject which must always arise at the beginning of everything, namely, whether it always was, and had no beginning of becoming, or whether it came into being, having begun from some beginning' (28b2-7). In the temporal arrangement of Timaeus' discourse, the first topic is the temporal beginning of the world; the question whether the world began precedes discussion of anything else, and Timaeus explicitly observes that such a...

---

31 320-3531. Timaeus remarks that his account fails to correspond, in its temporal order, to the temporal order of the creation of the world itself.
32  See n. 53 below, on the difficulty of speaking of this subject.
33  The material basis of the world will be a later topic, not because it is temporally subsequent, but because the spatial structure of the account will place the fundamental material in the central body of the discourse. See Sect. II, ‘Space and Shape’, below. Timaeus' talk of an arche here refers to the temporal beginning, not to any material stuff such as the early Presocratics had sought.

---

question has to come first. Whether the world also has an end is a different, though related, issue which is raised in the course of Timaeus' treatment of time (380-396), where we learn that time and the universe are contemporaneous: they come into existence together and will perish together if they perish at all. Thus, the world cannot have an end 'in time'; its end would be the end of time. But time is the temporal model of eternity and resembles eternity as closely as possible, specifically by having everlasting existence, though not, of course, the timeless being of eternity.

Timaeus' discourse about the world also has a temporal structure, and deals with one thing after another; like the world, it starts with the beginning of time, which coincides with the beginning of the world. But what happens at the end of his story? Clearly it will not describe the end of time nor the end of the world, since no such end is envisaged, although presumably the possibility of discourse, like the possibility of time, would end at the end of the world. But Timaeus' discourse does not reach an end in the *Timaeus*. The dialogue ends before Timaeus ends his speech (his final words form the opening of the next dialogue); and his discourse is complete not because it sees the world to its end but because it sees the world to its completion. His discourse is complete because it has described the full contents of the world (92C4–9), not because it has described the whole of time. In this sense, Timaeus' speech does not come to an end at all within the dialogue itself, just as the world will not come to an end within time.

Two other features reinforce the idea that the temporal structure of the discourse matches the structure of time itself. One is the lack of available time for discussing eternity. At 38b Timaeus observes that it is not the right moment 'in the present time' to go into an accurate discussion of matters to do with eternity. Doubtless, this is partly because the proper subject for today's discourse is the temporal model, not the eternity to which it aspires. But it is no accident that we find ourselves in...
Creative Discourse in the Timaeus

Catherine Osborne

‘the present’, a temporal situation in which precision about eternity is not a suitable target.

The other feature is a problem about language. Timaeus mentions a number of features of our language about time that fail in respect to eternity. Not only are we in the habit of misusing the tensed verbs ‘was’, ‘is’, and ‘will be’ to refer to the eternal, when they should strictly be used only of what is subject to change over time. We also sometimes use the tenseless ‘is’ in phrases that refer to past, present, and future changes and to what does not exist. These problems with our ordinary language indicate that normal discourse is not well suited to dealing with what is timeless; and one possible explanation of this is that discourse, like the world, is inherently temporal. It may struggle to capture eternity, just as the world struggles to resemble the eternal paradigm; but the best it will do is produce the language of everlasting change, not a language that correctly describes the timeless.

### Space and Shape

Temporal considerations are not the only ones to surface in Timaeus’ discourse. In structuring his account, he also uses spatial metaphors. These envisage the account as something that has a shape, and that moves forward or returns to its starting-point, just as the heavens that it describes are circling in physical space.

Although the very beginning of Timaeus’ discourse deals with the question of the beginning of the world, this section is treated as an overture, preliminary to the main melody; the main discourse starts afresh at ἕπειρον with an account of the demiurge and his motives in ordering the world for the best. This is the first in a series of new beginnings identifiable in

When one is to say how it [the universe] really came to be on these principles, one must add to the mixture the essence of the wandering cause as well, how it is its nature to behave. So we must go back again, and adopt a different beginning that is applicable to these things again, and, just as before, when we dealt with the earlier things, so now, in connection with these things we must begin from the beginning.

As in the earlier passage concerning the beginning (35b), so here again we meet the language of ‘origin’ or ‘principle’ (arche) prominently. Here, we sought an answer to the question of an origin as such; in the second place, we sought that origin in the maker and father who is ‘most properly the origin’. Here, we seek an origin or source of matter in the wandering cause. Finally, at the third return to the starting-point (686—693), we shall be reminded of the distinction between the two types of cause, necessary and divine, which together serve as the ‘material’ out of which the rest of the account is to be built (6936). In each case, it seems that we return to a starting-point to collect some of the building-blocks for an account of the world. Timaeus is building a world out of the language of causes and explanations, just as the demiurge built a world out of the materials that serve as those causes: ‘now that, like builders, we have the different kinds of cause stacked ready as materials, out of which we have to construct the rest of our account, let us return briefly to the start’ (6936—9). Timaeus speaks of ‘going back’ to the beginning, and of ‘making our way’ to the same point as we set out from to come here. The metaphors are of travel; the account is envisaged as a path through space that has both distance and direction.

Completing this route involves passing through the same point more than once, though possibly not

36 3763—3838. In fact, Timaeus objects only to the past and future tenses, which suggests that he does not clearly distinguish between the present tense ‘is’ in ‘was, is, and will be’ and the untensed uses of ‘is’ to which he refers in the next part of the sentence.

37 3838—b3. The use of the verb esti for what does not exist seems to be a problem not about tenses but about being as such.

38 The musical metaphor is explicit, 29ds~6, and is, of course, another feature of the analogy between discourse and subject-matter, since Timaeus will proceed to deal with the harmonic intervals created in the world-soul, although the very beginning of Timaeus’ discourse deals with the question of the beginning of the world, this section is treated as an overture, preliminary to the main melody; the main discourse starts afresh at ἕπειρον with an account of the demiurge and his motives in ordering the world for the best. This is the first in a series of new beginnings identifiable in

39 Kar dp%ds, 4835; ἐρεμός ἀπόσυς, 48b2; ἀπότομος, 48b3. (These phrases are untranslatable because they are ambiguous as between causal principles and temporal beginnings.) Cf. 48b7, 03, d1, d3, d5, e1, ez, ἐκπαίδευσιν, 2963, προειρήμ., 48b1, ἡλευθέρω τοῖς ἔποιεῖν, 6938.

Τέταρτος ορθός Τροπος, νοούμενος ὃς ἑαυτόν, ὃς ἑαυτήν ἑαυτῷ ἑτερον, 69310. Other examples of the motif of pathways are Ττ. 51c—d, 53C2,
tracing precisely the same path on more than one occasion.\footnote{Given that Timaeus says at 480-d that he cannot undertake the task of declaring the arche at this point, we may suppose that the attempt to deduce the nature of the receptacle in 493 ff. is not meant to be the fulfilment of that task, but rather the new route that will bring us to the vantage-point from which to undertake the task.} There seem to be three possible explanations of the route taken in this descriptive journey. One is that we are tracing and retracing a circle which returns each time to the same point. But this would involve covering the same route each time, and it is not clear that Timaeus would suggest that we had taken the same route in investigating necessity and the divine, and in completing the account with both causes in play. An alternative is that the route forms a rectilinear shape (a triangle perhaps) in which a number of different paths can be taken from the same starting-point and eventually meet to complete the figure. The third possibility is that what is envisaged is a number of circular orbits intersecting at a point but tracing a different path on a sphere. This model has the advantage of accounting for the fact that we find ourselves back at the point of intersection and yet in each case setting out to trace a new path that will again return us to the origin. It also corresponds in spatial structure to the arrangement of the circles of the Same and the Different out of which the demiurge constructs the world-soul (σ6b—d), which rotate across each other in contrary directions and at varying speeds. Again, it seems possible to find in Timaeus’ account of the world a structure that resembles the structure of the world it is to describe. Timaeus, like his demiurge, bends his account round to form a series of circles.

The second return to the starting-point comes at 483, where Timaeus introduces the work of necessity as a second principle alongside the work of reason with which he had been dealing up to that point. At this point, Timaeus sets out a second time from his starting-point; but, on this second trip, the direction of the voyage is not so secure as the first had been. Timaeus has to describe the ‘wandering cause’, and the danger of wandering from the course and getting into difficulties on the way is more severe. Timaeus first hesitates before the task of designating what exactly is the underlying principle of all things, or, indeed, how many such principles there are. That task is not one that can be attempted at this point on the present route. It is ‘difficult to indicate our opinions in the course of the present route of passage’ (48cz—d).

Instead, a return to the beginning is in order and we must embark on a new voyage from our original starting-point, which will in due course enable us to attempt the task of defining and describing the number and nature of the basic elements, and of discovering why the so-called four elements have the status not of letters but of something at least as complex as syllables if not more so.\footnote{48d4—e. The image, according to R. D. Archer-Hind, The ‘Timaeus’ of Plato, ed. with intro. and notes (London, 1888), 169, is that of sailors embarking on a voyage and calling on a protecting deity to see them safe to their destination. See further Sect. II, ‘Matter’, below.} The new voyage requires a guardian deity to bring us safe to port, just as we had to call upon the gods at the very start of the whole undertaking (zyd): ‘So now at the start of our discourse we shall call upon god as our guardian from the strange and unfamiliar narrative to give us safe passage as far as the doctrine of likely things, and we shall begin once again to speak.’\footnote{See further Sect. II, ‘Matter’, below.}

What is clear here is that the discourse concerning the wandering cause passes through peculiarly difficult waters. The danger is that we should wander off the route and fail to reach the exemplary result we seek. It is tempting to connect this with Timaeus’ concern to find a ‘safe’ way of using language at 49d.\footnote{48c4—e. The word for ‘element’ (stoicheion) is also the word for ‘letter’, the basic element out of which words are made. Here, Plato is making explicit an analogy latent in the Greek language itself between language and the material world: both are constructed out of a series of more or less complex parts. Hence, it is not implausible to suppose that Ti. as a whole is using this analogy to say something about the nature of discourse.}

The exposition of the work of reason has also had its difficulties. They concerned the way that we match the spoken account to the logical sequence of creation in the work of reason. Strictly speaking, the soul is prior to the body, and Timaeus’ account
ought to have dealt with the creation of the soul first in time in order to reflect its priority in the demiurge's creation. Timaeus' account aims to reproduce the work of the demiurge, but fails at this point (34010-3531).

Timaeus' account fails to reproduce the work of the demiurge in its logical order because the way we speak is tied up with our involvement with what is contingent. Discourse, as we actually use it, correlates in the hierarchy not with the rational order of the demiurge and his Forms but with the contingent order of the material world. We might say that our usage of language does not fully allow the systematic representation of the work of reason, since it already imports the unsystematic principle, the wandering cause that underlies the world we know.

In this respect, Timaeus cannot bring his account to match accurately the sequence of reason. But, in other respects, the account does match the physical structure of the world, in space if not in chronological order. Most obvious is the fact that the discussion of the receptacle occurs roughly in the middle of Timaeus' account, after the second of the three new beginnings. There is, of course, a sense in which the receptacle is the matrix that underlies the entire material world, and, hence, has no special spatial location at any one point in that world. Rather, it is the spatial location of all the rest. That is also true, in some sense, of the role of the receptacle within Timaeus' own account, since he needs the concept of the receptacle to explain the nature of necessity and the material aspects of causation, and, in this sense, the receptacle is fundamental to the whole account. But there is also a sense in which the unformed receptacle does have a proper place in the scheme of things. It is, of course, ambiguous, occupying the dividing-line between being and becoming, or indeed between what is and what is not. It is a 'third kind of thing', in addition to Forms and particulars. As such, it appropriately occupies a middle location.

In this respect, Timaeus cannot bring his account to match accurately the sequence of reason. But, in other respects, the account does match the physical structure of the world, in space if not in chronological order. Most obvious is the fact that the discussion of the receptacle occurs roughly in the middle of Timaeus' account, after the second of the three new beginnings. There is, of course, a sense in which the receptacle is the matrix that underlies the entire material world, and, hence, has no special spatial location at any one point in that world. Rather, it is the spatial location of all the rest. That is also true, in some sense, of the role of the receptacle within Timaeus' own account, since he needs the concept of the receptacle to explain the nature of necessity and the material aspects of causation, and, in this sense, the receptacle is fundamental to the whole account. But there is also a sense in which the unformed receptacle does have a proper place in the scheme of things. It is, of course, ambiguous, occupying the dividing-line between being and becoming, or indeed between what is and what is not. It is a 'third kind of thing', in addition to Forms and particulars. As such, it appropriately occupies a middle location.

Discourse proves inadequate for expressing the logical sequence of the works of reason. Arguably, there is a similar problem in describing the demiurge himself. But most acute of all is the difficulty of speaking of the nurse of becoming, the receptacle that underlies matter. Timaeus makes a number of apologies for his attempt at putting the receptacle into words at 49a—b. He indicates a problem about our normal use of language, which turns out to be inaccurate. We tend to suppose that the things we meet every day, fire and water and the like, are things that we can pick out with words and speak of as 'this' and 'that'. Technically, this is incorrect, according to Timaeus, because the language of 'this' and 'that' implies that the objects picked out are things with some identity and permanence: things that are, not qualities that merely become. In fact, fire and water and the like are passing phases; they are qualities characterizing the basic stuff that is the only thing that can accurately be indicated by the words 'this' or 'that'.

Matter

Discourse proves inadequate for expressing the logical sequence of the works of reason. Arguably, there is a similar problem in describing the demiurge himself. But most acute of all is the difficulty of speaking of the nurse of becoming, the receptacle that underlies matter. Timaeus makes a number of apologies for his attempt at putting the receptacle into words at 49a—b. He indicates a problem about our normal use of language, which turns out to be inaccurate. We tend to suppose that the things we meet every day, fire and water and the like, are things that we can pick out with words and speak of as 'this' and 'that'. Technically, this is incorrect, according to Timaeus, because the language of 'this' and 'that' implies that the objects picked out are things with some identity and permanence: things that are, not qualities that merely become. In fact, fire and water and the like are passing phases; they are qualities characterizing the basic stuff that is the only thing that can accurately be indicated by the words 'this' or 'that'.


53 Two problems are indicated concerning the demiurge: one is that it is hard to find him, and the other is that, if you did find him, it would be impossible to tell all people what you had found, 2803-5. The difficulty of 'telling' may lie in the inadequacy of language for the job or in the difficulty of understanding something hard to conceive. The reference to 'all people' suggests the latter difficulty.
So, given that these things never appear the same, how could anyone be certain of one of them that it is this and not something else, and not regret it? It could not be. But our safest course by far, when we are dealing with these things, is to speak in the following way: when we see something changing over time, such as fire, we should always call it something 'in this condition', and not 'this' fire, each time, and not 'this' water but always 'what is in this condition'. Among the other things that we generally pick out in language by using the terms 'this' and 'that', thinking that we are signifying something, we should not speak of any as if it had some permanence. (4907-62)

There is, then, a difficulty about applying language correctly to the world of becoming where the things we have to speak about are transitory qualities predicated of some more basic subject. But this problem about the changing nature of ordinary things, which will not allow them to qualify for the designation 'this', differs from the difficulty that we have in finding words to describe what does lie beneath and qualify for the designation 'this'. Here, we can find no other term, besides 'this' or 'that', to indicate the receptacle, because in itself it is wholly lacking in qualities (506-513). To apply any description to it would be to speak of it in one of its qualified forms.

In the end, Timaeus offers three ways of speaking of the receptacle with some accuracy in language. The first is by metaphor, using four analogies: the modelling material (5034-5), the basis used for perfumes (5065), the mother's role in reproduction (50d2-3, 5134-5), and the 'nurse' (szds). Secondly, he suggests some ways of describing it which are 'not false': namely, to deny that it has the character of any of the elements, and to declare that it is invisible, formless, receptive of everything, that it participates in what is intelligible, though in a puzzling way, and is extremely difficult to grasp (sia-b). Thus, we can correctly say a number of things about what the receptacle is not like. Thirdly, we can talk about the receptacle by describing how it is characterized as fire, water, and so on (sib2-6).

The fact that language has a problem with changing things does not preclude the idea that it has difficulty expressing what is eternal and unchanging (see n. 20 above). The difficulty pointed out here is not a general one rejecting all our attempts to indicate items, but rather the use of 'this' for things that do not deserve such an identity. Clearly, our ordinary terms pick out qualities that things temporarily have, and can be used to say so properly in certain circumstances.

Of these various difficulties concerning the correct description of the receptacle, one involves an inaccuracy in ordinary language when it speaks of fire and water as 'this' and 'that'. But the other difficulties arise from the difficulty of grasping or expressing what can strictly only be pointed out as 'this' and can never be described as possessing any character of its own. It is plain that the lack of words to describe the receptacle is correlated with the lack of qualities to be described in the receptacle. We can use words to describe how something is qualified when it is qualified, but we cannot describe what is totally lacking in the qualities to which our words relate.

The problems over describing the receptacle reinforce what we had already observed in dealing with the demiurge and the eternal forms. Timaeus' discourse, describing the world, occupies the same rank, in the hierarchy of verbal images, as does the world that he describes, in the hierarchy of images in the physical realm. Timaeus creates a world out of words, and the words have to serve as the building-blocks, corresponding to the building-blocks out of which the demiurge constructs his world.

In the case of the world, we might identify the building-blocks in two ways. Firstly, there is the set of causes that are mentioned as building-materials at 693. For the world, we need (i) a creator, (2) the eternal paradigm on which the work of reason is modelled, and (3) the wandering cause that imports necessity. But, secondly, there are the elements, the geometrical shapes that characterize the basic stuff that the demiurge uses to construct his more elaborate world. These geometrical shapes are not matter; they are already, as we were so clearly told in learning of the receptacle, qualities that come into being in the underlying receptacle. But they are what we actually deal with in the world, and they are what the demiurge uses in putting order into the world.

III. Words that Make Sense

When Timaeus creates his world in discourse, it seems clear that he does not approach the task with language that is totally

54 The fact that language has a problem with changing things does not preclude the idea that it has difficulty expressing what is eternal and unchanging (see n. 20 above). The difficulty pointed out here is not a general one rejecting all our attempts to indicate items, but rather the use of 'this' for things that do not deserve such an identity. Clearly, our ordinary terms pick out qualities that things temporarily have, and can be used to say so properly in certain circumstances.

55 Alternatively, we may take the set of (i) Form, (2) Copy, and (3) Space, listed at 516—528.
We may safely assume that Timaeus does not have to invent his alphabet but inherits it ready-made, as the demiurge inherited the receptacle for his world. But does Timaeus construct his discourse out of words that already come endowed with meaning, or do they acquire their meaning in the context of the discourse into which he builds them? To answer this question, I suggest that we should look at the analogy with the work of the demiurge. Does the demiurge impose the geometrical structure on matter to make the receptacle come in the form of fire, water, and the other basic qualities? Does he first encounter the receptacle in its formlessness, or does he find it already oscillating between the qualities it is capable of receiving, and choose those features as they suit his purpose for the good? These two options are analogous to the two options regarding Timaeus’ discourse. Either he is responsible for giving the meaning to his language, or his role is to organize words that already carry some potential for meaning.

When we look closely at the text, it becomes clear that Plato has no doubt about the material that the demiurge has to work with: he does not find it totally formless. On the contrary, the threefold structure of reality pre-exists the task of the demiurge; there already exist form and space and the becoming that is the combination of the two: ‘Let this be the upshot of my account in sum, three things in threefold form, being and space and becoming, even before the heavens came into being’ (52d). It is not the demiurge who devises the perfect geometrical forms out of which the world is to be constructed. Matter already displays those forms, even in its chaotic pre-cosmic state, while the demiurge’s task is to transform that potential for good order into the good order that it is to show in the best of all possible worlds:

And the nurse of becoming, being moistened and the fired and receiving forms of earth and air and undergoing all the attend other passions that . upon these, appears in all kinds of aspects . . . kinds So when the four a are shaken by the receptacle, which provides kind of agitating instrument as it is itself shaken, the things that are least alike are separated off from each other, and those that are together most alike collect in the same place. Hence, these things regions of occupied different space even before the universe came to of them, be constructed out (52d-53a)

56 Compare the theory of Socrates’ dream in the Theaetetus (20id—2020), that the elements of language (and of things likewise) are inexplicable and unknowable, and can only be named.

57 See above, n. 47. At 48b—c, Timaeus says that we tend to suppose that the so-called elements are the stoicheia, the letters, when in fact they are not even as fundamental as syllables, presumably in fact nothing less complex than words. Clearly, the receptacle must be most basic, so it must have the status of letters unless there is some even more basic material of language. In the material world the triangles (53C-54b) may be at the level of syllables.

58 Timaeus suggests that the alphabet provides an analogy: the alphabet for matter is not fire and water but something more fundamental, apparently what we are to call the ‘nurse of becoming’. In language, the alphabet appears to be the bottom rung, out of which all else is made, in which everything takes its expression, and which by itself has no meaning.

Timeaus inherits the alphabet already created. For the paradigm, on which to model his account of the world, he looks elsewhere. Like the demiurge he does not create ex nihilo, and he does not create his own blueprint. Despite the contrast with Critias’ second-hand tales, it is not originality that is prized in Timaeus’ account. Neither Timaeus nor his demiurge expects to be praised for inventing something new. What has Timaeus done that is worth while? Like the demiurge, he has given expression to the perfection of the eternal model by producing an image of it, as like to the original as possible, moulded out of a material that is, in some respects, unequal to the task. Timaeus’ words cannot accurately describe the demiurge himself, or the eternal Forms, or the receptacle, because the words are ideally suited to describing the level of reality that comes between the Form and the receptacle. Like the copy in the world of becoming, his discourse combines matter and form.

204  Catherine Osborne

Creative Discourse in the Timaeus 205
Thus, the demiurge comes to a chaos that already displays the qualities of earth, air, fire, water, and any others that are to be identified as basic characters displayed by the receptacle, and he finds those elements already sorted into the regions of space by their own automatic mechanical processes. Constructing these elements, and arranging them with heavy ones at the centre and light ones at the edges, are not among the demiurge's tasks. Those are characteristics that he finds already there. His task is to give rational order and measure to the arrangement of what he finds there:

Before that, all these things lacked proportion or measure. When the attempt was made to set the universe in order, first of all fire and water and earth and air, which bore certain marks of their own but which were in the sort of state that anything is in when it is not in touch with the divine, were then for the first time structured with forms and numbers. That god constructed them to be as beautiful and perfect as is possible when they had not been so before—this must be the basis of our account in all circumstances for ever. (533—b)

Plato is claiming that a universe organized by chance, and by the mechanical functions of the elements, would still be a disordered universe. Order and rationality, he suggests, are introduced when an intelligent craftsman constructs a world for a purpose, a world designed to be beautiful, perfect, and directed to what is good. While the material elements might automatically congregate in different regions and produce something with a semblance of structure, that would not be a cosmos, and it would certainly not be the best possible world.

But there is an analogous point about language, and the discourse that Timaeus has to offer. The availability of words out of which he might construct his discourse will not, in itself, account for the value of the discourse that he does produce. The words Timaeus chooses to use may pre-exist his account and have some kind of potential meaning. They may bear some relation to each other, independently of his use of them in his account of the world. But randomly or mechanically ordered words would not supply a satisfactory account of the world, any more than randomly or mechanically structured matter makes an intelligently structured world.

Timaeus' account is the best possible, because of what he does with the words of which he makes it. He structures and orders his materials to produce the account best geared to his purpose. His purpose is to display the value of the world that he describes and to honour the work of the demiurge. Another account would not do that job, unless it were produced by a craftsman, like Timaeus, capable of discerning the perfect paradigm and offering the best account that can be rendered in language. Thus, words serve as Timaeus' material, but the value of the account lies not in the language itself, nor in the meaning of individual words, but in the structured whole that is his 'likely' story, and of which he alone is the craftsman.  

Thus, Timaeus' discourse describes the world, but not because of any inherent or stable connection of the words by themselves with the paradigm that they will come to express in his account. Plainly the words do already carry some meaning, which influences his choice of words, just as the demiurge selects his materials according to whatever character each presents. But what they express, the likeness to which they are moulded, will be determined not so much by the character that they had before he came to use them, but by the use to which he puts them in the image he creates. They do not have a stable character or meaning of their own, any more than the elements to which the demiurge comes to embark upon his creation have a stable character. That much we learnt in discovering that the receptacle that underlies matter is the only stable and subsistent thing, while the characters that enable us to describe the so-called elements as 'such and such' are properties that are acquired.

We are reminded of the contrast drawn between Timaeus' tale and that which Critias had offered. Timaeus seeks to give an account that best describes the way the world works, but he does not suppose that there is one correct 'formula' that he must recite. It is, rather, to be no less 'likely' than any other.  

58 The value of the work does not seem to derive from its author, however. We infer from the goodness of our world that there is an intelligent author behind it; but that does not mean that we value it for its author, nor do we need to appeal to its author to appreciate its value. It is Critias, by contrast, who is inclined to appeal to the authority of the original teller of his tale as the source of its value and truth (2od7—2ia3, 2sdy—e5). Timaeus' account is good not because it is Timaeus' account but because it is a good one.

59 The uniqueness of Timaeus' account is like that of the world, in that one good model of a perfect paradigm is sufficient, and will not be improved by multiplication, though it may not be the only acceptable formula.
Timaeus, like the demiurge, was to fashion something new and fine out of a material that could be moulded, with more or less responsiveness, to illustrate reality. Critias, by contrast, had supposed that there was a correct set of words, if we could get back far enough in time and remember accurately the words of one who knew the distant past. Given the correct formula, we should be telling the truth. Critias seems to presuppose that the words permanently stand for facts and things in the worlds, so that to tell the truth we must simply repeat the right set of words that pictures a set of events that really happened so.

IV. Natural Science and the Successful Story

My conclusions so far have been about language in general and the way in which Timaeus claims to use language not as a pictorial imitation of the particular reality of the sensible world but as a world with meaning of its own, structured to match the world of the senses. But Plato's dialogue does not simply make a point about language. It also comments on the status of natural science.

It might be supposed that, in the Timaeus, Plato allows, perhaps for the first time, that there might be some value in empirical knowledge and the study of nature, just as in the Laws he was to bring political science down to the realities of experience. But a closer appreciation of the context in the Timaeus—Critias group will show that this is far from what we should conclude. Perhaps it is true that Plato is allowing some importance to the kind of natural science that Timaeus has to offer; but what sort of science is that? Timaeus does not suggest that we should turn first to the natural world, and seek to match our account to what we find there. On the contrary, he clearly rejects Critias' concern with 'truth' and correspondence with historical events and particular facts. There is another kind of reality to which Timaeus attempts to make his account conform, and that is the truth of a paradigm in the world of being, the Forms. This reality is independent of the scientist, just as Critias envisaged that his facts of history were independent of the observer, but it is not accessible to observation more directly in the particulars of the world than it is in the discourse of science. Neither can be used to check the accuracy of the other. Indeed, the discourse of a good scientist will seek to model the tale directly on a paradigm of good order and truth. It will match the world of becoming only because it has the same status, as an image in words, while the world of particulars is an image in matter. The discourse will enable us to see the world for what it is, the best of all possible worlds, just as much as the world can enable us to appreciate the truth of the discourse. Neither is prior nor more direct as an image of what is true.

If this position is considered in the light of the familiar debate between a realist or an instrumentalist account of truth and success in a scientific theory, we find that Plato's position is neither that of the realist, for whom independently available facts of the particular world are named and described in the scientific account, nor that of the instrumentalist, for whom the theoretical account is a convenient fiction and corresponds to nothing independent of the observer's most successful outlook on the world.60 For Timaeus, the validity of the 'scientific' account is not observer-related, nor is it a theoretical construct that refuses to engage with reality. But the reality to which it conforms is not the material world, nor is it a reality available to the scientist more directly, as an independently measurable standard to which he might compare his account. It is exemplified in his discourse, and in discourse generally, as well, and as immediately, as it is embodied in the material world.

Timaeus' scientific account does not seek the sort of truth that consists in correspondence with real events. That is precisely why Plato must deny that it is 'true' in the sense that Critias' tale about the past was claiming to be 'true'. Timaeus' discourse is exemplary or 'likely', because it models the created world on a permanent world of real being.61

61 See G. E. R. Lloyd, 'Plato on Mathematics and Nature, Myth and Science', Humanities—International Christian University Publication 4 B (Mitaka, Tokyo), 18(1983), 11-30; repr. in Lloyds, Methods, 333-51: 342-51, for a more detailed analysis of Ti.'s reservations about the truth that can be achieved in natural science. Nevertheless, Lloyd still implies that Plato regards the 'likely' status of natural science as a failure in this respect, rather than, as I am suggesting, its virtue.
If this is so, the contrast between the 'poetical' approach of Critias' ancient history and the scientific approach of Timaeus' story is essential to understanding what Plato's view of science is. So far from turning from theory to empirical investigation in his old age, Plato reaffirms an attitude found in the Republic: a description has validity, not in virtue of its faithfulness to empirical aspects of our familiar world, but in virtue of its aspiration to an ideal.62 Such a theory comes close to truth just in so far as, in speaking of the world of becoming, it tells of how it must be if it perfectly, or as nearly as possible, instantiates the ideal; whereas the poet and the historian will be dissatisfied unless they modify, or indeed construct, the theoretical model on the basis of the way that they find the imperfect things of this world appear to be.

It does not follow that all discourse bears a direct relation to the realm of being. Perhaps there are two ways of talking. One of those, Critias' way, describes or pictures the things of experience, offering a further picture of an image, and expects to be judged, as Critias expects to be judged, on the accuracy of its resemblance to the particular model that we can see independently. The other is Timaeus' way, which offers a likeness of the ideal, and aims to judge the value of its account not by reference to the actual world that is itself an imperfect image, but by reference to an ideal paradigm that it seeks to exemplify.

It seems clear that the kind of studies required to instil in the philosopher an understanding of reliable scientific models has not changed fundamentally from that envisaged in the Republic. The Timaeus comments, by means of an illustration from natural science, on the reason why an acceptable account of the ideal state in action will not be one that looks for a historical realization of it in practice. On the contrary, if we wish to flesh out the ideal city we shall not need to realize a historical example; it will be sufficient to build a city in words, just as Timaeus constructs in systematic discourse a sort of twin-earth to match the product made by the demiurge.63

62 Cf. R. 52yd—53oc on the common mistake of paying attention to the stars when doing theoretical astronomy. I am not suggesting that Plato holds that material and particular things have no value or goodness. Plainly, Ti. argues that an understanding of the goodness of the created order is an essential part of science correctly done. The point is rather that the scientific account is correct not in its accurate portrait of particulars but in its understanding of the paradigm that explains them.

63 I am grateful to Christopher Gill, M. M. McCabe, and an anonymous reader for Oxford University Press, for helpful comments on an earlier draft; to Oswald Hanfling, my colleagues at Swansea, and the audience at the Swansea Philosophical Society for attacking a number of unclarities and problems; and to Luc Brisson for sending me copies of some of his published work on the Timaeus.