

THE TIMÆUS,

A DIALOGUE

ON NATURE.



## INTRODUCTION.

TO

## THE TIMÆUS.

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THE design, says Proclus, of Plato's Timæus evidently vindicates to itself the whole of physiology, and is conversant from beginning to end with the speculation of the universe. For the book of Timæus the Locrian concerning nature is composed after the Pythagoric manner; and Plato, thence deriving his materials, undertook to compose the present dialogue, according to the relation of the scurrilous Timon. This dialogue, therefore, respects physiology in all its parts; speculating the same things in images and in exemplars, in wholes and in parts. For it is filled with all the most beautiful modes of physiology, delivering things simple for the sake of such as are composite, parts on account of wholes, and images for the sake of exemplars; and it leaves none of the primary causes of nature unexplored.

But Plato alone, of all the physiologists, has preserved the Pythagoric mode in speculations about nature. For physiology receives a threefold division, one part of which is conversant with matter and material causes; but a second adds an inquiry into form, and evinces that this is the more principal cause; and lastly, a third part manifests that these do not rank in the order of causes, but concauses; and, in consequence of this, establishes other proper causes of things subsisting in nature, which it denominates *producing*, *paradigmatical*, and *final* causes. But this being the case, all the physiologists prior to Plato, confining themselves to speculations about matter, called this general receptacle of things by different names. For, with respect to Anaxagoras himself, as it appears, though while others were dreaming he perceived that intellect was the first cause of generated natures, yet he made no use of intellect in his demonstrations, but rather considered certain airs and  
ethers

ethers as the causes of the phænomena, as we are informed by Socrates in the Phædo. But the most accurate of those posterior to Plato, (such as the more early peripatetics,) contemplating matter in conjunction with form, considered these as the principles of bodies; and if at any time they mention a producing cause, as when they call nature a principle of motion, they rather take away than establish his efficacious and producing prerogative, while they do not allow that he contains the reasons<sup>1</sup> of his productions, but admit that many things are the progeny of chance. But Plato, following the Pythagoreans, delivers as the concauses of natural things, an all-receiving matter, and a material form, as subservient to proper causes in generation; but, prior to these, he investigates primary causes, i. e. the producing, the paradigmatical, and the final.

Hence, he places over the universe a demiurgic intellect and an intelligible cause; in which last the universe and goodness have a primary subsistence, and which is established above the artificer of things in the order of the desirable, or, in other words, is a superior object of desire. For, since that which is moved by another, or a corporeal nature, is suspended from a motive power, and is naturally incapable either of producing, perfecting, or preserving itself, it evidently requires a fabricative cause for the commencement and continuance of its being. The concauses, therefore, of natural productions must necessarily be suspended from true causes, as the sources of their existence, and for the sake of which they were fabricated by the father of all things. With great propriety, therefore, are all these accurately explored by Plato, and likewise the two depending from these, viz. form, and the subject matter. For this world is not the same with the intelligible and intellectual worlds, which are self-subsistent, and consequently by no means indigent of a subject, but it is a composite of matter and form. However, as it perpetually depends on these, like the shadow from the forming substance, Plato assimilates it to intelligible animal itself; evinces that it is a God through its participation of good, and perfectly defines the whole world to be a blessed God, participating of intellect and soul.

Such, then, being Plato's design in the Timæus, he very properly in the beginning exhibits, through images, the order of the universe; for it is

<sup>1</sup> That Aristotle himself, however, was not of this opinion, I have shown in the Introduction to my Translation of his *Metaphysics*.

usual with the Pythagoreans <sup>1</sup>, previous to the tradition of a scientific doctrine, to present the reader with a manifestation of the proposed inquiry, through similitudes and images: but in the middle part the whole of Cosmogony is delivered; and towards the end, partial natures, and such as are the extremities of fabrication, are wove together with wholes themselves. For the repetition of the Republic, which had been so largely treated of before, and the Atlantic history, unfold through images the theory of the world. For, if we consider the union and multitude of mundane natures, we must say, that the summary account of the Republic by Socrates, which establishes as its end a communion pervading through the whole, is an image of its union; but that the battle of the Atlantics against the Athenians, which Critias relates, is an image of the distribution of the world, and especially so according to the two coordinate oppositions of things. For, if we make a division of the universe into *celestial* and *sublunary*, we must say that the Republic is assimilated to the celestial distribution; since Socrates himself asserts that its paradigm is established in the heavens; but that the Atlantic war corresponds to generation, which subsists through contrariety and mutation. And such are the particulars which precede the whole doctrine of physiology.

But after this the demiurgic, paradigmatic, and final causes of the universe are delivered; from the prior subsistence of which the universe is fabricated, both according to a whole and according to parts. For the corporeal nature of it is fabricated with forms and demiurgic sections, and is distributed with divine numbers; and soul is produced from the demiurgus, and is filled with harmonic reasons and divine and fabricative symbols. The whole mundane animal too is connected together, according to the united comprehension which subsists in the intelligible world; and the parts which it contains are distributed so as to harmonize with the whole, both such as are corporeal and such as are vital. For partial souls are introduced into its spacious receptacle, are placed about the mundane Gods, and become mundane through the luciform vehicles with which they are connected, imitating their presiding and leading Gods. Mortal animals too are fabricated and vivified by the celestial Gods; and prior to these, the formation of man is delivered as a

<sup>1</sup> Είναι γὰρ τοῖς Πυθαγορείοις ἔθος, πρὸ τῆς ἐπιστημονικῆς διδασκαλίας προτιθεῖναι τὴν διὰ τῶν ὁμοίων, καὶ τῶν εἰκοίων τῶν ζήτουμένων σχημάτων δηλοῦν. Procl. in Tim. p. 10.

microcosm, comprehending in himself partially every thing which the world contains divinely and totally. For we are endued with an intellect subsisting in energy, and a rational soul proceeding from the same father and vivifying goddesses as were the causes of the intellect and soul of the universe. We have likewise an ethereal vehicle analogous to the heavens, and a terrestrial body composed from the four elements, and with which it is also coordinate. If, therefore, it be proper to contemplate the universe multifariously both in an intelligible and sensible nature, paradigmatically, and as a resemblance, totally and partially, a discourse concerning the nature of man is very properly introduced in the speculation of the universe.

With respect to the form and character of the dialogue, it is acknowledged by all that it is composed according to the Pythagoric mode of writing. And this also must be granted by those who are the least acquainted with the works of Plato, that the manner of his composition is Socratic, philanthropic, and demonstrative. If, therefore, Plato any where mingles the Socratic and Pythagoric property together, this must be apparent in the present dialogue. For it contains, agreeably to the Pythagoric custom, elevation of intellect, together with intellectual and divine conceptions: it likewise suspends every thing from intelligibles, bounds wholes in numbers, exhibits things mystically and symbolically, is full of an elevating property, of that which transcends partial conceptions, and of the enunciative mode of composition. But from the Socratic philanthropy it contains an easy accommodation to familiar discourse, gentleness of manners, proceeding by demonstration, contemplating things through images, the ethical peculiarity, and every thing of this kind. Hence, it is a venerable dialogue, and deduces its conceptions from on high, from the first principles of things; but it mingles the demonstrative with the enunciative, and prepares us to understand physics, not only physically but theologically. For, indeed, Nature herself rules over the universe suspended from the Gods, and directs the forms of bodies through the influence of their inspiring power; for she is neither herself a divinity, nor yet without a divine characteristic, but is full of illuminations from all the various orders of the Gods.

But if it be proper, as Timæus says, that discourses should be assimilated to the things of which they are the interpreters, it will be necessary that the dialogue should contain both that which is physical and that which is theological;

theological; imitating by this mean Nature which it contemplates. Further still, since according to the Pythagoric doctrine things receive a triple division, into such as are intelligible, such as are physical, and such as rank in the middle of these, which the Pythagoreans usually call mathematical, all these may very conveniently be viewed in all. For in intelligibles things middle and last subsist in a causal manner; and in mathematical natures both are contained, such as are first according to similitude, and such as are third after the manner of an exemplar. And lastly, in natural things the resemblances of such as are prior subsist. With great propriety, therefore, does Timæus, when describing the composition of the soul, exhibit her powers, and reasons, and the elements of her nature, through mathematical names: but Plato defines the characteristics of these from geometrical figures, and at the same time leaves the causes of all these pre-subsisting in a primary manner in the intelligible intellect, and the intellect of the artificer of the universe.

And thus much for the manner of the dialogue; but its argument or hypothesis is as follows. Socrates coming into the Piræus for the sake of the Bendidian festival, which was sacred to Diana, and was celebrated prior to the Panathenaia<sup>1</sup>, on the twentieth of the month Thargelion or June, discoursed there concerning a republic with Polemarchus, Cephalus, Glauco, Adimantus, and Thrasymachus the sophist. But on the following day he related this discourse in the city to Timæus, Critias, Hermocrates, and a fourth nameless person. On the third day they end the narration; and Timæus commences from hence his discourse on the universe, before Socrates, Critias, and Hermocrates; the same nameless person who was present at the second narration being now absent from the third.

With respect to the term *nature*, which is differently defined by different philosophers, it is necessary to inform the reader, that Plato does not consider either matter or material form, or body, or natural powers, as worthy to be called nature; though nature has been thus denominated by others. Nor does he think proper to call it soul; but establishing its essence between soul and corporeal powers, he considers it as inferior to the former through its being divided about bodies, and its incapacity of conversion to itself, but as surpassing the latter through its containing the reasons of all

<sup>1</sup> Sacred to Minerva.

things, and generating and vivifying every part of the visible world. For nature verges towards bodies, and is inseparable from their fluctuating empire. But soul is separate from body, is established in herself, and subsists both from herself and another; from another, that is, from intellect through participation, and from herself on account of her not verging to body, but abiding in her own essence, and at the same time illuminating the obscure nature of matter with a secondary life. Nature, therefore, is the last of the causes which fabricate this corporeal and sensible world, bounds the progressions of incorporeal essences, and is full of reasons and powers through which she governs mundane affairs. And she is a goddess indeed, considered as deified; but not according to the primary signification of the word. For the word God is attributed by Plato, as well as by the ancient theologians, to beings which participate of the Gods. Hence every pure intellect is, according to the Platonic philosophy, a God according to union; every divine soul according to participation; every divine dæmon according to contact; divine bodies are Gods as statues of the Gods; and even the souls of the most exalted men are Gods according to similitude; while in the mean time superessential natures only are primarily and properly Gods. But nature governs the whole world by her powers, by her summit comprehending the heavens, but through these ruling over the fluctuating empire of generation, and every where weaving together partial natures in amicable conjunction with wholes.

But as the whole of Plato's philosophy is distributed into the contemplation of intelligibles and sensibles, and this very properly, since there is both an intelligible and sensible world, as Plato himself asserts in the course of the dialogue; hence in the Parmenides he comprehends the doctrine of intelligibles, but in the Timæus of mundane natures. And in the former of these dialogues he scientifically exhibits all the divine orders, but in the latter all the progressions of such as are mundane. Nor does the former entirely neglect the speculation of what the universe contains, nor the latter of intelligibles themselves. And this because sensibles are contained in intelligibles paradigmatically, and intelligibles in sensibles according to similitude. But the latter abounds more with physical speculations, and the former with such as are theological; and this in a manner adapted to the persons after whom the dialogues are called: to Timæus on the one hand,



who had composed a book on the universe, and to Parmenides on the other, who had written on true beings. The divine Jamblichus, therefore, asserts very properly, that the whole theory of Plato is comprehended in these two dialogues, the Parmenides and Timæus. For the whole doctrine of mundane and supermundane natures is accurately delivered in these, and in the most consummate perfection; nor is any order of beings left without investigation.

We may behold too the similitude of proceeding in the Timæus to that in the Parmenides. For, as Timæus refers the cause of every thing in the world to the first artificer, so Parmenides suspends the progression of all things from *the one*. And as the former represents all things as participating of demiurgic providence, so the other exhibits beings participating of a uniform essence. And again, as Timæus prior to his physiology presents us through images with the theory of mundane natures, so Parmenides prior to his theology excites us to an investigation of immaterial forms. For it is proper, after being exercised in discourses about the best polity, to proceed to a contemplation of the universe; and, after an athletic contention through strenuous doubts about ideas, to betake ourselves to the mystic speculation of the unities of beings. And thus much for the hypothesis or argument of the dialogue.

But as a more copious and accurate investigation of some of its principal parts will be necessary, even to a general knowledge of the important truths which it contains, previous to this I shall present the reader with an abstract of that inimitable theory respecting the connection of things, which is the basis of the present work, and of the whole philosophy of Plato. For by a comprehensive view of this kind we shall be better prepared for a minute survey of the intricate parts of the dialogue, and be convinced how infinitely superior the long lost *philosophy of Pythagoras and Plato* is to the *experimental farrago* of the *moderns*.

Since the first cause is *the good*<sup>1</sup>, and this is the same with *the one*, as is evident from the Parmenides, it is necessary that the whole of things should be the most excellent, that is, the most united that can possibly be conceived. But perfect union in the whole of things can no otherwise take place than

<sup>1</sup> See the sixth Book of the Republic.

by the extremity of a superior order coalescing, *κατασχέσιν*, through habitude or alliance, with the summit of an order which is proximately inferior. Again, with respect to all beings, it is necessary that some should move or be motive only, and that others should be moved only; and that between these there should be two mediums, the self-motive natures, and those which move and at the same time are moved. Now that which is motive only, and consequently essentially immovable, is intellect, which possesses both its essence and energy in eternity; the whole intelligence of which is firmly established in indivisible union, and which though a cause prior to itself participates of deific illumination. For it possesses, says Plotinus, twofold energies; one kind indeed as intellect, but the other in consequence of becoming as it were intoxicated, and deifying itself with nectar. But that which is self-motive is soul, which, on account of possessing its energy in transition and a mutation of life, requires the circulations of time to the perfection of its nature, and depends on intellect as a more ancient and consequently superior cause. But that which moves and is at the same time moved is nature, or that corporeal life which is distributed about body, and confers generation, nutrition and increase to its fluctuating essence. And lastly, that which is moved only is body, which is naturally passive, imbecil and inert.

Now, in consequence of the profound union subsisting in things, it is necessary that the highest beings or intelligibles should be wholly super-essential, *κατασχέσιν*, according to proximity or alliance; that the highest intellects should be beings, the first of souls intellects, and the highest bodies lives, on account of their being wholly absorbed as it were in a vital nature. Hence, in order that the most perfect union possible may take place between the last of incorporeals and the first of bodies, it is necessary that the body of the world should be consummately vital; or indeed, according to habitude and alliance, life itself. But it is necessary that a body of this kind should be perpetually generated, or have a subsistence in perpetually *becoming to be*. For after intellect, which eternally abides the same both in essence and energy, and soul, which is eternally the same in essence but mutable in energy, that nature must succeed which is perpetually mutable both in essence and energy, and which consequently subsists in a perpetual dispersion of temporal extension, and is co-extended with time. Such a body, therefore,

fore, is very properly said to be generated, at the same time that this generation is perpetual; because, on account of its divisibility and extension, it alone derives its existence from an external cause: likewise, because it is a composite, and because it is not at once wholly that which it is, but possesses its being in continual generation. This body, too, on account of the perpetuity of its duration, though this is nothing more than a flowing eternity, may be very properly called a whole with a total subsistence: for every thing endued with a total subsistence is eternal; and this may be truly asserted of the body of the world, when we consider that its being is co-extended with the infinite progressions of time. Hence, this divine or celestial body may be properly called *ὅλος ὀλικῶς*, or a *whole totally*, just as the limb of an animal is *μέρος μερικῶς*, or a *part partially*. But between *whole totally* and *part partially* two mediums are necessarily required, viz. *part totally* and *whole partially* (*μέρος ὀλικῶς* and *ὅλος μερικῶς*). The *parts*, therefore, with a *total subsistence* which the world contains, are no other than the celestial orbs, which are consequently eternal and divine, after the same manner as the whole body of the world, together with the spheres of the elements; and the *wholes partially* are no other than the individuals of the various species of animals, such as a man, a horse, and the like.

Now this divine body, on account of its superiority to sublunary natures, was called by Aristotle a *ffth body*, and was said by Plato to be composed for the most part from fire. But in order to a more perfect comprehension of its nature, it is necessary to observe, that the two elements which, according to Plato, are situated in the extremes, are fire and earth, and that the characteristic of the former is *visibility*, and of the latter *tangibility*; so that every thing becomes visible through fire, and tangible through earth. Now the whole of this celestial body, which is called by the ancients heaven, consists of an unburning vivific fire, like the natural heat which our bodies contain, and the illuminations of which give life to our mortal part. But the stars are for the most part composed from this fire, containing at the same time the summits of the other elements. Hence, heaven is wholly of a fiery characteristic, but contains in a causal manner the powers of the other elements; as, for instance, the solidity and stability of earth, the conglutinating and unifying nature of water, and the tenuity and transparency of air.

For,

For, as earth comprehends all things in a terrestrial manner, so the heavens contain all things according to a fiery characteristic.

But the following extraordinary passage from Proclus admirably unfolds the nature of this divine body, and the various gradations of fire and the other elements. "It is necessary to understand (says he <sup>1</sup>) that the fire of the heavens is not the same with sublunary fire, but that this is a divine fire consubstantial with life, and an imitation of intellectual fire; while that which subsists in the sublunary region is entirely material, generated and corruptible. Pure fire, therefore, subsists in the heavens, and there the whole of fire is contained; but earth according to cause, subsisting there as another species of earth, naturally associating with fire, as it is proper it should, and possessing nothing but solidity alone. For, as fire there is illuminative, and not burning, so earth there is not gross and sluggish, but each subsists according to that which is the summit of each. And as pure and true fire is there, so true earth subsists here, and the *wholeness*, *ὁλοτης*, of earth <sup>2</sup>; and fire is here according to participation, and materially, as earth is according to a primary subsistence. So that in heaven the summit of earth is contained, and in earth the dregs and sediment of fire. But it is evident that the moon has something solid and dark, by her obstructing the light; for obstruction of light is alone the province of earth. The stars too obstruct our sight, by casting a shadow of themselves from on high. But since fire and earth subsist in heaven, it is evident that the middle elements must be there also; air first of all, as being most diaphanous and agile, but water, as being most vaporous: each at the same time subsisting far purer than in the sublunary region, that all things may be in all, and yet in an accommodated manner in each.

"However, that the whole progression and gradations of the elements may become apparent, it is necessary to deduce the speculation of them from on high. These four elements, then, fire, air, water, and earth, subsist first of all in the demiurgus of wholes, uniformly according to cause. For all

<sup>1</sup> In Tim. p. 152.

<sup>2</sup> For it is necessary that the first subsistence of each of the elements should be, as we have before observed, according to *part total*, in order to the perfect union of the world; and this *part total* is called by the Platonists *ὁλοτης*, or a *wholeness*.

causes are previously assumed in him, according to one comprehension; as well the intellectual, divine, pure, and vigorous power of fire, as the containing and vivific cause of air; and as well the prolific and regenerating essence of water, as the firm, immutable, and undeviating form of earth. And this the theologist Orpheus knowing, he thus speaks concerning the demiurgus:

His body's boundless, stable, full of light.

And

Th' extended region of surrounding air  
Forms his broad shoulders, back and bosom fair.

Again,

His middle zone's the spreading sea profound.

And

The distant realms of Tartarus obscure  
Within earth's roots his holy feet secure;  
For these earth's utmost bounds to Jove belong,  
And form his basis, permanent and strong.

“ But from these demiurgic causes a progression of the elements into the universe takes place, but not immediately into the sublunary world. For how can the most immaterial things give subsistence to the most material without a medium; or things immovable be immediately hypostatic of such as are moved in all directions? Since the progression of things is nowhere without a medium, but subsists according to a well-ordered subjection; and generations into these material, dissipated, and dark abodes, take place through things of a proximate order. Since, therefore, the elements in the demiurgus are intellects and imparticipable intellectual powers, what will be their first progression? Is it not manifest that they will yet remain intellectual powers, but will be participated by mundane natures? For from imparticipable intellect the proximate progression is to that which is participated. And, universally, progression takes place from imparticipables to things participated, and from supernundane to mundane forms. But what are these things which yet remain intellectual, but are participated, and what subjection do they possess? Is it not evident that they are no longer intellectual (i. e. essentially intellectual)? But I call those natures intellectual which are the forms of intellect, and of a truly intellectual essence. But  
becoming

becoming participated, and being no longer intellectual, it is evident that they are no longer immovable natures. But, not being immovable, they must be self-motive. For these are proximately suspended from immovable natures; and from things essentially intellectual a progression takes place to such as are so according to participation, and from things immovable to such as are self-motive. These elements, therefore, subsist in life, and are self-motive and intellectual according to participation. But the progression from this must be manifest. For the immediate descent from life is to animal; since this is proximate to life. And from that which is essentially self-motive, to that which is self-motive according to a participation of life. For, so far as it proceeds from life to animal, it suffers a mutation. But so far as it proceeds from that which is immaterial to things immaterial<sup>1</sup>, (that is, such as may be called immaterial when contrasted with mutable matter,) and from divine life to a divine essence, it becomes assimilated to them. If, therefore, you take away from hence that which is immaterial and immutable, you will produce that which is mutable and material. And through this, indeed, they are diminished from such as are before them; but on account of the symmetry and order of their motions, and their immutability in their mutations, they become assimilated to them. If, therefore, you take away this order, you will behold the great confusion and inconstancy of the elements; and this will be the last progression, and the very dregs and sediment of all the prior gradations of the elements.

“Of the elements, therefore, some are immovable, imparticipable, intellectual and demiurgic; but others are intellectual and immovable according to essence, but participated by mundane natures. Others again are self-motive, and essentially lives; but others are self-motive and vital, but are not lives. Some again are alter-motive, or moved by another, but are moved in an orderly manner; and, lastly, others have a disordered, tumultuous, and confused subsistence.”

Such then is the progression of the elements, and such the nature of a celestial body. But, if the body of the world be spherical, and this must necessarily be the case, as a sphere is the most perfect of figures, and the world the best of effects, there must be some part in it corresponding to a

<sup>1</sup> He means the divine bodies of the stars, and the body of the heavens; which, compared with sublunary bodies, may be justly called *immaterial bodies*.

centre, and this can be no other than earth. For, in an orderly progression of things, that which is most distant, and the last, is the worst; and this we have already shown is the earth. But in a sphere, that which is most distant from the superficies is the centre; and, therefore, earth is the centre of the world. This conclusion, indeed, will doubtless be ridiculed by every *sagacious* modern, as too absurd in such an *enlightened* age as the present to deserve the labour of a confutation. However, as it follows by an inevitable consequence from the preceding theory, and this theory is founded on the harmonious union of things, we may safely assert that it is consistent with the universe itself. At such a period, indeed, as the present, when there is such a dire perversion of religion, and men of every description are involved in extreme impiety, we cannot wonder that the spirit of profane innovation should cause a similar confusion in the system of the world. For men of the present day being destitute of true science, and not having the least knowledge of the true nature and progressions of things, in the first place make the universe an unconnected production, generated in time, and of course naturally subject to dissolution; and, in the next place, allow of no essential distinction in its principal parts. Hence, the earth is by them hurled into the heavens, and rolled about their central sun in conjunction with the celestial orbs. The planets are supposed to be heavy bodies similar to our sluggish earth; the fixed stars are all so many suns; and the sun himself is a dense, heavy body, occasionally suffering dimness in his light, and covered with dark and fuliginous spots. With respect to this last particular, indeed, they boast of ocular conviction through the assistance of the telescope; and what reasoning can invalidate the testimony of the eyes? I answer, that the eyes in this particular are more deceived when assisted by glasses, than when trusting to their own naked power of perceiving. For, in reality, we do not perceive the heavenly bodies themselves, but their inflammations in the air: or, in other words, certain portions of air enkindled by the swiftness of their course. This at least cannot be denied to be possible; and, if so, it is not at all wonderful that a gross aerial inflammation should, when viewed through a telescope, appear dim and clouded with spots. But this is not an hypothesis of my own invention, but is derived from Ammonius Hermeas, who, as we are informed by Olympiodorus in the Phædo, was of this opinion, as also was Heraclitus long before him; who, speaking (says Olym-

piodorus) in his obscure way concerning the sun, says of that luminary “*enkindling measures and extinguishing measures*,”—that is, enkindling an image of himself in the air when he rises, the same becoming extinguished when he sets.

Nor let the moderns fondly imagine that their system of astronomy was adopted by Pythagoras and his followers, for this opinion is confuted by Spanheim and Dickinſon; and this, ſays Fabricius <sup>1</sup>, with no contemptible arguments: and we are informed by Simplicius <sup>2</sup>, long before them, that the Pythagoreans by the fire in the middle did not mean the ſun, but a demiurgic vivific fire, ſeated in the centre of the earth. The prophecy of Swift, therefore, in his *Gulliver’s Travels*, that the boacted theory of gravitation would at one time or other be exploded, may certainly be conſidered as a moſt true prediction, at leaſt ſo far as relates to the celeftial orbs.

But to return from this digreſſion. The inerratic ſphere, according to the Platonic philoſophy, has the relation of a monad to the multitude of ſtars which it contains; or, in other words, it is the proximate cauſe of this multitude which it contains, and with which it has a coordinate ſubſiſtence. But, according to the ſame philoſophy, all the planets are fixed in ſolid ſpheres, in conformity to the motions of which they perpetually revolve; but, at the ſame time, have peculiar motions of their own beſides thoſe of the ſpheres <sup>3</sup>. Theſe ſpheres too are all concentric, or have the ſame centre with the earth and the univerſe, and do not conſiſt of hard impenetrable matter, as the moderns have ignorantly ſuppoſed; for being divine or immaterial bodies, ſuch as we have already deſcribed, they have nothing of the denſity and gravity of this our earth, but are able to permeate each other without diviſion, and to occupy the ſame place together; juſt like the illuminations emitted from ſeveral lamps, which paſs through the whole of the ſame room at once, and pervade each other without confuſion, divulſion, or any apparent diſtinction. So that theſe ſpheres are ſimilar to mathematical bodies, ſo far as they are immaterial, free from contrariety, and exempt from every paſſive quality; but are different from them, ſo far as they are full of motion and life. But they are concealed from our ſight through the

<sup>1</sup> Vid. Biblioth. Græc. vol. 1. de Orpheo.

<sup>2</sup> In Ariſtot. de Cælo, lib. 2.

<sup>3</sup> For Plato makes no mention of epicycles and eccentric circles.



tenuity and subtilty of their nature, while, on the contrary, the fire of the planets which are carried in them is visible through the solidity which it possesses. So that earth is more predominant in the planets than in the spheres; though each subsists, for the most part, according to the characteristic of fire. But let it be carefully remembered, that the peculiarity of all fire is the *being visible*, but that neither heat nor fluidity belongs to every species of fire: and that the property of all earth is the *being tangible*, but that gravity and subsiding downwards do not belong to all.

But, in consequence of each of these spheres being a *όλοτης*, or *part with a total subsistence*, as we have already explained, it follows that every planet has a number of satellites surrounding it, analogous to the choir of the fixed stars? and that every sphere is full of Gods, angels, and dæmons, subsisting according to the properties of the spheres in which they reside. This theory indeed is the grand key to the theology of the antients, as it shows us at one view why the same God is so often celebrated with the names of other Gods; which led Macrobius formerly to think that all the Gods were nothing more than the different powers of the sun; and has induced certain superficial moderns, to frame hypotheses concerning the antient theology so ridiculous, that they deserve to be considered in no other light than the ravings of a madman, or the undisciplined conceptions of a child. But that the reader may be fully convinced of this, let him attend to the following extraordinary passages from the divine commentaries of Proclus on the Timæus. And, in the first place, that every planet is attended with a great number of satellites, is evident from the following citation;—"There are other divine animals attending upon the circulations of the planets, the leaders of which are the seven planets; and these revolve and return in their circulations in conjunction with their leaders, just as the fixed stars are governed by the circulation of the inerratic sphere."—Εἶδεναι καὶ ἀλλὰ ζῶα θεῖα εἰη οὐρανία συνεπιόμενα ταῖς τῶν πλανητικῶν περιφοραῖς, ἃν ἡγεμόνες εἰσὶν οἱ ἑπτὰ.—Καὶ συμπεριπολεῖ, καὶ συναποκαθίσταται ταῖς ἑαυτῶν ἀρχαῖς, ὡς περ καὶ τὰ ἀπλανῆ κρατεῖται ὑπὸ τῆς ὅλης περιφορᾶς<sup>1</sup>. And in the same place he informs us, that the revolution of these satellites is similar to that of the planets which they attend; and this, he acquaints us a little before, is according to Plato a spiral revolution. Καὶ γὰρ ταῦτα τρεπόμενα ἐστί, καὶ πλανῆν ἔχοντα τοιαύτην, ὅταν εἰρηκέν περὶ τῶν ἑπτὰ μικρῶν προτερον.

<sup>1</sup> Vid. Procl. in Tim. p. 279.

Again, with respect to their number—"about every planet there is a number (of satellites) analogous to the choir of the fixed stars, all of them subsisting with proper circulations of their own".—Ἔστι γὰρ καθ' ἑκάστην αἰθέρη ἀναλογὴν τῶν τῶν ἀστέρων χορῶν, συνυφεστίως ταῖς οἰκείαις περιφοραῖς.—And if it should be inquired why, with respect to the fixed stars, there is one monad, the *wholeness* (ὅλότης) of them; but among the planets there is both a *ὅλότης*, *wholeness* or *totality*, that is the sphere of each, and a leader besides in each, that is the apparent orb; he answers in the same place, that as the motion of the planets is more various than that of the fixed stars, so their possession of government is more abundant, for they proceed into a greater multitude. He adds—But in the sublunary regions there is still a greater number of governors; for the *monads* (that is, *totalities*) in the heavens generate a number analogous to themselves. So that the planets being secondary to the fixed stars, require a twofold government; one of which is more total and the other more partial.

But with respect to the satellites, the first in order about every planet are Gods; after these, dæmons revolve in lucid orbicular bodies; and these are followed by partial souls such as ours, as the following beautiful passage abundantly evinces. "But that in each of these (the planetary spheres) there is a multitude coordinate to each, you may infer from the extremes. For if the inerratic sphere has a multitude coordinate to itself, and earth is, with respect to terrestrial animals, what the inerratic sphere is to such as are celestial, it is necessary that every *wholeness* should possess certain partial animals coordinate to itself, through which also the spheres derive the appellation of *wholenesses*. But the natures situated in the middle are concealed from our sense, while, in the mean time, those contained in the extremes are apparent; one sort through their transcendently lucid essence, and the other through their alliance to ourselves. But if partial souls are disseminated about these spheres, some about the sun, some about the moon, and others about each of the remaining spheres<sup>2</sup>; and if prior to souls there are dæmons filling up the herds of which they are the leaders; it is evidently beautifully said that each of the spheres is a world. And this is agreeable to the doctrines of theologians, when they teach us that there are Gods in every sphere

<sup>2</sup> Page 275.

<sup>3</sup> This Plato himself asserts in the following dialogue.

prior to dæmons, the government of some receiving its perfection under that of others. As for instance with respect to our queen the Moon, that she contains the goddesses Hecate and Diana ; and with respect to our sovereign the Sun, and the Gods which he contains, theologists celebrate Bacchus as subsisting there,

The Sun's assessor, who with watchful eye  
Inspects the sacred pole :

They also celebrate Jupiter as seated there, Osiris, and a solar Pan, as likewise other divinities, of which the books of theologists and theurgists are full ; from all which it is evident how true it is that each of the planets is the leader of many Gods, which fill up its proper circulation <sup>1</sup>.”—*Ὅτι δὲ καὶ ἐν ἑκάστῃ τούτων πλήθος ἐστὶν ἑκάστην συστοιχόν, κατασκευασείας αὐτῆς ἀπο τῶν ἀκρῶν. Εἰ γὰρ ἡ ἀπλανὴς ἔχει συστοιχόν ἑαυτῇ πλήθος, καὶ ἡ γῆ τῶν χθονίων ζῶων ἐστὶ, ὡς ἐκείνη τῶν οὐρανίων, ἀναγκὴ καὶ ἑκάστην ὀλοτῆτα παντὶ ἔχειν μέρηκα αὐτῆς συστοιχὰ πρὸς αὐτὴ ζῶα, διὰ καὶ ὀλοτῆτες λέγονται. Λαμβάνει δὲ ἡμῶν τὰ μέσα τὴν αἰσθησίν, τῶν ἀκρῶν δὴλων ὄντων, τῶν μὲν, διὰ τὴν ὑπερλαμπρὸν οὐσίαν, τῶν δὲ διὰ τὴν πρὸς ἡμᾶς συγγενείαν. Εἰ δὲ καὶ μερικαὶ ψυχὰι περὶ αὐτοὺς ἐσπαρήσαν, ἀλλὰ μὲν περὶ ἡλίον, ἀλλὰ δὲ περὶ σεληνῆν, ἀλλὰ δὲ περὶ ἑκάστον τῶν λοιπῶν, καὶ πρὸ τῶν ψυχῶν δαιμόνες συμπληροῦσι τὰς ἀγέλας ἃν εἰσὶν ἡγεμόνες, δῆλον ὅτι καλῶς εἰρητὰ κόσμον ἑκάστην εἶναι τῶν σφαιρῶν, καὶ τῶν θεολογῶν ἡμᾶς ταῦτα διδασκόντων, ὅποταν περὶ ἑκάστους θεοὺς ἐν αὐτοῖς εἶναι, πρὸ τῶν δαιμόνων, ἀλλοὺς ὑπο τῶν ἀλλῶν τελούντας ἡγεμονίαν, οἷον, καὶ περὶ τῆς δεσποίνης ἡμῶν Σεληνῆς, ὅτι καὶ ἡ Ἐκάτη θεὰ ἐστὶν ἐν αὐτῇ, καὶ ἡ Ἀρτεμὶς, καὶ περὶ τοῦ βασιλείως Ἡλίου καὶ τῶν ἐκεῖ θεῶν, τὸν ἐκεῖ Διονύσου ὕμνουτες, Ἡέλιος παρέδρος ἐπισκοπεῖν πολλοὺς ἀγῶν, τὸν Δία τὸν ἐκεῖ, τὸν Ὀσίρι, τὸν Πανά, τὸν ἡλιακόν, τοὺς ἀλλοὺς, ἃν οἱ βίβλοι πληρεῖς εἰσὶ τῶν θεολογῶν καὶ τῶν θεωρηγῶν, ἐξ ἃν ἀπάντων δῆλον, ὅπως ἀληθῆς, καὶ τῶν πλανωμένων ἑκάστον ἀγλαρχὴν εἶναι πολλῶν θεῶν, συμπληρούντων αὐτοῦ τὴν ἰδίαν περιφορὰν.*

Now, from this extraordinary passage, we may perceive at one view why the Sun in the Orphic hymns is called Jupiter, why Apollo is called Pan, and Bacchus the sun ; why the Moon seems to be the same with Rhea, Ceres, Proserpine, Juno, Venus, &c. and, in short, why any one divinity is celebrated with the names and epithets of so many of the rest. For from this sublime theory it follows that every sphere contains a Jupiter, Neptune, Vulcan, Vesta, Minerva, Mars, Ceres, Juno, Diana, Mercury, Venus, Apollo, and in short every deity, each sphere at the same time conferring on these Gods the peculiar characteristic of its nature ; so that, for instance,

<sup>1</sup> Procl. in Tim. p. 279.

in the sun they all possess a solar property, in the moon a lunar one, and so of the rest. From this theory too we may perceive the truth of that divine saying of the antients, that all things are full of Gods; for more particular orders proceed from such as are more general, the mundane from the supermundane, and the sublunary from the celestial; while earth becomes the general receptacle of the illuminations of all the Gods. "Hence (says Proclus <sup>1</sup>) there is a terrestrial Ceres, Vesta, and Isis, as likewise a terrestrial Jupiter and a terrestrial Hermes, established about the one divinity of the earth; just as a multitude of celestial Gods proceeds about the one divinity of the heavens. For there are progressions of all the celestial Gods into the earth; and earth contains all things, in an earthly manner, which heaven comprehends celestially. Hence we speak of a terrestrial Bacchus, and a terrestrial Apollo, who bestows the all-various streams of water with which the earth abounds, and openings 'prophetic of futurity.'" And if to all this we only add that all the other mundane Gods subsist in the twelve above mentioned, and that the first triad of these is *demiurgic* or *fabricative*, viz. Jupiter, Neptune, Vulcan; the second, Vesta, Minerva, Mars, *defensive*; the third, Ceres, Juno, Diana, *vivific*; and the fourth, Mercury, Venus, Apollo, *elevating* and *harmonic*:—I say, if we unite this with the preceding theory, there is nothing in the antient theology that will not appear admirably sublime and beautifully connected, accurate in all its parts, scientific and divine. Such then being the true account of the Grecian theology, what opinion must we form of the wretched systems of modern mythologists; and which most deserves our admiration, the impudence or ignorance of the authors of such systems? The systems indeed of these men are so monstrously absurd, that we may consider them as instances of the greatest distortion of the rational faculty which can possibly befall human nature, while connected with such a body as the present. For one of these considers the Gods as merely symbols of agriculture, another as men who once lived on the earth <sup>2</sup>, and a third as the patriarchs and prophets of the Jews. Surely should these systems be transmitted to posterity, the historian by whom they are related must either be considered by future generations as an impostor, or his narration must be viewed in the light of an extravagant romance.

I only add, as a conclusion to this sublime theory, that though the whole

<sup>1</sup> In Tim. p. 282.

<sup>2</sup> See my notes on the Cratylus.

of the celestial region is composed from the four elements, yet in some places fire in conjunction with earth (*i. e.* earth without gravity and density) predominates; in others fire, with the summit of water; and in others again fire with the summit of air: and according to each of these an all-various mutation subsists. Hence some bodies in the heavens are visible, and these are such as have fire united with the solid; but others are still more visible<sup>1</sup>, and these are such as have fire mingled with the splendid and diaphanous nature of air. And hence the spheres of the planets, and the inerratic sphere itself, possess a more attenuated and diaphanous essence; but the stars are of a more solid composition. But fire every where prevails, and all heaven is characterized through the power of this exalted element. And neither is the fire there caustic (for this is not even the property of the first of the sublunary elements, which Aristotle calls *fiery*, *πυροειδής*) nor corruptive of any thing, nor of a nature contrary to earth; but it perpetually shines with a pure and transparent light, with vivific heat, and illuminating power.

And such are the outlines of the system of the world, according to Pythagoras and Plato; which, strange as the assertion may seem, appears to have been but little known from the æra of the emperor Justinian to the present time. That beautiful mode in which as we have shown the elements subsist both in the heavens and the earth, has not been even suspected by modern natural philosophers to have any existence; and astronomers have been very far from the truth in their assertions concerning the celestial spheres. In consequence of indolence, or ignorance, or prejudice, or from all three in conjunction, the moderns have invented systems no less discordant with the nature of things than different from each other. They have just been able to gain a glimpse of the beautiful union of things in the vegetable and animal tribes belonging to the earth, and have discovered that the lowest of the animal species and the highest of the vegetable approximate so near to each other, that the difference between the two can scarcely be perceived; but this is the very summit of their researches; they are unable to trace the connection of things any further, and rest satisfied in admitting that

The chain continues, but with links unknown.

<sup>1</sup> That is, in themselves: but they are invisible to us, on account of their possessing but little of the resisting nature of earth; and this is the reason why we cannot see the celestial spheres.

The divine nature of the celestial bodies cannot be seen through the telescope, and incorporeals are not to be viewed with a microscopic eye: but these instruments are at present the great standards of truth; and whatever opposes or cannot be ascertained by the testimony of these, is considered as mere conjecture, idle speculation, and a perversion of the reasoning power.

But let us now proceed to a summary view of some of the principle parts of this most interesting dialogue. And, in the first place, with respect to the history which is related in the beginning, concerning a war between the inhabitants of the Atlantic island and the Athenians:—Crantor, the most early of Plato's commentators, considered this relation (says Proclus) as a mere history unconnected with allegory; while other Platonists, on the contrary, have considered it as an allegory alone. But both these opinions are confuted by Proclus and the best of the Platonists; because Plato calls it a very wonderful, but at the same time true, narration. So that it is to be considered as a true history, exhibiting at the same time an image of the opposition of the natures which the universe contains. But according to Amelius<sup>1</sup> it represents the opposition between the inerratic sphere and the fixed stars; according to Origen<sup>2</sup>, the contest between dæmons of a superior and those of an inferior order; according to Numenius, the disagreement between more excellent souls who are the attendants of Pallas, and such as are conversant with generation under Neptune. Again, according to Porphyry, it insinuates the contest between dæmons deducing souls into generation, and souls ascending to the Gods. For Porphyry gives a three-fold distinction to dæmons; asserting that some are divine, that others subsist according to habitude, *κατα σχῆσιν*, among which partial souls rank when they are allotted a dæmoniacal condition, and that others are evil and noxious to souls. He asserts, therefore, that this lowest order of dæmons always contends with souls in their ascent and descent, especially western dæmons; for, according to the Egyptians, the west is accommodated to dæmons of this description. But the exposition of Jamblichus, Syrianus and Proclus is doubtless to be preferred, as more consistent with the nature of the dialogue; which refers it to the opposition perpetually flourishing in the universe between unity and

<sup>1</sup> A disciple of Plotinus contemporary with Porphyry.

<sup>2</sup> Not the father, of that name, but a disciple of Ammonius Saccas, and contemporary with Plotinus.

multitude,

multitude, bound and infinity, sameness and difference, motion and permanency, from which all things, the first cause being excepted, are composed. Likewise, being has either an essential or accidental subsistence, and is either incorporeal or corporeal: and if incorporeal, it either verges or does not verge to body. But bodies are either simple and immaterial, as the celestial bodies, or simple and material, as those of an ærial nature, or composite and material, as those of earth. So that the opposition of all these is occultly signified by that antient war; the higher and more excellent natures being every where implied by the Athenians, and those of a contrary order by the inhabitants of the Atlantic island.

That the reader, however, may be convinced that Plato's account of the Atlantic island is not a fiction of his own devising, let him attend to the following relation of one Marcellus, who wrote an history of Æthiopian affairs, according to Proclus<sup>1</sup>:—"That such, and so great, an island once existed, is evinced by those who have composed histories of things relative to the external sea. For they relate that in their times there were seven islands in the Atlantic sea, sacred to Proserpine: and besides these, three others of an immense magnitude; one of which was sacred to Pluto, another to Ammon, and another, which is the middle of these, and is of a thousand stadia, to Neptune. And besides this, that the inhabitants of this last island preserved the memory of the prodigious magnitude of the Atlantic island, as related by their ancestors; and of its governing for many periods all the islands in the Atlantic sea. And such is the relation of Marcellus in his Æthiopic history."

*Ὅτι μὲν ἐγένετο τοιαυτὴ τις νῆσος καὶ τετρακάτη, δὴλοῦσι τινες τῶν ἱστοροῦντων τὰ περὶ τῆς ἔξω θαλάττης. εἶναι γὰρ καὶ ἐν τοῖς αὐτῶν χρόνοις ἑπτὰ μὲν νήσους ἐν σκεῖνῃ τῆς πελάγει Περσεφόνης ἴσθου, τρεῖς δὲ ἄλλας ἀπείρους, τὴν μὲν Πλουτωνος, τὴν δὲ Ἀμμωνος, μισθὴν δὲ τουτοῦ ἀλλῆν Προσειδωνος, χιλίων σταδίων τὸ μέγεθος. Καὶ τοὺς οἰκοντάς ἐν αὐτῇ μνημὴν ἀπὸ τῶν προγενῶν διασωζέειν περὶ τῆς Ἀτλαντίδος οὕτως γενομένης ἐκεῖ νήσου παρμεγαθύστατης, ἣν ἐπὶ πολλὰς περιόδους δυσκοτεῖται πασῶν τῶν ἐν Ἀτλαντικῇ πελάγει νήσων. Ταῦτα μὲν οὐδὲ Μαρκελλὸς ἐν ταῖς Ἀιθιοπικοῖς γέγραφεν.*

Indeed it is not at all wonderful that so large an island should once have existed, nor improbable that many more such exist at present, though to us unknown, if we only consider the Platonic theory concerning the earth, of which the reader will find an account in the Introduction to the Phædo, and

<sup>1</sup> In Tim. p. 55.

which the following extraordinary passage from Proclus<sup>1</sup> abundantly confirms. “It is here (says he) requisite to remember the Platonic hypotheses concerning the earth. For Plato does not measure its magnitude after the same manner as mathematicians; but thinks that its interval is much greater, as Socrates asserts in the Phædo. In which dialogue also he says, that there are many habitable parts similar to our abode<sup>2</sup>. And hence he relates that an island and continent of this kind exist in the external or Atlantic sea. For, indeed, if the earth be naturally spherical, it is necessary that it should be such according to its greatest part. But the parts which we inhabit, both internally and externally, exhibit great inequality. In some parts of the earth, therefore, there must be an expanded plain, and an interval extended on high. For, according to the saying of Heraclitus, he who passes through a very profound region will arrive at the Atlantic mountain, whose magnitude is such, according to the relation of the Æthiopian historians, that it touches the æther, and casts a shadow of five thousand stadia in extent; for from the ninth hour of the day the sun is concealed by it, even to his perfect demerision under the earth. Nor is this wonderful: for Athos, a Macedonian mountain, casts a shadow as far as to Lemnos, which is distant from it seven hundred stadia. Nor are such particulars as these, which Marcellus the Æthiopic historian mentions, related only concerning the Atlantic mountain; but Ptolemy also says that the lunar mountains are of an immense height; and Aristotle, that Caucasus is enlightened by the rays of the sun a third part of the night after sun-set, and a third part before the rising of the sun. And if any one considers the whole magnitude of the earth,

<sup>1</sup> In Tim. p. 56.

<sup>2</sup> The latter Platonists appear to have been perfectly convinced that the earth contains two quarters in an opposite direction to Europe and Asia; and Olympiodorus even considers Plato as of the same opinion, as the following passage from his commentary on this part of the Phædo clearly evinces.—“Plato (says he) directs his attention to four parts of the globe, as there are two parts which we inhabit, i. e. Europe and Asia; so that there must be two others, in consequence of the antipodes.” *Καταστοχάζεται δε των τεσσαρων (τοπων) επειδη δυο καθ’ ημας εισιν, η Ευρωπη και η Ασια, ωστε δυο αλλοι κατα τους αντιποδας.* Now in consequence of this, as they were acquainted with Africa, the remaining fourth quarter must be that which we call America. At the same time let it be carefully remembered, that these four quarters are nothing more than four holes with respect to the whole earth, which contains many such parts; and that consequently they are not quarters of the earth itself, but only of a small part of the earth in which they are contained, like a small globe in one of a prodigious extent.



bounded by its elevated parts, he will conclude that it is truly of a prodigious magnitude, according to the assertion of Plato."

In the next place, by the fable of Phaëton we must understand the destruction of a considerable part of the earth through fire, by means of a comet being dissolved of a solar nature. Likewise, when he mentions a deluge, it is necessary to remember, that through the devastations of these two elements, fire and water, a more prolific regeneration of things takes place at certain periods of time; and that when Divinity intends a reformation, the heavenly bodies concur with this design in such a manner, that when a conflagration is about to take place, then, according to Berofus<sup>1</sup> the Chaldæan, all the planets are collected together in Cancer; but when a deluge, then the planets meet in Capricorn. With respect to Pallas and Neptune, who are mentioned in this part of the dialogue, as the reader will find an account of these Divinities in the Notes to the Cratylus, I shall only add at present, that, according to Proclus, Minerva most eminently presides in the celestial constellation called the Ram, and in the equinoctial circle, where a power motive of the universe principally prevails.

Again, it is necessary to understand, that when the world is said by Plato to be *generated*, this term expresses its flowing and composite nature, and does not imply any temporal commencement of its existence. For, as the world was necessarily produced according to essential power, this being the most perfect of all modes of operation, it is also necessary that it should be coexistent with its artificer; just as the sun produces light coexistent with itself, fire heat, and snow coldness. The reader must, however, carefully observe, that when we say it is necessary that the cause of the universe should operate according to power, we do not understand a necessity which implies violence or constraint; but that necessity which Aristotle<sup>2</sup> defines as the perfectly simple, and which cannot have a multifarious subsistence. And hence this term, when applied to the most exalted natures, to whom alone in this sense it belongs, signifies nothing more than an impossibility of subsisting otherwise than they do, without falling from the perfection of their nature. Agreeably to this definition, Necessity was called by ancient theologians Adrastia and Themis, or the perfectly right and just:

<sup>1</sup> Vid. Senec. Natural. Quæst. III. 29.

<sup>2</sup> Metaphys. lib. 5.

and if men of the present day had but attended to this signification of the word, i. e. if any edition of Aristotle's works, with a *copious index* mentioning this sense of necessity, had fortunately existed, they would not have ignorantly supposed that this word, when applied to divine natures, signified constraint, violence, and over-ruling power. As intellect, therefore, is eternal, both according to essence and energy, and as soul is eternal in essence, but temporal in energy, so the world is temporal both in essence and energy. Hence, every thing prior to soul always *is*, and is never generated; but soul both *is*, and is perpetually generated; and the world never *is*, but is always generated: and whatever the world contains in like manner never is; but instead of being always generated, like the whole world, is so at some particular time. Because the world therefore is conversant with perpetual motion and time, it may be said to be always generated, or advancing towards being; and therefore never truly is. So that it resembles the image of a mountain beheld in a torrent, which has the appearance of a mountain without the reality, and which is continually renewed by the continual renovation of the stream. But soul, which is eternal in essence, and temporal in energy, may be compared to the image of the same rock beheld in a pool, and which, of course, when compared with the image in the torrent, may be said to be permanently the same. In fine, as Proclus well observes, Plato means nothing more by *generation* than the formation of bodies, i. e. a motion or procession towards the integrity and perfection of the universe.

Again, by the *demiurgus* and *father* of the world we must understand Jupiter, who subsists at the extremity of the *intellectual triad*<sup>1</sup>; and *αὐτὸ ζῶον*, or *animal itself*, which is the exemplar of the world, and from the contemplation of which it was fabricated by Jupiter, is the last of the *intelligible triad*, and is same with the Phanes of Orpheus: for the theologist represents Phanes as an animal with the heads of various beasts, as may be seen in our Notes to the Parmenides. Nor let the reader be disturbed on finding that, according to Plato, the first cause is not the immediate cause of the universe; for this is not through any defect or imbecility of nature, but, on the contrary, is the consequence of transcendency of power. For, as the first cause

<sup>1</sup> See the Notes on the Cratylus and Parmenides.

is the same with *the one*, a unifying energy must be the prerogative of his nature; and as he is likewise perfectly superessential, if the world were his immediate progeny, it must be as much as possible superessential and profoundly one: but as this is not the case, it is necessary that it should be formed by intellect and moved by soul. So that it derives the unity and goodness of its nature from the first cause, the orderly disposition and distinction of its parts from Jupiter its artificer, and its perpetual motion from soul; the whole at the same time proceeding from the first cause through proper mediums. Nor is it more difficult to conceive matter after this manner invested with form and distributed into order, than to conceive a potter making clay with his own hands, giving it a shape when made, through the assistance of a wheel, and, when fashioned, adorning it through another instrument with figures; at the same time being careful to remember, that in this latter instance different instruments are required through the imbecility of the artificer, but that in the former various mediums are necessary from the transcendency of power which subsists in the original cause. And from all this it is easy to infer, that matter was not prior to the world by any interval of time, but only in the order of composition; priority here implying nothing more than that which must be considered as first in the construction of the world. Nor was it hurled about in a disordered state prior to order; but this only signifies its confused and tumultuous nature, when considered in itself, divested of the supervening irradiations of form.

With respect to the four elements, I add, in addition to what has been said before, that their powers are beautifully disposed by Proclus as follows, viz:

FIRE.	AIR.
Subtle, acute, movable.	Subtle, blunt, movable.
WATER.	EARTH.
Dense, blunt, movable.	Dense, blunt, immovable.

In which disposition you may perceive how admirably the two extremes fire and earth are connected, though indeed it is the peculiar excellence of the Platonic philosophy to find out in every thing becoming mediums through that part of the dialectic art called division; and it is owing to this that the philosophy

philosophy itself forms so regular and consistent a whole. But I have invented the following numbers for the purpose of representing this distribution of the elements arithmetically.

Let the number 60 represent fire, and 480 earth; and the mediums between these, viz. 120 and 240, will correspond to air and water. For as  $60 : 120 :: 240 : 480$ . But  $60 = 3 \times 5 \times 4$ .  $120 = 3 \times 10 \times 4$ .  $240 = 6 \times 10 \times 4$ . and  $480 = 6 \times 10 \times 8$ . So that these numbers will correspond to the properties of the elements as follows :

FIRE :	AIR ::
$3 \times 5 \times 4 :$	$3 \times 10 \times 4 ::$
Subtle, acute, movable :	Subtle, blunt, movable.
WATER :	EARTH.
$6 \times 10 \times 4 ::$	$6 \times 10 \times 8$
Dense, blunt, movable ::	Dense, blunt, immovable.

With respect to fire it must be observed, that the Platonists consider *light*, *flame*, and *a burning coal*,  $\Phi\omega\varsigma$ ,  $\Phi\lambda\omicron\xi$ ,  $\alpha\nu\theta\rho\alpha\xi$ , as differing from each other; and that a subjection or remission of fire takes place from on high to the earth, proceeding, as we have before observed, from that which is more immaterial, pure, and incorporeal, as far as to the most material and dense bodies: the last proceſſion of fire being subterranean; for, according to Empedocles, there are many rivers of fire under the earth. So that one kind of fire is material and another immaterial, i. e. when compared with sublunary matter; and one kind is corruptible, but another incorruptible; and one is mixed with air, but another is perfectly pure. The characteristic too of fire is neither heat nor a motion upwards, for this is the property only of our terrestrial fire; and this in consequence of not subsisting in its proper place: but the essential peculiarity of fire is visibility; for this belongs to all fire, i. e. to the *divine*, the *mortal*, the *burning*, and the *impetuous*. It must, however, be carefully observed, that our eyes are by no means the standards of this visibility: for we cannot perceive the celestial spheres, on account of fire and air in their composition so much predominating over earth; and many terrestrial bodies emit no light when considerably heated, owing

owing to the fire which they contain being wholly absorbed, as it were, in gross and ponderous earth.

In like manner, with respect to earth, the characteristic of its nature is solidity and tangibility, but not ponderosity and a tendency downwards; for these properties do not subsist in every species of earth. Hence, when we consider these two elements according to their opposite subsistence, we shall find that fire is always in motion, but earth always immovable; that fire is eminently visible, and earth eminently tangible; and that fire is of a most attenuated nature through light, but that earth is most dense through darkness. So that as fire is essentially the cause of light, in like manner, earth is essentially the cause of darkness; while air and water subsisting as mediums between these two, are, on account of their diaphanous nature, the causes of visibility to other things, but not to themselves. In the mean time moisture is common both to air and water, connecting and conglutinating earth, but becoming the seat of fire, and affording nourishment and stability to its flowing nature.

With respect to the composition of the mundane soul, it is necessary to observe that there are five genera of being, from which all things after the first being are composed, viz. *essence, permanency, motion, sameness, difference*. For every thing must possess *essence*; must *abide* in its cause, from which also it must *proceed*, and to which it must be *converted*; must be the *same* with itself and certain other natures, and at the same time *different* from others and distinguished in itself. But Plato, for the sake of brevity, assumes only three of these in the composition of the soul, viz. *essence, sameness, and difference*; for the other two must necessarily subsist in conjunction with these. But by a nature impartible, or without parts, we must understand intellect, and by that nature which is divisible about body, corporeal life. The mundane soul, therefore, is a medium between the mundane intellect and the whole of that corporeal life which the world participates. We must not, however, suppose that when the soul is said to be mingled from these two, the impartible and partible natures are consumed in the mixture, as is the case when corporeal substances are mingled together; but we must understand that the soul is of a middle nature between these, so as to be different from each, and yet a participant of each.

The first numbers of the soul are these: 1, 2, 3, 4, 9, 8, 27; but the other numbers are,

	6	
8		9
9		12
12		18
16		27
18		36
24		54
32		81
36		108
48		162

But in order to understand these numbers mathematically, it is necessary to know, in the first place, what is meant by arithmetical, geometrical, and harmonic proportion. Arithmetical proportion, then, is when an equal excess is preserved in three or more given numbers; geometrical, when numbers preserve the same ratio; and harmonic, when the middle term is exceeded by the greater, by the same part of the greater as the excess of the middle term above the lesser exceeds the lesser. Hence, the numbers 1, 2, 3, are in arithmetical proportion; 2, 4, 8, in geometrical, since as 2 is to 4, so is 4 to 8; and 6, 4, 3, are in harmonic proportion, for 4 is exceeded by 6 by 2, which is a third part of 6, and 4 exceeds 3 by 1, which is the third part of 3. Again, sesquialter proportion is when one number contains another and the half of it besides, such as the proportion of three to 2; but sesquitercian proportion takes place when a greater number contains a lesser, and besides this, a third part of the lesser, as 4 to 3; and a sesquioctave ratio is when a greater number contains a lesser one, and an eighth part of it besides, as 9 to 8; and this proportion produces in music an entire tone, which is the principle of all symphony. But a tone contains five symphonies, viz. the *diatessaron*, or sesquitercian proportion, which is composed from two tones, and a semitone, which is a sound less than a tone; the *diapente*, or sesquialter proportion, which is composed from three tones and a semitone; the *diapason*, or duple proportion, i. e. four to two, which is composed from six tones; the *diapason diapente*, which consists of nine tones  
and

and a semitone; and the *disdiapason*, or quadruple proportion, i. e. four to one, which contains twelve tones.

But it is necessary to observe further concerning a tone, that it cannot be divided into two equal parts; because it is composed from a sesquioctave proportion, and 9 cannot be divided into two equal parts. Hence, it can only be divided into two unequal parts, which are usually called semitones; but by Plato *λειμματα*, or *remainders*. But the lesser part of a tone was called by the Pythagoreans *diesis*, or *division*; and this is surpassed by a sesquitercian proportion by two tones; and the remaining greater part, by which the tone surpasses the less semitone, is called *apotome*, or a *cutting off*.

But as it is requisite to explain the different kinds of harmony, in order to a knowledge of the composition of symphonies, let the reader take notice that harmony receives a triple division, into the Diatonic, Enharmonic, and Chromatic. And the Diatonic genus takes place when its division continually proceeds through a less semitone and two tones. But the Enharmonic proceeds through two dieses. And the Chromatic is that which ascends through two unequal semitones and three semitones; or *τριημιτονιον*, according to the appellation of the antient musicians. And to these three genera all musical instruments are reduced, because they are all composed from these harmonies. But though there were many different kinds of instruments among the antients, yet the Pythagorean and Platonic philosophers used only three—the Monochord, the Tetrachord, and the Polychord; to which three they refer the composition of all the other instruments. From among all these, therefore, Plato assumes the *diatonic* harmony, as more agreeable to nature; in which the tetrachord proceeds through a less semitone and two tones; tending by this means from a less to a greater semitone, as from a more slender to a more powerful matter, which possesses a simple form, and is at the same time both gentle and robust. And hence, as all instruments are conversant with these three kinds of harmony, Plato, says Proclus, in consequence of preferring the diatonic harmony, alone uses two tones when he orders us to fill up the sesquitercian, sesquioctave and semitone intervals.

With respect to the first numbers, which are evidently those described by Plato, the first three of these, 1, 2, 3, as Syrianus beautifully observes, may

be considered as representing the soul of the world, abiding in, proceeding from, and returning to, herself, viz. abiding according to that first part, proceeding through the second, and this without any passivity or imbecility, but returning according to the third: for that which is perfective accedes to beings through conversion. But as the whole of the mundane soul is perfect, united with intelligibles, and eternally abiding in intellect, hence she providentially presides over secondary natures; in one respect indeed over those which are as it were proximately connected with herself, and in another over solid and compacted bulks. But her providence over each of these is twofold. For those which are connected with her essence in a following order, proceed from her according to the power of the fourth term (4), which possesses generative powers; but return to her according to the fifth (9), which reduces them to one. Again, solid natures, and all the species which are discerned in corporeal masses, proceed according to the octuple of the first part (i. e. according to 8), which number is produced by two, is solid, and possesses generative powers proceeding to all things; but they return according to the number 27, which is the regression of solids, proceeding as it were from the ternary, and existing of the same order according to nature: for such are all odd numbers.

And thus much for the first series of numbers, in which duple and triple ratios are comprehended; but after this follows another series, in which the duple are filled with sesquitercian and sesquialter ratios, and the sesquitercian spaces receive a tone. And here, in the first place, in the duple progression between 6 and 12, we may perceive two mediums, 8 and 9. And 8 indeed subsists between 6 and 12 in an harmonic ratio; for it exceeds 6 by a third part of 6, and it is in like manner exceeded by 12 by a third part of 12. Likewise 8 is in a sesquitercian ratio to 6, but 12 is sesquialter to 8. Besides, the difference between 12 and 8 is 4, but the difference between 8 and 6 is 2. And hence, 4 to 2, as well as 12 to 6, contains a duple ratio: and these are the ratios in which the artifice of harmony is continually employed. We may likewise compare 9 to 6 which is sesquialter, 12 to 9 which is sesquitercian, and 9 to 8 which is sesquioctave, and forms a tone; and from this comparison we shall perceive that two sesquitercian ratios are bound together by this sesquioctave, viz. 8 to 6 and 9 to 12. Nor is an arithmetical medium wanting in these numbers; for 9 exceeds 6 by 3, and is by the same number exceeded



exceeded by 12. And in the same manner we may proceed in all the following duple ratios, binding the duple by the sesquitercian and sesquialter, and connecting the two sesquitercians by a sesquiocave ratio. We may run through the triple proportions too in a similar manner, excepting in the tone. But because sesquitercian ratios are not alone produced from two tones, but from a semitone, and this a lesser, which is deficient from a full tone by certain small parts, hence Plato says, that in the sesquitercian ratios a certain small portion remains <sup>1</sup>. And thus much may suffice for an epitome of the mode in which the duple and triple intervals are filled.

But the words of Plato respecting these intervals plainly show, as Proclus well observes, that he follows in this instance the doctrine of the ancient theologians. For they assert, that in the artificer of the universe there are separating and connecting powers, and that through the former he separates his government from that of his father Saturn, but through the latter applies the whole of his fabrication to his paternal unity; and they call these operations incisives and bonds. Hence the demiurgus, dividing the essence of the soul, according to these powers in demiurgic bounds, is said to cut the parts from their totality, and again to bind the same with certain bonds, which are *μεσοτητες*, *middles* or *mediums*, and through which he connects that which is divided, in the same manner as he divides, through sections, that which is united. And as the first numbers, 1, 2, 3, 4, 9, 8, 27, represented those powers of the soul by which she abides in, proceeds from, and returns to, herself, and causes the progression and conversion of the parts of the universe—so, in these second numbers, the sesquitercian, sesquialter, and other ratios constitute the more particular ornament of the world; and, while they subsist as wholes themselves, adorn the parts of its parts.

I only add, that we must not suppose these numbers of the soul to be a multitude of unities; but we must conceive them to be vital self-motive natures, which are indeed the images of intellectual numbers, but the exemplars of such as are apparent to the eye of sense. In like manner, with respect to harmony, soul is neither harmony itself, nor that which subsists in harmonized natures. For harmony itself is uniform, separate, and exempt from the whole of things harmonized; but that which subsists in things har-

<sup>1</sup> The proportion of 256 to 243 produces what is called in music *λεμμα*, *λίμμα*, or that which remains.

monized is dependent on others, by which also it is naturally moved. But the harmony of the soul subsists in the middle of these two, imparting harmony to others, and being the first participant of it herself.

In order to understand the figure of the soul, in the first place, mathematically, conceive all the above-mentioned numbers to be described in a certain straight rule, according to the whole of its breadth; and conceive this rule to be afterwards divided according to its length. Then all these ratios will subsist in each part of the section. For, if the division were made according to breadth, it would be necessary that some of the numbers should be separated on this side, and others on that. Afterwards let the two lengths of the rule be mutually applied to each other, viz. in the points which divide these lengths in half: but let them not be so applied as to form right angles, for the intended circles are not of this kind. Again, let the two lengths be so incurvated, that the extremes may touch each other; then two circles will be produced, one interior and the other exterior, and they will be mutually oblique to each other. But one of these will be the circle of *sameness*, and the other of *difference*; and the one will subsist according to the equinoctial circle, but the other according to the zodiac: for every circle of difference is rolled about this, as of identity about the equinoctial. Hence, these rectilinear sections ought not to be applied at right angles, but according to the similitude of the letter X, agreeably to the mind of Plato, so that the angles in the summit only may be equal; for neither does the zodiac cut the equinoctial at right angles. And thus much for the mathematical explanation of the figure of the soul.

But again, says Proclus, referring the whole of our discourse to the essence of the soul, we shall say that, according to the mathematical disciplines, continuous and discrete quantity seem in a certain respect to be contrary to each other; but in soul both concur together, i. e. union and division. For soul is both unity and multitude, and one reason and many; and so far as she is a whole she is continuous, but so far as number she is divided, according to the reasons which she contains. Hence, according to her continuity, she is assimilated to the union of intelligibles; but, according to her multitude, to their distinction. And if you are willing to ascend still higher in speculations, soul, according to her union, possesses a vestige and resemblance of *the one*, but according to her division she exhibits the multitude

of

of divine numbers. Hence we must not say that she alone possesses an arithmetical essence, for she would not be continuous; nor alone a geometrical essence, for she would not be divided: she is therefore both at once, and must be called both arithmetical and geometrical. But so far as she is arithmetical, she has at the same time harmony conjoined with her essence; for the multitude which she contains is elegant and composite, and receives in the same and at once both that which is essential quantity and that which is related. But so far as she is geometrical, she has that which is spherical connected with her essence. For the circles which she contains are both immovable and moved; immovable indeed according to essence, but moved according to a vital energy; or, to speak more properly, they may be said to possess both of these at once, for they are self-motive: and that which is self-motive is both moved and is at the same time immovable, since a motive power seems to belong to an immovable nature. Soul, therefore, essentially pre-assumes all disciplines; the geometrical, according to her totality, her forms, and her lines; the arithmetical, according to her multitude and essential unities; the harmonical, according to the ratios of numbers; and the spherical, according to her double circulations. And, in short, she is the essential, self-motive, intellectual, and united bond of all disciplines, purely comprehending all things; figures in an unfigured manner; unitedly such things as are divided; and without distance such as are distant from each other.

We are likewise informed by Proclus, that, according to Porphyry, a character like the letter X comprehended in a circle was a symbol with the Egyptians of the mundane soul; by the right lines, perhaps (says he), signifying its bifurcated progression, but by the circle its uniform life and intellectual progress, which is of a circular nature. But of these circles the exterior, or the circle of sameness, represents the dianoëtic power of the soul; but the interior, or the circle of difference, the power which energizes according to opinion: and the motion which is perpetually revolved in sameness, and which comprehends the soul, is intellect.

Again, we have before observed that, according to the Platonic philosophy, the planets revolve with a kind of spiral motion; while variously wandering under the oblique zodiac, they at one time verge to the south, and at another to the north, sometimes advance, and sometimes retreat, and being at one  
time

time more distant from and at another nearer to the earth. And this motion, indeed, very properly belongs to them, from their middle position, as it is a medium between the right-lined motion of the elements and the circular motion of the innerratic sphere: for a spiral is mixed from the right line and circle. Add too, that there are seven motions in the heavens; the circular, before, behind, upwards, downwards, to the right hand, and to the left. But the spheres alone possess a circular motion. And the stars in the innerratic sphere revolve about their centres; but at the same time have an advancing motion, because they are drawn along towards the west by the sphere in which they are fixed. But they are entirely destitute of the other five motions. On the contrary, the planets have all the seven. For they revolve about their own centres, but are carried by the motions of their spheres towards the east. And besides this, they are carried upwards and downwards, behind and before, to the right hand and to the left. Every star, too, by its revolution about its own centre, imitates the energy of the soul which it contains about its own intellect; but by following the motion of its sphere, it imitates the energy of the sphere about a superior intellect. We may likewise add, that the uniformity in the motions of the fixed stars confers union and perseverance on inferior concerns; but that the manifold and opposite motions of the planets contribute to the production, mingling and governing of things various and opposite.

And here, as the reader will doubtless be desirous of knowing why earth is called by Plato the first and most antient of the Gods within the heavens, I doubt not but he will gratefully receive the following epitome of the beautiful account given by Proclus of the earth in his inestimable commentaries on this venerable dialogue.—“Earth (says he) first proceeds from the intelligible earth which comprehends all the intelligible orders of the Gods, and from the intellectual earth which is co-ordinated with heaven. For our earth, being analogous to these, eternally abides, as in the centre of heaven; by which being every way comprehended, it becomes full of generative power and demiurgic perfection. The true earth, therefore, is not this corporeal and gross bulk, but an animal endued with a divine soul and a divine body. For it contains an immaterial and separate intellect, and a divine soul energizing about this intellect, and an ethereal body proximately depending on this soul; and, lastly, this visible bulk, which is on all sides animated and  
filled

filled with life from its inspiring soul, and through which it generates and nourishes lives of all-various kinds. For one species of life is rooted in the earth, and another moves about its surface. For how is it possible that plants should live while abiding in the earth, but when separated from it die, unless its visible bulk was full of life? Indeed it must universally follow that wholes must be animated prior to parts: for it would be ridiculous that man should participate of a rational soul and of intellect, but that earth and air should be deprived of a soul, sublimely carried in these elements as in a chariot, governing them from on high, and preserving them in the limits accommodated to their nature. For, as Theophrastus well observes, wholes would possess less authority than parts, and things eternal than such as are corruptible, if deprived of the possession of soul. Hence there must necessarily be a soul and intellect in the earth, the former causing her to be prolific, and the latter connectedly containing her in the middle of the universe. So that earth is a divine animal, full of intellectual and animastic essences, and of immaterial powers. For if a partial soul, such as ours, in conjunction with its proper ethereal vehicle, is able to exercise an exuberant energy in a material body, what ought we to think of a soul so divine as that of the earth? Ought we not to assert, that by a much greater priority she uses these apparent bodies through other middle vehicles, and through these enables them to receive her divine illuminations?

“Earth then subsisting in this manner, she is said, in the first place, to be our nurse, as possessing, in a certain respect, a power equivalent to heaven; and because, as heaven comprehends divine animals, so earth appears to contain such as are earthly. And, in the second place, as inspiring our life from her own proper life. For she not only yields us fruits, and nourishes our bodies through these, but she fills our souls with illuminations from her own divine soul, and through her intellect awakens ours from its oblivious sleep. And thus, through the whole of herself, she becomes the nurse of our whole composition.

“But we may consider the poles as powers which give stability to the universe, and excite the whole of its bulk to intelligible love; which connect a divisible nature indivisibly, and that which possesses interval in an united and indistant manner. But the axis is one divinity congregating the centres of the universe, connecting the whole world, and moving its  
divine

divine circulations; about which the revolutions of the stars subsist, and which sustains the whole of the heavens by its power. And hence it is called Atlas, from the immutable and unwearied energy with which it is endued. Add too that the word *τεταμεινός*, *extended*, signifies that this one power is Titanic, guarding the circulations of the wholes which the universe contains.

“Earth is likewise called the guardian and fabricator of night and day. And that she causes the night indeed is evident; for her magnitude and figure give that great extent to the conical shadow which she produces. But she is the fabricator of the day, considered as giving perfection to the day which is conjoined with night; so that earth is the artificer of both these in conjunction with the sun.

“But she is the most antient and first of the Gods in the heavens, considered with respect to her stability and generative power, her symphony with heaven, and her position in the centre of the universe. For the centre possesses a mighty power in the universe, as connecting all its circulations; and hence it was called by the Pythagoreans the tower of Jupiter, from its containing a demiurgic guard. And if we recollect the Platonic hypothesis concerning the earth (which we have mentioned before), that our habitable part is nothing but a dark hollow, and very different from the true earth, which is adorned with a beauty similar to that of the heavens, we shall have no occasion to wonder at her being called the first and most antient of the celestial Gods.”

Again, according to the Platonic philosophy, some of the fixed stars are sometimes so affected, that for a considerable space of time they become invisible to us; and in this case, both when they withdraw themselves from our view, and when they again make their appearance, they are said by such as are skilled in these affairs, according to the information of Proclus<sup>1</sup>, both to produce and signify mighty events. But though it is evident from the very words of Plato, in this part of the dialogue, that this opinion concerning certain stars disappearing and becoming again visible was entertained by all the astronomers of his time, and by the Pythagoreans prior to him,

<sup>1</sup> In Tim. p. 285. And in p. 333 he informs us, that the fixed stars have periods of revolution, though to us unknown, and that different stars have different periods. See also Chalcidius in Plat. Tim. p. 218.

yet this most interesting circumstance seems to have been utterly unknown to the moderns. Hence, not in the least suspecting this to be the case, they have immediately concluded from stars appearing of which we have no account, and others disappearing which have been observed in the heavens for many ages, that the stars are bodies, like earthly natures, subject to generation and decay. But this is not wonderful, if we consider that such men as these have not the smallest conception that the universe is a perfect whole; that every thing perfect must have a first, middle, and last; and that, in consequence of this, the heavens alone can rank in the first place, and earth in the last.

As the universe, indeed, as well as each of its principal parts or *wholes*, is *perpetual*, and as this perpetuity being temporal can only subsist by periodical circulation, hence all the celestial bodies, in order that all the possible variety of things may be unfolded, form different periods at different times; and their appearings and disappearings are nothing more than the restitutions of their circulations to their pristine state, and the beginnings of new periods. For according to these especially, says Proclus, they turn and transmute mundane natures, and bring on abundant corruptions and mighty mutations, as Plato asserts in the Republic.

In the next place, from the sublime speech of the demiurgus to the junior or mundane Gods, the reader may obtain full conviction that the Gods of the antients were not dead men deified; for they are here represented as commanded by the mundane artificer to fabricate the whole of the mortal race. And with respect to the properties of the sublunary Gods, which Plato comprehends in nine divinities, Proclus beautifully observes that *Heaven* bounds, *Earth* corroborates, and *Ocean* moves, the whole of generation. That *Tethys* establishes every thing in its proper motion, intellectual natures in intellectual, middle natures in animal, and corporeal natures in physical motion; *Ocean* at the same time moving all things collected together in one. But *Saturn* distributes intellectually only, *Rhea* vivifies, *Phorcys* scatters spermatic reasons, *Jupiter* gives perfection to things apparent from unapparent causes, and *Juno* evolves according to the all-various mutations of apparent natures. And thus through this ennead the sublunary world is in a becoming manner distributed and filled; divinely indeed from the Gods, angelically from angels, and dæmoniacally from

dæmons. And again, the Gods subsisting about bodies, souls, and intellects; angels exhibiting their providence about souls and bodies; and dæmons being divided about the fabrication of nature, and the care of bodies. But it may be asked, Why does Plato comprehend the whole extent of the Gods producing generation, in these nine divinities? Because, says Proclus, this ennead accomplishes the fabrication of generation. For in the sublunary regions there are bodies and natures, souls and intellects, and these both totally and partially. And all these subsist in both respects, that is both totally and partially, in each of the elements, because wholes and parts subsist together. Hence, as each element ranks as a monad, and contains bodies and natures, souls and intellects, both totally and partially, an ennead will evidently be produced in each. But *Heaven* and *Earth* generate the unapparent essences of these, the former according to union, and the latter according to multiplication: but *Ocean* and *Tethys* give perfection to their common and distributed motion; at the same time that the motion of each is different. In like manner, with respect to the wholes which are adorned, *Saturn* distributes things partial from such as are total, but in an intellectual manner. But *Rhea* calls forth this distribution from intellectual natures into all-various progressions, and as far as to the ultimate forms of life, in consequence of her being a vivific Goddess. But *Phorcys* produces the Titanic distinction, as far as to natural reasons. And after these three, the fathers of composite natures succeed. And Jupiter indeed orderly disposes sensible natures totally, in imitation of *Heaven*. For in the intellectual order, and in the royal series, he proceeds analogous to *Heaven*<sup>1</sup>. But Juno moves the wholes, fills them with powers, and unfolds them according to every progression. And the Gods posterior to these fabricate the partial works of sensible natures, according to the characteristics by which they are distinguished; viz. the demiurgic, the vivific, the perfective, and the connective, unfolding and distributing themselves as far as to the last of things. For these last are all of them analogous to the Saturnian order, from whose government the distributive characteristic originally proceeds.

Again, by the *Crater* in which the mundane soul was mingled, we must

<sup>1</sup> For there are six kings, according to Orpheus, who preside over the universe—Phanes, Night, Heaven, Saturn, Jupiter, Bacchus; and of these Saturn proceeds analogous to Phanes, and Jupiter to Heaven.

understand



understand the vivific Goddeſs Juno; by the term *mingling*, a communion of eſſence; and by a ſecond mixture in a certain reſpect the ſame, but yet deficient from the firſt in a ſecond and third degree, the ſimilitude and at the ſame time inferiority of partial to total ſouls, and the order ſubſiſting among partial ſouls. For ſome of theſe are pure and undefiled, aſſociating with generation but for a ſhort time, and this for the God-like purpoſe of benefiting more ingenious ſouls; but others wander from their true country for very extended periods of time. For between ſouls which abide on high without deſilement, and ſuch as deſcend and are deſiled with vice, the medium muſt be ſuch ſouls as deſcend, indeed, but without deſilement.

But when the artifiſer of the univerſe is ſaid to have diſtributed ſouls equal in number to the ſtars, this muſt not be underſtood as if one partial ſoul was diſtributed under one of the ſtars, and that the quantity of ſouls is equal to that of the ſtarry Gods; for this would be perfectly inconſiſtent with what Plato aſſerts a little before, that the artifiſer diſſeminated ſome of theſe into the earth, ſome into the ſun and ſome into the moon, thus ſcattering a multitude into each of the inſtruments of time. But, as Proclus well obſerves, equality of number here muſt not be underſtood monadically, but according to analogy. For in numbers, ſays he, ten is analogous to unity, thirty to three, fifty to five, and entirely all the numbers poſterior to the decad, to all within the decad. And hence five is not equal to fifty in quantity, nor three to thirty, but they are only equal according to analogy. After this manner, therefore, the equal in number muſt be aſſumed in partial ſouls; ſince there is a number of theſe accommodated to every divine ſoul, and which each divine ſoul uniformly pre-aſſumes in itſelf. And hence, when it unfolds this number, it bounds the multitude of partial ſouls diſtributed under its eſſence. Likewise, with reſpect to theſe depending ſouls, ſuch as are firſt ſuſpended from a divine ſoul are leſs in number, but greater in power; but ſuch as are ſecond in progreſſion are leſs in power, but more extended in number; while at the ſame time each is analogous to the divine cauſe from which it proceeds.

Obſerve, too, that when Plato uſes the term *the moſt pious of animals*, man alone is not implied, but the inhabitants likewise or partial ſouls of the ſeveral ſpheres and ſtars: for, ſays Proclus, between eternal animals <sup>1</sup>, and

<sup>1</sup> i. e. ſtars and ſpheres.

such as live but for a short period <sup>1</sup>, (viz. whose periods of circulation are short) it is necessary there should be a species of rational animals more divine than man, and whose existence is of a very extended duration. It is likewise worthy of observation, that the soul is conjoined with this gross body through two vehicles as mediums, one of which is ethereal and the other aerial: and of these the ethereal vehicle is *simple and immaterial*, but the aerial *simple and material*; and this dense earthly body is *composite and material*.

Again, when our souls are represented after falling into the present body as suffering a transmutation into brutes, this, as Proclus beautifully observes, must not be understood as if our souls ever became the animating principles of brutal bodies, but that by a certain sympathy they are bound to the souls of brutes, and are as it were carried in them, just as evil dæmons insinuate themselves into our phantasy, through their own depraved imaginations. And by the circulations of the soul being merged in a profound river and impetuously borne along, we must understand by the river, not the human body alone, but the whole of generation (with which we are externally surrounded) through its swift and unstable flowing. For thus, says Proclus, Plato in the Republic calls the whole of generated nature the river of Lethe, which contains both Lethe and the meadow of Ate, according to Empedocles <sup>2</sup>; the devouring jaws of matter and the light-hating world, as it is called by the Gods; and the winding rivers under which many are drawn down, as the oracles <sup>3</sup> assert. But by the circulations of the soul the diænoëtic and doxastic powers are signified; the former of which, through the soul's conjunction with the body, is impeded in its energies, and the latter is Titanically torn in pieces under the irrational life.

Again, if we consider man with reference to a contemplative life, which is the true end of his formation, we shall find that the head, which is the instrument of contemplation, is the principal member, and that the other members were only added as ministrant to the head. With respect to sight,

<sup>1</sup> i. e. men.

<sup>2</sup> Εν ἢ και ἡ Αἴθρη, και ὁ τῆς Αἴθης λειμῶν, ὡς φησιν Ἐμπεδοκλῆς, και το λαβρον τῆς ἰλῆς, και ὁ μισοφαιης κοσμος, ὡς οἱ θεοι λεγουσι, και τα σκολια ρειθρα, ὑφ' ὧν οἱ πολλοι κατασυρονται, ὡς τα λογια φησι. Procl. in Tim. p. 339. See more concerning this in my Dissertation on the Eleusinian and Bacchic Mysteries.

<sup>3</sup> Viz. the oracles of Zoroaster.

it must be observed that Democritus, Heraclitus, the Stoics, many of the Peripatetics and ancient geometricians, together with the Platonists, were of opinion that vision subsists through a lucid spirit emitted from the eyes : and this spirit, according to Plato and his followers, is an unburning vivific fire similar to celestial fire, from which it originally proceeds. But this fire, the illuminations of which, as we have already observed, give life to our mortal part, is abundantly collected in the eye as in a fat diaphanous substance, whose moisture is most shining and whose membranes are tender and transparent, but yet sufficiently firm for the purpose of preserving the inherent light. But a most serene ray shines through the more solid pupil ; and this ray originates internally from one nerve, but is afterwards derived through two small nerves to the two eyes. And these nerves, through the fat humours of the eyes, winding under the tunics, arrive at length at the pupils. But a light of this kind, thus preserved in the small nerves, and bursting through the narrow pupils as soon as it shines forth into dispersed rays, as it commenced from one ray, so it immediately returns into one, from the rays naturally uniting in one common ray : for the eyes also, on account of their lubricity, roundness, and smooth substance, are easily moved hither and thither, with an equal and similar revolution. This visual ray, however, cannot proceed externally and perceive objects at a distance, unless it is conjoined with external light proceeding conically to the eyes ; and hence our ray insinuating itself into this light, and becoming strengthened by the association, continues its progression till it meets with some opposing object. But when this is the case, it either diffuses itself through the superficies of the object, or runs through it with wonderful celerity, and becomes immediately affected with the quality of the object. And a resistance, motion, and affection of this kind produces vision, viz. from the vibration of the ray thus affected gradually arriving at the instrument of sight, and by this means exciting that image of the object which is naturally inherent in the instrument, and through which when excited perception ensues. For there are three particulars which belong in general to all the senses ; first, an image or mark of the sensible thing impressed in the sensitive instrument ; and this constituted both in passion and energy in a certain similitude to the sensible object : but afterwards we must consider an impression of this kind as now perfect, and ending in species, viz. in the common composite life :  
and

and, in the third place, that inherent reason of the soul ensues, which germinates from the sensitive soul, is accommodated to species of this kind, and is that through which sensitive judgment and cogitation subsist.

But further, the Platonists admit, with Democritus and Empedocles, that certain material images of things flow through the pores of bodies, and preserve, to a certain distance, not only the qualities but likewise the shape of the bodies from which they flow. And these radial images are intimated by Plato in this dialogue, in the Sophista, and in the seventh book of his Republic; in commenting on the last of which, Proclus observes as follows: "According to Plato, (says he) representations of things are hypostases of certain images fabricated by a dæmoniacal art, as he teaches us in the Sophista; for shadows, of which they say images are the companions, possess a nature of this kind. For these are the effigies of bodies and figures, and have an abundant sympathy with the things from which they fall; as is evident from what the arts of magicians are able to effect, and from what they tell us concerning images and shadows. But why should I speak of the powers of magicians, when irrational animals are able to operate through images and shadows, prior to all reason? for they say that the hyæna, by trampling on the shadow of a dog seated on an eminence, will hurl him down and devour him; and Aristotle says, that if a woman, during her menstrua, looks into a mirror, she will defile both the mirror and the apparent image."—*Ὅτι κατὰ Πλατῶνα αἱ ἐμφασεῖς ὑποστάσεις εἰσὶν εἰδῶν τινῶν δαιμονίᾳ μηχανῇ δημιουργουμέναι, καθάπερ αὐτὸς ἐν τῷ σοφιστῇ διδάσκει. Καὶ γὰρ αἱ σκῆαι αἷς τὰ εἰδῶλα συζυγεῖν φησὶ τοιαύτην ἔχουσι φύσιν. Καὶ γὰρ αὐταὶ σωματῶν εἰσὶ καὶ σχημάτων εἰκόνες, καὶ παντὸς ἔχουσι πρὸς τὰ ἀφ' ὧν ἐπιπίπτουσι συμπάθειαν, ὡς δηλοῦσι καὶ ὅσα μαγῶν (lege μαγῶν) τέχναι πρὸς τὰ εἰδῶλα δρᾶν καὶ ἐπαγγέλλονται καὶ τὰς σκῆας. Καὶ τί λεγὼ τὰς ἐκείνων δυνάμεις αἷ καὶ τοῖς ἀλογοῖς ἤδη ζωῆς ὑπάρχῃ προλογουμένης ἐνεργεῖν. Ἢ γὰρ ὕψινα φασὶν τὴν τοῦ κυνὸς ἐν ὕψει καθήμενου πατήσασα σκῆαν καταβάλλει, καὶ βόηην ποιῆσαι τὸν κύνα. Καὶ γυναῖκος καθήμενης φησὶν Ἀριστοτέλης, εἰς ἐνοπήριον ἰδούσης, αἰματῶνται, τὸ τε ἐνοπτριον, καὶ τὸ ἐμφαινόμενον εἰδῶλον.*—And he likewise informs us in the same place, that these images, on account of their slender existence, cannot otherwise become visible to our eyes, than when, in consequence of being established, restored, and illuminated in mirrors, they again receive their pristine power and the shape of their originals. Hence, says he, density

† Vid. Procl. in Plat. Polit. p. 430.

is required in the body which receives them, that the image may not be dissipated from the rarity of the receptacle, and that from many defluxions it may pass into one form. But smoothness likewise is required, lest the asperity of the receptacle, on account of the prominency of some of its parts and the depth of others, should be the cause of inequality to the image. And, lastly, splendour is required; that the image, which naturally possesses a slender form, may become apparent to the sight.

In the next place, with respect to matter, and the various epithets by which Plato calls it in this dialogue, it is necessary to observe, that as in an ascending series of subjects we must arrive at length at something which is better than all things, so in a descending series our progression must be stopped by something which is worse than all things, and which is the general receptacle of the last procession of forms. And this is what the ancients called matter, and which they considered as nothing more than a certain indefiniteness of an incorporeal, indivisible, and intellectual nature, and as something which is not formally impressed and bounded by three dimensions, but is entirely remitted and resolved, and is on all sides rapidly flowing from being into non-entity. But this opinion concerning matter, says Simplicius<sup>1</sup>, seems to have been adopted by the first Pythagoreans among the Greeks; and after these by Plato, according to the relation of Moderatus. For he shows us—"that, according to the Pythagoreans, there is a *first one* subsisting prior to the essence of things and every substance; that after this, true being and intelligible or forms subsist: and, in the third place, that which pertains to soul, and which participates of *the one* and of intellectual forms. But after this (says he) the last nature, which is that of sensible, subsists; which does not participate of the preceding natures, but is thus affected and formed according to the representation of these; since the matter of sensible natures is the shadow of that non-being which primarily subsists in quantity, or rather may be said to depend upon, and be produced by, this." Hence Porphyry, in his second book on Matter, says Simplicius, observes that Plato calls matter, quantity, which is formless, indivisible, and without figure; but capacious, and the receptacle of form, figure, division, quality, and other things of a similar kind. And this quantity and form, considered according

<sup>1</sup> In Aristot. Phys. p. 50, b.

to the privation of a uniform reason, which comprehends all the reasons of beings in itself, is the paradigm of the matter of bodies; which, says Porphyry, both Plato and the Pythagoreans call a quantum, not after the same manner as form is a quantum, but according to privation and analysis, extension and divulsion, and its mutation from being. Matter, therefore, according to this doctrine, as Simplicius well observes, is nothing else than the permutation and vicissitude of sensible forms, with respect to intelligibles; since from thence they verge downwards, and extend to perfect non-entity, or the last of things—that is, to matter itself. Hence, says he, because dregs and matter are always the last of things, the Egyptians assert that matter, which they enigmatically denominate water, is the dregs of the first life; subsisting as a certain mire or mud, the receptacle of generable and sensible natures; and which is not any definite form, but a certain constitution of subsistence, in the same manner as that which is indivisible, immaterial and true being, is a constitution of an intelligible nature. And though all forms subsist both in intelligibles and in matter, yet in the former they subsist without matter, indivisibly and truly; but in the latter divisibly, and after the manner of shadows. And on this account every sensible form is diffipated through its union with material interval, and falls from the stability and reality of being.

But the following profound and admirable description of matter by Plotinus (Ennead. 3, lib. 6) will, I doubt not, be gratefully received by the Platonic reader.—“ Since matter (says he) is neither soul, nor intellect, nor life, nor form, nor reason, nor bound, but a certain indefiniteness; nor yet capacity, for what can it produce? since it is foreign from all these, it cannot merit the appellation of being; but is deservedly called non-entity. Nor yet is it non-entity in the same manner as *motion* and *permanency* are non-beings, considered as different from being: but it is true non-entity; the mere shadow and imagination of bulk, and the desire of subsistence; remaining fixed without abiding, of itself invisible, and avoiding the desire of him who is anxious to perceive its nature. Hence, when no one perceives it, it is then in a manner present; but cannot be viewed by him who strives intently to behold it. Again, in itself contraries always appear; the small and the great, the less and the more, deficiency and excess. So that it is a phantom, neither abiding nor yet able to fly away; capable of no one denomination,  
and

and possessing no power from intellect; but is constituted in the defect and shade, as it were, of all real being. Hence, too, in each of its vanishing appellations, it eludes our search: for, if we think of it as something great, it is in the mean time small; if as something more, it becomes less; and the apparent being which we meet with in its image is non-being, and, as it were, a flying mockery. So that the forms which appear in matter are merely ludicrous; shadows falling upon shadow, as in a mirror, where the position of the apparent is different from that of the real object; and which, though apparently full of forms, possesses nothing real and true. But the things which enter into, and depart from, matter, are nothing but imitations of being, and semblances flowing about a formless semblance. They seem, indeed, to effect something in the subject matter, but in reality produce nothing; from their debile and flowing nature being endued with no solidity and no rebounding power. And since matter likewise has no solidity, they penetrate it without division, like images in water, or as if any one should fill a vacuum with forms."

Such, then, being the true condition of matter and her inherent shadowy forms, we may safely conclude that whatever becomes corporeal in an eminent degree has but little power of recalling itself into one; and that a nature of this kind is ready by every trifling impulse to remain as it is impelled; to rush from the embraces of bound, and hasten into multitude and non-entity. Hence, as Plotinus beautifully observes, (Ennead. 3, lib. 6,)—"those who only place *being* in the genus of body, in consequence of impulses and concussions, and the phantasms perceived through the senses, which persuade them that sense is alone the standard of truth, are affected like those in a dream, who imagine that the perceptions of sleep are true. For sense is alone the employment of the dormant soul; since as much of the soul as is merged in body, so much of it sleeps. But true elevation and true vigilance are a resurrection from, and not with, the dull mass of body. For, indeed, a resurrection with body is only a transfmigration from sleep to sleep, and from dream to dream, like a man passing in the dark from bed to bed. But that elevation is perfectly true which entirely rises from the dead weight of bodies; for these, possessing a nature repugnant to soul, possess something opposite to essence. And this is further evident from their gene-

ration, their continual flowing and decay ; properties entirely foreign from the nature of being, substantial and real."

Lastly, when Plato composes the elements from mathematical planes, it is necessary to observe that, as these are physical planes, they must not only have length and breadth, but likewise depth, that they may be able to subsist as principles in natural effects.—“ For the Pythagoreans (says Simplicius <sup>1</sup>) considered every physical body as a figured quantity, and as in itself matter, but fashioned with different figures. That, besides this, it differs from a mathematical body in being material and tangible, receiving its tangibility from its bulk, and not either from heat or cold. Hence, from the subject matter being impressed with different figures, they assert that the four elements of the elements subsist. For these elements rank more in the nature of principles, as for instance, the cubic of earth ; not that earth has wholly a cubic figure, but that each of the parts of earth is composed from many cubes, which through their smallness are invisible to our sight ; and in the same manner the other elements from other primary figures. They add too, that from this difference of figures all the other properties of the elements ensue, and their mutations into each other. For, if it is inquired why much air is produced from a little water, they can very readily assign the cause by saying, that the elements of water are many, and that, the icosædrons of water being divided, many octædrons, and consequently a great quantity of air, will be produced.”

Simplicius likewise informs us, that the more ancient of Plato's interpreters, among which the divine Jamblichus ranks, considered Plato as speaking symbolically in this part concerning the figures of the elements ; but the latter Platonic philosophers, among whom Proclus, in my opinion, ranks as the most eminent, explained this part according to its literal meaning. And Simplicius, in the same book, has fortunately preserved the arguments of Proclus in defence of Plato's doctrine respecting these planes, against the objections of Aristotle.

Should it be asked in what this doctrine concerning planes differs from the dogma of Democritus, who asserted that natural bodies were fashioned

<sup>1</sup> De Cælo, lib. iv. p. 139.

according



according to figures, we may answer with Simplicius <sup>1</sup>, that Plato and the Pythagoreans by a plane denoted something more simple than a body <sup>2</sup>, atoms being evidently bodies; that they assigned commensuration and a demiurgic analogy <sup>3</sup> to their figures, which Democritus did not to his atoms; and that they differed from him in their arrangement of earth.

And thus much may suffice at present for an epitome of some of the principal parts of this most interesting dialogue. For, as it is my design at some future period to publish as complete a commentary as I am able from the inestimable commentaries of Proclus on this dialogue, with additional observations of my own, a more copious introduction might at present be considered as superfluous. The difficulty, indeed, of proceeding any further, might alone very well apologise for the want of completion in this compendium. For the commentary of Proclus, though consisting of five books, is imperfect <sup>4</sup>, and does not even extend so far as to the doctrine of vision, which in the present introduction I have endeavoured to explain. I trust, therefore, that the candid and liberal reader will gratefully accept these fruits of my application to the Platonic philosophy; and as this introduction and the following translation were the result of no moderate labour and perseverance, I earnestly hope they may be the means of awakening some few at least from the sleep of oblivion, of recalling their attention from fluctuating and delusive objects to permanent and real being; and thus may at length lead them back to their paternal port, as the only retreat which can confer perfect security and rest.

<sup>1</sup> De Cælo, p. 142.

<sup>2</sup> Viz. than any visible sublunary body.

<sup>3</sup> i. e. active and fabricative powers.

<sup>4</sup> It is a circumstance remarkably unfortunate, as I have before observed, that not one of the invaluable commentaries of this philosopher has been preserved entire. For that he wrote a complete commentary on this dialogue, is evident from a citation of Olympiodorus on Aristotle's *Meteors* from it, which is not to be found in any of the books now extant. In like manner, his treatise on Plato's theology is imperfect, wanting a seventh book; his commentaries on the *Parmenides* want many books; his *scholia* on the *Cratylus* are far from being complete; and this is likewise the case with his commentary on the *First Alcibiades*.

# THE TIMÆUS.

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## PERSONS OF THE DIALOGUE.

SOCRATES,     ||     CRITIAS,  
TIMÆUS,       ||     HERMOCRATES.

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Soc.

I SEE one, two, three, but where, friend Timæus, is that fourth person, who being received by me yesterday at a banquet of disputation, ought now in his turn to repay me with a similar repast?

TIM. He labours, Socrates, under a certain infirmity; for he would not willingly be absent from such an association as the present.

Soc. It remains therefore for you, O Timæus, and the company present, to fill up the part of this absent guest.

TIM. Entirely so, Socrates. And we shall endeavour, to the utmost of our ability, to leave nothing belonging to such an employment unaccomplished. For it would be by no means just that we, who were yesterday entertained by you, in such a manner as guests ought to be received, should not return the hospitality with readiness and delight.

Soc. Do you recollect the magnitude and nature of the things which I proposed to you to explain?

TIM. Some things, indeed, I recollect; but such as I have forgotten do you recall into my memory. Or rather, if it be not too much trouble, run over the whole in a cursory manner from the beginning, that it may be more firmly established in our memory.

Soc. Let it be so. And to begin: The sum of yesterday's dispute was,  
what

what kind of republic appeared to me to be the best, and from what sort of men such a republic ought to be composed.

TIM. And by us, indeed, Socrates, all that you said was approved in the highest degree.

SOC. Did we not, in the first place, separate husbandmen and other artificers from those whom we considered as the defenders of the city?

TIM. Certainly.

SOC. And when we had assigned to every one that which was accommodated to his nature, and had prescribed only one particular employment to every particular art, we likewise assigned to the military tribe one province only, I mean that of protecting the city; and this as well from the hostile incursions of internal as of external enemies; but yet in such a manner as to administer justice mildly to the subjects of their government, as being naturally friends, and to behave with warlike fierceness against their enemies in battle.

TIM. Entirely so.

SOC. For we asserted, I think, that the souls of the guardians should be of such a nature, as at the same time to be both irascible and philosophic in a remarkable degree; so that they might be gentle to their friends, and bold and ferocious to their enemies.

TIM. You did so.

SOC. But what did we assert concerning their education? Was it not that they should be instructed in gymnastic exercises, in music, and other becoming disciplines?

TIM. Entirely so.

SOC. We likewise established, that those who were so educated should neither consider gold, or silver, or any goods of a similar kind, as their own private property; but that rather, after the manner of adjutants, they should receive the wages of guardianship from those whom they defend and preserve; and that their recompense should be no more than is sufficient to a moderate subsistence. That, besides this, they should use their public stipend in common, and for the purpose of procuring a common subsistence with each other; so that, neglecting every other concern, they may employ their attention solely on virtue, and the discharge of their peculiar employment.

TIM. These things also were related by you.

SOC.

Soc. Of women too we asserted, that they should be educated in such a manner, as to be aptly conformed similar to the natures of men ; with whom they should perform in common both the duties of war, and whatever else belongs to the business of life.

TIM. This too was asserted by you.

Soc. But what did we establish concerning the procreation of children ? Though perhaps you easily remember this, on account of its novelty. For we ordered that the marriages and children should be common ; as we were particularly careful that no one might be able to distinguish his own children, but that all might consider all as their kindred ; that hence those of an equal age might regard themselves as brothers and sisters ; but that the younger might reverence the elder as their parents and grandfathers, and the elder might esteem the younger as their children and grandsons.

TIM. These things, indeed, as you say, are easily remembered.

Soc. But that they might from their birth acquire a disposition as far as possible the best, we decreed that the rulers whom we placed over the marriage rites should, through the means of certain lots, take care that in the nuptial league the worthy were mingled with the worthy ; that no discord may arise in this connection when it does not prove prosperous in the end ; but that all the blame may be referred to fortune, and not to the guardians of such a conjunction.

TIM. We remember this likewise.

Soc. We also ordered that the children of the good should be properly educated, but that those of the bad should be secretly sent to some other city ; yet so that such of the adult among these as should be found to be of a good disposition should be recalled from exile ; while, on the contrary, those who were retained from the first in the city as good, but proved afterwards bad, should be similarly banished.

TIM. Just so.

Soc. Have we, therefore, sufficiently epitomized yesterday's disputation ; or do you require any thing further, friend Timæus, which I have omitted ?

TIM. Nothing, indeed, Socrates ; for all this was the subject of your disputation.

Soc. Hear now how I am affected towards this republic which we have described ; for I will illustrate the affair by a similitude. Suppose then that some

some one, on beholding beautiful animals, whether represented in a picture, or really alive, but in a state of perfect rest, should desire to behold them in motion, and struggling as it were to imitate those gestures which seem particularly adapted to the nature of bodies; in such a manner am I affected towards the form of that republic which we have described. For I should gladly hear any one relating the contests of our city with other nations, when it engages in a becoming manner in war, and acts during such an engagement in a manner worthy of its institution, both with respect to practical achievements and verbal negotiations. For indeed, O Critias and Hermocrates, I am conscious of my own inability to praise such men and such a city according to their desert. Indeed, that I should be incapable of such an undertaking is not wonderful, since the same imbecility seems to have attended poets both of the past and present age. Not that I despise the poetic tribe; but it appears from hence evident, that, as these kind of men are studious of imitation, they easily and in the best manner express things in which they have been educated; while, on the contrary, whatever is foreign from their education they imitate with difficulty in actions, and with still more difficulty in words. But with respect to the tribe of Sophists, though I consider them as skilled both in the art of speaking and in many other illustrious arts; yet, as they have no settled abode, but wander daily through a multitude of cities, I am afraid lest, with respect to the institutions of philosophers and politicians, they should not be able to conjecture the quality and magnitude of those concerns which wise and politic men are engaged in with individuals, in warlike undertakings, both in actions and discourse. It remains, therefore, that I should apply to you, who excel in the study of wisdom and civil administration, as well naturally as through the assistance of proper discipline and institution. For Timæus here of Locris, an Italian city governed by the best of laws, exclusive of his not being inferior to any of his fellow-citizens in wealth and nobility, has arrived in his own city at the highest posts of government and honours. Besides, we all know that Critias is not ignorant of the particulars of which we are now speaking. Nor is this to be doubted of Hermocrates, since a multitude of circumstances evince that he is both by nature and education adapted to all such concerns. Hence, when you yesterday requested me to dispute about the institution of a republic, I readily complied with your request;

being persuaded that the remainder of the discourse could not be more conveniently explained by any one than by you, if you were but willing to engage in its discussion. For, unless you properly adapt the city for warlike purposes, there is no one in the present age from whom it can acquire every thing becoming its constitution. As I have, therefore, hitherto complied with your request, I shall now require you to comply with mine in the above-mentioned particulars. Nor have you indeed refused this employment, but have with common consent determined to repay my hospitality with the banquet of discourse. I now, therefore, stand prepared to receive the promised feast.

HERM. But we, O Socrates, as Timæus just now signified, shall cheerfully engage in the execution of your desire; for we cannot offer any excuse sufficient to justify neglect in this affair. For yesterday, when we departed from hence and went to the lodging of Critias, where we are accustomed to reside, both in his apartment and prior to this in the way thither we discoursed on this very particular. He therefore related to us a certain antient history, which I wish, O Critias, you would now repeat to Socrates, that he may judge whether it any way conduces to the fulfilment of his request.

CRIT. It is requisite to comply, if agreeable to Timæus, the third associate of our undertaking.

TIM. I assent to your compliance.

CRIT. Hear then, O Socrates, a discourse surprising indeed in the extreme, yet in every respect true, as it was once related by Solon, the most wise of the seven wise men. Solon, then, was the familiar and intimate friend of our great-grandfather Dropis, as he himself often relates in his poems. But he once declared to our grandfather Critias, (as the old man himself informed us,) that great and admirable actions had once been achieved by this city, which nevertheless were buried in oblivion, through length of time and the destruction of mankind. In particular he informed me of one undertaking more illustrious than the rest, which I now think proper to relate to you, both that I may repay my obligations, and that by such a relation I may offer my tribute of praise to the Goddess in the present solemnity, by celebrating her divinity, as it were, with hymns, justly and in a manner agreeable to truth.

Soc. You speak well. But what is this antient achievement which was  
not

not only actually related by Solon, but was once really accomplished by this city?

CRIT. I will acquaint you with that ancient history, which I did not indeed receive from a youth, but from a man very much advanced in years; for at that time Critias, as he himself declared, was almost ninety years old, and I myself was about ten. When, therefore, that solemnity was celebrated among us which is known by the name of *Cureotis Apaturiorum*<sup>1</sup>, nothing was omitted which boys in that festivity are accustomed to perform. For, when our parents had set before us the rewards proposed for the contest of singing verses, both a multitude of verses of many poets were recited, and many of us especially sung the poems of Solon, because they were at that time entirely new. But then one of our tribe, whether he was willing to gratify Critias, or whether it was his real opinion, affirmed that Solon appeared to him most wise in other concerns, and in things respecting poetry the most ingenious of all poets. Upon hearing this, the old man (for I very well remember) was vehemently delighted; and said, laughing—If Solon, O Arynander, had not engaged in poetry as a casual affair, but had made it, as others do, a serious employment; and if through seditions and other fluctuations of the state, in which he found his country involved, he had not been compelled to neglect the completion of the history which he brought from Egypt, I do not think that either Hesiod or Homer, or any other poet, would have acquired greater glory and renown. In consequence of this, Arynander inquired of Critias what that history was. To which he answered, that it was concerning an affair the greatest and most celebrated

<sup>1</sup> The *Apaturia*, according to Proclus and Suidas, were festivals in honour of Bacchus, which were publicly celebrated for the space of three days. And they were assigned this name, δι' απατην, that is, on account of the deception through which Neptune is reported to have vanquished Xanthus. The first day of these festivals was called *δερπεια*, in which, as the name indicates, those of the same tribe feasted together; and hence (says Proclus) on this day *ενοχλαι και δειπνα πολλα*, splendid banquets and much feasting took place. The second day was called *αναρρυσια*, a sacrifice, because many victims were sacrificed in it; and hence the victims were called *αναρρυσματα*, because *ερωμενα ανω εβητο*, they were drawn upwards, and sacrificed. The third day, of which Plato speaks in this place, was called *κουρευωτης*, because on this day *κυροι*, that is, boys or girls, were collected together in tribes, with their hair shorn. And to these some add a fourth day, which they call *επειδα*, or the day after. Proclus further informs us, that the boys who were collected on the third day were about three or four years old.

which this city ever performed ; though through length of time, and the destruction of those by whom it was undertaken, the fame of its execution has not reached the present age. But I beseech you, O Critias, (say Amynander,) relate this affair from the beginning ; and inform me what that event was which Solon asserted as a fact, and on what occasion, and from whom he received it.

There is then (says he) a certain region of Egypt called Delta, about the summit of which the streams of the Nile are divided. In this place a government is established called Saitical ; and the chief city of this region of Delta is Sais, from which also king Amasis derived his origin. The city has a presiding divinity, whose name is in the Egyptian tongue Neith, and in the Greek Athena, or Minerva. These men were friends of the Athenians, with whom they declared they were very familiar, through a certain bond of alliance. In this country Solon, on his arrival thither, was, as he himself relates, very honourably received. And upon his inquiring about antient affairs of those priests who possessed a knowledge in such particulars superior to others, he perceived, that neither himself, nor any one of the Greeks, (as he himself declared), had any knowledge of very remote antiquity. Hence, when he once desired to excite them to the relation of antient transactions, he for this purpose began to discourse about those most antient events which formerly happened among us. I mean the traditions concerning the first Phoroneus and Niobe, and after the deluge, of Deucalion and Pyrrha, (as described by the mythologists,) together with their posterity ; at the same time paying a proper attention to the different ages in which these events are said to have subsisted. But upon this one of those more antient priests exclaimed, O Solon, Solon, you Greeks are always children, nor is there any such thing as an aged Grecian among you ! But Solon, when he heard this—What (says he) is the motive of your exclamation ? To whom the priest :—Because all your souls are juvenile ; neither containing any antient opinion derived from remote tradition, nor any discipline hoary from its existence in former periods of time. But the reason of this is the multitude and variety of destructions of the human race, which formerly have been, and again will be : the greatest of these, indeed, arising from fire and water ; but the lesser from ten thousand other contingencies. For the relation subsisting among you, that Phaeton, the offspring of the Sun, on a certain time  
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attempting to drive the chariot of his father, and not being able to keep the track observed by his parent, burnt up the natures belonging to the earth, and perished himself, blasted by thunder—is indeed considered as fabulous, yet is in reality true. For it expresses the mutation of the bodies revolving in the heavens about the earth; and indicates that, through long periods of time, a destruction of terrestrial natures ensues from the devastations of fire. Hence, those who either dwell on mountains, or in lofty and dry places, perish more abundantly than those who dwell near rivers, or on the borders of the sea. To us indeed the Nile is both salutary in other respects, and liberates us from the fear of such-like depredations. But when the Gods, purifying the earth by waters, deluge its surface, then the herdsmen and shepherds inhabiting the mountains are preserved, while the inhabitants of your cities are hurried away to the sea by the impetuous inundation of the rivers. On the contrary, in our region, neither then, nor at any other time, did the waters descending from on high pour with desolation on the plains; but they are naturally impelled upwards from the bosom of the earth. And from these causes the most antient traditions are preserved in our country. For, indeed, it may be truly asserted, that in those places where neither intense cold nor immoderate heat prevails, the race of mankind is always preserved, though sometimes the number of individuals is increased, and sometimes suffers a considerable diminution. But whatever has been transacted either by us, or by you, or in any other place, beautiful or great, or containing any thing uncommon, of which we have heard the report, every thing of this kind is to be found described in our temples, and preserved to the present day. While, on the contrary, you and other nations commit only recent transactions to writing, and to other inventions which society has employed for transmitting information to posterity; and so again, at stated periods of time, a certain celestial defluxion rushes on them like a disease; from whence those among you who survive are both destitute of literary acquisitions and the inspiration of the Muses. Hence it happens that you become juvenile again, and ignorant of the events which happened in antient times, as well among us as in the regions which you inhabit.

The transactions, therefore, O Solon, which you relate from your antiquities, differ very little from puerile fables. For, in the first place, you only mention one deluge of the earth, when at the same time many have hap-

pened. And, in the next place, you are ignorant of a most illustrious and excellent race of men, who once inhabited your country; from whence you and your whole city descended, though a small seed only of this admirable people once remained. But your ignorance in this affair is owing to the posterity of this people, who were for many ages deprived of the use of letters, and became as it were dumb. For prior, O Solon, to that mighty deluge which we have just mentioned, a city of Athenians existed, informed according to the best laws both in military concerns and every other duty of life; and whose illustrious actions and civil institutions are celebrated by us as the most excellent of all that have existed under the ample circumference of the heavens. Solon, therefore, upon hearing this, said that he was astonished; and, burning with a most ardent desire, entreated the priests to relate accurately all the actions of his antient fellow-citizens. That afterwards one of the priests replied:—Nothing of envy, O Solon, prohibits us from complying with your request. But for your sake, and that of your city, I will relate the whole; and especially on account of that Goddess who is allotted the guardianship both of your city and ours, and by whom they have been educated and founded: yours, indeed, by a priority to ours of a thousand years, receiving the seed of your race from Vulcan and the Earth. But the description of the transactions of this our city during the space of eight thousand years, is preserved in our sacred writings. I will, therefore, cursorily run over the laws and more illustrious actions of those cities which existed nine thousand years ago. For when we are more at leisure we shall prosecute an exact history of every particular, receiving for this purpose the sacred writings themselves.

In the first place, then, consider the laws of these people, and compare them with ours: for you will find many things which then subsisted in your city, similar to such as exist at present. For the priests passed their life separated from all others. The artificers also exercised their arts in such a manner, that each was engaged in his own employment without being mingled with other artificers. The same method was likewise adopted with shepherds, hunters and husbandmen. The soldiers too, you will find, were separated from other kind of men; and were commanded by the laws to engage in nothing but warlike affairs. A similar armour too, such as that of shields and darts, was employed by each. These we first used in Asia; the  
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the Goddesses in those places, as likewise happened to you, first pointing them out to our use. You may perceive too from the beginning what great attention was paid by the laws to prudence and modesty; and besides this, to divination and medicine, as subservient to the preservation of health. And from these, which are divine goods, the laws, proceeding to the invention of such as are merely human, procured all such other disciplines as follow from those we have just enumerated. From such a distribution, therefore, and in such order, the Goddesses first established and adorned your city, choosing for this purpose the place in which you were born; as she foresaw that, from the excellent temperature of the region, men would arise distinguished by the most consummate sagacity and wit.\* For, as the Goddess is a lover both of wisdom and war, she fixed on a soil capable of producing men the most similar to herself; and rendered it in every respect adapted for<sup>r</sup>the habitation of such a race. The antient Athenians, therefore, using these laws, and being formed by good institutions, in a still higher degree than I have mentioned, inhabited this region; surpassing all men in every virtue, as it becomes those to do who are the progeny and pupils of the Gods.

But\*though many and mighty deeds of your city are contained in our sacred writings, and are admired as they deserve, yet there is one transaction which surpasses all of them in magnitude and virtue. For these writings relate what prodigious strength your city formerly tamed, when a mighty warlike power, rushing from the Atlantic sea, spread itself with hostile fury over all Europe and Asia. For at that time the Atlantic sea was navigable, and had an island before that mouth which is called by you the Pillars of Hercules. But this island was greater than both Libya and all Asia together, and afforded an easy passage to other neighbouring islands; as it was likewise easy to pass from those islands to all the continent which borders on this Atlantic sea. For the waters which are beheld within the mouth which we just now mentioned, have the form of a bay with a narrow entrance; but the mouth itself is a true sea. And lastly, the earth which surrounds it is in every respect truly denominated the continent. In this Atlantic island a combination of kings was formed, who with mighty and wonderful power subdued the whole island, together with many other islands and parts of the continent; and, besides this, subjected to their dominion all Libya, as far as to Egypt; and Europe, as far as to the Tyrrhene sea. And when

when they were collected in a powerful league, they endeavoured to enslave all our regions and yours, and besides this all those places situated within the mouth of the Atlantic sea. Then it was, O Solon, that the power of your city was conspicuous to all men for its virtue and strength. For, as its armies surpassed all others both in magnanimity and military skill, so with respect to its contests, whether it was assisted by the rest of the Greeks, over whom it presided in warlike affairs, or whether it was deserted by them through the incursions of the enemies, and became situated in extreme danger, yet still it remained triumphant. In the mean time, those who were not yet enslaved it liberated from danger; and procured the most ample liberty for all those of us who dwell within the Pillars of Hercules. But in succeeding time prodigious earthquakes and deluges taking place, and bringing with them desolation in the space of one day and night, all that warlike race of Athenians was at once merged under the earth; and the Atlantic island itself, being absorbed in the sea, entirely disappeared. And hence that sea is at present innavigable, arising from the gradually impeding mud which the subsiding island produced. And this, O Socrates, is the sum of what the elder Critias repeated from the narration of Solon.

But when yesterday you was discoursing about a republic and its citizens, I was surprised on recollecting the present history: for I perceived how divinely, from a certain fortune, and not wandering from the mark, you collected many things agreeing with the narration of Solon. Yet I was unwilling to disclose these particulars immediately, as, from the great interval of time since I first received them, my remembrance of them was not sufficiently accurate for the purpose of repetition. I considered it, therefore, necessary that I should first of all diligently revolve the whole in my mind. And on this account I yesterday immediately complied with your demands: for I perceived that we should not want the ability of presenting a discourse accommodated to your wishes, which in things of this kind is of principal importance. In consequence of this, as Hermocrates has informed you, immediately as we departed from hence, by communicating these particulars with my friends here present, for the purpose of refreshing my memory, and afterwards revolving them in my mind by night, I nearly acquired a complete recollection of the affair. And, indeed, according to the proverb, what we learn in childhood abides in the memory with a wonderful stability.

For, with respect to myself, for instance, I am not certain that I could recollect the whole of yesterday's discourse, yet I should be very much astonished if any thing should escape my remembrance which I had heard in some past period of time very distant from the present. Thus, as to the history which I have just now related, I received it from the old man with great pleasure and delight; who on his part very readily complied with my request, and frequently gratified me with a repetition. And hence, as the marks of letters deeply burnt in remain indelible, so all these particulars became firmly established in my memory. In consequence of this, as soon as it was day I repeated the narration to my friends, that together with myself they might be better prepared for the purposes of the present association. But now, with respect to that for which this narration was undertaken, I am prepared, O Socrates, to speak not only summarily, but so as to descend to the particulars of every thing which I heard. But the citizens and city which you fabricated yesterday as in a fable, we shall transfer to reality; considering that city which you established as no other than this Athenian city, and the citizens which you conceived as no other than those ancestors of ours described by the Egyptian priest. And indeed the affair will harmonize in every respect; nor will it be foreign from the purpose to assert that your citizens are those very people who existed at that time. Hence, distributing the affair in common among us, we will endeavour, according to the utmost of our ability, to accomplish in a becoming manner the employment which you have assigned us. It is requisite, therefore, to consider, O Socrates, whether this discourse is reasonable, or whether we should lay it aside, and seek after another.

Soc. But what other, O Critias, should we receive in preference to this? For your discourse, through a certain affinity, is particularly adapted to the present sacred rites of the Goddesses. And besides this, we should consider, as a thing of the greatest moment, that your relation is not a mere fable, but a true history. It is impossible, therefore, to say how, and from whence, neglecting your narration, we should find another more convenient. Hence it is necessary to confess that you have spoken with good fortune; and it is equally necessary that I, on account of my discourse yesterday, should now rest from speaking, and be wholly attentive to yours.

Crit. But now consider, Socrates, the manner of our disposing the mutual banquet

banquet of disputation. For it seems proper to us that Timæus, who is the most astronomical of us all, and is particularly knowing in the nature of the universe, should speak the first; commencing his discourse from the generation of the world, and ending in the nature of men. But that I after him, receiving the men which he has mentally produced, but which have been excellently educated by you, and introducing them to you according to the law of Solon, as to proper judges, should render them members of this city; as being in reality no other than those Athenians which were described as unknown to us in the report of the sacred writings. And that in future we shall discourse concerning them as about citizens and Athenians.

Soc. I seem to behold a copious and splendid banquet of disputation set before me. It is, therefore, now your business, O Timæus, to begin the discourse; having first of all, as is highly becoming, invoked the Gods according to law.

TIM. Indeed, Socrates, since those who participate but the least degree of wisdom, in the beginning of every undertaking, whether small or great, call upon Divinity, it is necessary that we (unless we are in every respect unwise) who are about to speak concerning the universe, whether it is generated or without generation, invoking the Gods and Goddesses, should pray that what we assert may be agreeable to their divinities, and that in the ensuing discourse we may be consistent with ourselves. And such is my prayer to the Gods, with reference to myself; but as to what respects the present company, it is necessary to pray that you may easily understand, and that I may be able to explain my meaning about the proposed subjects of disputation. In the first place, therefore, as it appears to me, it is necessary to define what that is which is always *real being*<sup>1</sup>, but is without generation; and

<sup>1</sup> It is well observed here by Proclus, that Plato, after the manner of geometricians, assumes, prior to demonstrations, definitions and hypotheses, through which he frames his demonstrations, and previously delivers the principles of the whole of physiology. For, as the principles of music are different from those of medicine, and those of arithmetic from those of mechanics, in like manner there are certain principles of the whole of physiology, which Plato now delivers: and these are as follow. *True being is that which is apprehended by intelligence in conjunction with reason: that which is generated, is the object of opinion in conjunction with irrational sense: every thing generated is generated from a cause: that which does not subsist from a cause is not generated: that of which the paradigm is eternal being, is necessarily beautiful: that of which the paradigm is*

and what that is *which is generated indeed, or consists in a state of becoming to be*, but which never really is. The former of these indeed is apprehended by *intelligence* in conjunction with *reason*, since it always subsists according to *same*. But the latter is perceived by *opinion* in conjunction with *irrational sense*; since it subsists in a state of generation and corruption, and never truly is. But whatever is generated is necessarily generated from a certain cause. For it is every way impossible that any thing should be generated without a cause. When, therefore, an artificer, in the fabrication of any work, looks to that which always subsists according to *same*, and, employing a paradigm of this kind, expresses the idea and power in his work, it is then necessary that the whole of his production should be beautiful. But when he beholds that which is in generation, and uses a generated paradigm, it is alike necessary that his work should be far from beautiful.

I denominate, therefore, this universe *heaven, or the world*, or by any other appellation in which it may particularly rejoice. Concerning which, let us in the first place consider that which, in the proposed inquiry about the universe, ought in the very beginning to be investigated; whether it always was, having no principle of generation<sup>1</sup>, or whether it was generated,

*is generated, is not beautiful: the universe is denominated heaven, or the world.* For from these principles he produces all that follows. Hence, says Proclus, he appears to me to say *what* eternal is, and *what* that which is generated is, but not to say *that* each of them is. For the geometrician also informs us *what* a point is and *what* a line is, prior to his demonstrations, but he by no means teaches us *that* each of these has a subsistence. For how will he act the part of a geometrician, if he discourses about the existence of his proper principles? After the same manner the physiologist says *what* eternal being is, for the sake of the future demonstrations, but by no means shows *that* it is; since in so doing he would pass beyond the limits of physiology. As, however, Timæus being a Pythagorean differs from other physiologists, and Plato in this dialogue exhibits the highest science, hence he afterwards, in a manner perfectly divine, proves *that* true being has a subsistence; but at present he employs the definition of *what* it is, preserving the limits of physiology. He appears, indeed, to investigate the definition of eternal being, and of that which is generated, that he may discover the causes which give completion to the universe, viz. form and matter: for that which is generated requires these. But he assumes the third hypothesis, that he may discover the fabricative cause of the universe; the fourth, because the universe was generated according to a paradigmatic cause; and the fifth concerning the name of the universe, that he may investigate the participation of *the good* and *the ineffable* by the world.

<sup>1</sup> That is denominated generated, says Proclus (in Tim. p. 85.) which has not the whole of its essence or energy established in one, so as to be perfectly immutable. And of this kind are, this

rated, commencing its generation from a certain cause. It was generated. For this universe is visible, and has a body. But all such things are sensible. And sensibles are apprehended by opinion, in conjunction with sense. And such things appear to have their subsistence in becoming to be, and in being generated. But we have before asserted, that whatever is generated is necessarily generated from some cause. To discover, therefore, the *artificer* and *father* of the universe is indeed difficult; and when found it is impossible to reveal him through the ministry of discourse to all men.

Again: this is to be considered concerning him, I mean, according to what paradigm extending himself, he fabricated the world—whether towards an exemplar, subsisting according to that which is always the same, and similarly affected, or towards that which is generated. But, indeed, if this world is beautiful, and its artificer good, it is evident that he looked towards an eternal exemplar in its fabrication. But if the world be far from beautiful, which it is not lawful to assert, he necessarily beheld a generated instead of an eternal exemplar. But it is perfectly evident that he regarded an

sensible world, time in things moved, and the transitive intellection of souls. But that every motion subsists according to a part, and that the whole of it is not present at once, is evident. And if the essence of the world possesses generation, and the perpetuity of it is according to a temporal infinity, it may be inferred, that between things eternally perpetual, and such as are generated in a part of time, it is necessary that nature should subsist which is generated infinitely. It is also requisite that a nature of this kind should be generated infinitely in a twofold respect, viz. either that the whole of it should be perpetual through the whole of time, but that the parts should subsist in the parts of time, as is the case with the sublunary elements, or that both the whole and the parts of it should be co-extended with the perpetuity of all time, as is the case with the heavenly bodies. For the perpetuity according to eternity is not the same with the perpetuity of the whole of time, as neither is the infinity of eternity and time the same; because eternity is not the same with time, the former being infinite life at once total and full, or, the whole of which is ever present to itself, and the latter being a flowing image of such a life.

Further still, says Proclus, the term generated has a multifarious meaning. For it signifies that which has a temporal beginning, every thing which proceeds from a cause, that which is essentially a composite, and that which is naturally capable of being generated, though it should not be generated. The term generated, therefore, being multifariously predicated, that which is generated according to time possesses all the modes of generation. For it proceeds from a cause, is a composite, and is naturally capable of being generated. Hence, as that which is generated in a part of time begins at one time, and arrives at perfection in another, so the world, which is generated according to the whole of time, is always beginning, and always perfect. And it has indeed a certain beginning of generation, so far as it is perfected by its cause, but has not a certain beginning so far as it has not a beginning of a certain partial time.

eternal



eternal paradigm. For the world is the most beautiful of generated natures, and its artificer the best of causes. But, being thus generated, it is fabricated according to that which is comprehensible by reason and intelligence, and which subsists in an abiding sameness of being. And from hence it is perfectly necessary that this world should be the resemblance of something. But to describe its origin according to nature is the greatest of all undertakings. In this manner, then, we must distinguish concerning the image and its exemplar. As words are allied to the things of which they are the interpreters, hence it is necessary, when we speak of that which is stable<sup>1</sup> and firm, and intellectually apparent, that our reasons should be in like manner stable and immutable, and as much as possible irreprehensible, with every perfection of a similar kind. But that, when we speak concerning the image of

<sup>1</sup> That which Plato now calls *stable* and *firm*, he before called eternal being, subsisting after the same manner, and apprehended by intelligence; denominating it *stable* instead of *eternal being*, and *intellectually apparent*, instead of *that which is apprehended by intelligence*. He also says, that the reasonings about it should be *stable* indeed, that through the sameness of the appellation he may indicate the similitude of them to things themselves; but *immutable*, that they may shadow forth the firmness of the thing; and *irreprehensible*, that they may imitate that which is apprehended by intelligence, and may scientifically accede. For it is necessary that reasonings, if they are to be adapted to intelligibles, should possess the accurate and the stable, as being conversant with things of this kind. For, as the knowledge of things eternal is immutable, so also is the *reasoning*; since it is evolved knowledge. However, as it proceeds into multitude, is allotted a composite nature, and on this account falls short of the union and impartibility of the thing, he calls the former in the singular number *stable* and *firm*, and *intellectually apparent*, but the latter in the plural number *stable*, *immutable* and *irreprehensible reasonings*. And since in *reason* there is a certain similitude to its paradigm, and there is also a certain dissimilitude, and the latter is more abundant than the former, he employs one appellation in common, *the stable*; but the other epithets are different. And as, with respect to our knowledge, scientific reasoning cannot be confused by it, (for there is nothing in us better than science,) but is confused by the thing itself, as not being able to comprehend its nature such as it is, and as it comes into contact with its impartibility, hence he adds, *as much as possible*. For science itself considered as subsisting in souls is irreprehensible, but is reprehended by intellect, because it evolves the impartible, and apprehends the simple in a composite manner. Since the phantasy also reprehends sense, because its knowledge is attended with passion according to mixture, from which the phantasy is pure; opinion the phantasy, because it knows in conjunction with type and form, to which opinion is superior; science opinion, because the latter knows without being able to assign the cause, the ability of effecting which especially characterizes the former; and intellect as we have said science, because the latter divides the object of knowledge transitively, but the former apprehends every thing at once in conjunction with essence. Intellect, therefore, is alone unconquerable; but science and scientific reasoning are vanquished by intellect, according to the knowledge of being.

that which is immutable, we should employ only probable arguments, which have the same analogy to the former as a resemblance to its exemplar. And, indeed, as essence<sup>1</sup> is to generation, so is truth to faith. You must not wonder, therefore, O Socrates, since many things are asserted by many concerning

<sup>1</sup> Plato, says Proclus, had prior to this made two things the leaders, the intelligible and that which is generated, or paradigm and image, and had assumed two things analogous to these, science and probability, or truth and faith, truth being to an intelligible paradigm as faith to a generated image; and now he geometrically adds the alternate proportion. For, if as truth is to the intelligible, so is faith to that which is generated, it will be alternately as truth is to faith, so the intelligible to that which is generated. Plato, therefore, clearly divides reasonings and knowledges with the things known; and Parmenides also, though obscure through his poetry, yet at the same time says, that there are twofold knowledges, truth and faith, of twofold things, viz. of beings and non-beings; and the former of these knowledges he calls splendour, as shining with intellectual light, but he deprives the latter of stable knowledge. The faith, however, which Plato now assumes appears to be different from that of which he speaks in the sixth book of his Republic, in the section of a line; for that is irrational knowledge, whence also it is divided from conjecture, but is arranged according to sense. But the present faith is rational, though it is mingled with irrational knowledges, employing sense and conjecture; and hence it is filled with much of the unstable. For, receiving *that* a thing is from sense or conjecture, it thus assigns the causes: but these knowledges possess much of the confused and unstable. Hence Socrates in the Phædo very much blames the senses, because we neither see nor hear any thing accurately. How then can knowledge, originating from sense, possess the accurate and irreprehensible? For those powers that employ science alone collect with accuracy every thing which is the object of their knowledge; but those powers that energeize with sense err and fall off from the accurate, through sense, and through the unstable nature of the thing known. For what can any one assert of that which is material, since it is always changing and flowing, and is not naturally adapted to abide for a moment? And with respect to a celestial nature, in consequence of being very remote from us, it is not easily known, nor scientifically apprehended; but we must be satisfied with an approximation to the truth, and with probability in the speculation of it. For every thing which is in place requires a residence there, in order to a perfect knowledge of its nature. But the intelligible is not a thing of this kind, since it is not to be apprehended by our knowledge in place. For where any one stops his dianoëtic power, there, in consequence of the intelligible being every where present, he comes into contact with truth. And if it is possible to assert any thing stable concerning a celestial nature, this also is possible, so far as it partakes of being, and so far as it is to be apprehended by intelligence. For it is through geometrical demonstrations, which are universal, that we are alone able to collect any thing necessary concerning it; but, so far as it is sensible, it is with difficulty apprehended, and with difficulty surveyed.

With respect to truth, however, Plato, following the theologists, establishes it as manifold. For one kind of truth is characterized by the nature of *the one*, being the light proceeding from *the good*, which, in the Phæbus, he says, imparts purity, and, in the Republic, union, to intelligibles. Another kind is that which proceeds from intelligibles, which illuminates the intellectual orders, which

cerning the Gods and the generation of the universe, if I should not be able to produce the most approved and accurate reasons on so difficult a subject. But you ought to rejoice if it shall appear that I do not employ reasons less probable than others : at the same time remembering, that I who discourse, and that you who are my judges, possess the human nature in common ; so that you should be satisfied if my assertions are but assimilative of the truth.

Soc. You speak excellently well, Timæus ; and we shall certainly act in every respect as you advise. This introduction, indeed, of your discourse we wonderfully approve : proceed, therefore, with the subsequent disputation.

TIM. Let us declare then on what account the composing artificer constituted generation and the universe. The artificer, indeed, was good ; but in that which is good envy never subsists about any thing which has being. Hence, as he was entirely void of envy, he was willing to produce all things as much as possible similar to himself. If, therefore, any one receives this most principal cause of generation and the world from wise and prudent men, he will receive him in a manner the most perfect and true. For, as the Divinity was willing that all things should be good, and that as much as possible nothing should be evil ; hence, receiving every thing visible, and which was not in a state of rest, but moving with confusion<sup>1</sup> and disorder, he

which an essence unfigured, uncoloured, and untouched first receives, and where also the plain of truth is situated, as it is written in the Phædrus. A third kind of truth is that which is connate with souls, which comes into contact with being through intelligence, and science subsisting in conjunction with the objects of science : for the light pertaining to the soul is the third from the intelligible ; since the intellectual is filled from the intelligible, and that pertaining to the soul from the intellectual order. This truth, therefore, subsisting in souls, must be now assumed, since we have admitted a corresponding faith, and not that which is irrational, and destitute of all logical consideration ; and the one must be conjoined with intelligibles, but the other with sensibles.

<sup>1</sup> Plato being willing to indicate the providence of the demiurgus pervading the universe, together with the gifts of intellect and the presence of soul, and to show the magnitude of the good which these impart to the world, surveys prior to this the whole corporeal constitution by itself, and how, thus considered, it is confused and disordered ; that also, beholding by itself the order proceeding from soul and demiurgic ornament, we may be able to define what a corporeal nature is in itself, and what orderly distribution it is allotted from fabrication. The world, indeed, always had a subsistence, but discourse divides the thing generated from the maker, and produces according to time things which subsist at once together, because every thing generated is a composite.

he reduced it from this wild inordination into order, considering that such a conduct was by far the best. For it neither ever was lawful, nor is, for the best of causes to produce any other than the most beautiful of effects. In consequence of a reasoning<sup>1</sup> process, therefore, he found that among the things naturally visible<sup>2</sup> there was nothing, the whole of which, if void of intelligence, could ever become more beautiful than the whole of that which is endued with intellect: and at the same time he discovered, that it was impossible for intellect to accede to any being, without the intervention of soul. Hence, as the result of this reasoning, placing intellect in soul and soul in body, he fabricated the universe; that thus it might be a work naturally the most beautiful and the best. In this manner, therefore, according

posited. To which we may add, that demiurgic fabrication being twofold, one being corporeal, and the other ornamental, Plato, beginning from the ornamental, very properly represents every thing corporeal moved in a confused and disordered manner, because such is its motion from itself when considered as not yet animated by an intellectual soul.

It also deserves to be noticed that Plato, in giving subsistence to the confused and disordered, prior to the fabrication of the world, imitates the ancient theologians. For, as they introduce the battles and seditions of the Titans against the Olympian Gods, so Plato pre-supposes these two, the unadorned, and the fabricator of the world, that the former may be adorned and participate of order. They, however, introduce these theologically; for they oppose the powers that preside over bodies to the Olympian deities: but Plato philosophically; for he transfers order from the Gods to the subjects of their government.

<sup>1</sup> The demiurgus of the universe, through the plenitude of his power, fabricates different things by different powers; for, since he comprehends in himself the cause of all fabrications, he after one manner gives subsistence to the whole world, and after another to its parts. Hence, by one intelligence he adorns the whole world, and generates it collectively, according to which energy the world also is one animal; but by reasoning he produces its parts, and these as wholes, because he is the demiurgus of total natures, viz. of total intellect, total soul, and all the bulk of body. In consequence of this, when composing parts, he is said to fabricate by reasoning. For reasoning here signifies a distributive cause of things; since it is not the reasoning of one doubting. For neither does art doubt, nor science; but artists and the scientific then doubt when they are indigent of their proper habits. If these, therefore, do not doubt when they are perfect, can it be supposed that intellect doubts, or the fabricator and father of the universe?

<sup>2</sup> That is, intelligibles: for that these are visible is evident from the words of Plato further on, where he says—"Whatever ideas intellect perceived in animal itself," &c. But that these are *naturally* visible will be evident, as Proclus beautifully observes, if we consider that some things are visible to us, and others according to nature. And the things, indeed, which are visible to us, are in their own nature dark and obscure; but things naturally visible are truly known, and are respondent with divine light. And such are intelligibles.

to an assimilative reason, it is necessary to call the world an animal, endued with intellect, and generated through the providence of Divinity.

This being determined, let us consider what follows; and, in the next place, after the similitude of what animals the composing artificer constituted the world. Indeed, we must by no means think that he fashioned it similar to such animals as subsist in the form of a part, or have a partial subsistence: for, if it had been assimilated to an imperfect animal, it certainly would not have been beautiful. But we should rather establish it as the most similar of all things to that animal, of which other animals, both considered separately and according to their genera, are nothing more than parts. For this, indeed, contains all intelligible animals comprehended in itself; just as this world contains us and the other animals which are the objects of sight. For, the Divinity being willing to assimilate this universe in the most exquisite degree to that which is the most beautiful and every way perfect of intelligible objects, he composed it one visible animal, containing within itself all such animals as are allied to its nature. Do we therefore rightly conclude that there is but one universe; or is it more right to assert that there are many and infinite? But indeed there can be but one, if it be only admitted that it is fabricated according to an exemplar. For that which comprehends all intelligible animals whatever can never be the second to any other. For another animal again would be required about these two, of which they would be parts; and it would be more proper to assert that the universe is assimilated to this comprehending third, rather than to the other two. That the world, therefore, from its being singular or alone, might be similar to all-perfect animal—on this account the artificer neither produced two nor infinite worlds; but heaven, or the universe, was generated and will be one and only begotten.

But since it is necessary that a corporeal nature should be visible and tangible, and since nothing can be visible without fire, and nothing tangible without something solid, and nothing solid without earth—hence the Divinity, beginning to fabricate, composed the body of the universe from fire and earth. But it is impossible for two things alone to cohere together without the intervention of a third; for a certain collective bond is necessary in the middle of the two. And that is the most beautiful of bonds which renders both itself and the natures which are bound remarkably one. But the

most beautiful analogy naturally produces this effect. For when either in three numbers, or masses, or powers, as is the middle to the last, so is the first to the middle; and again, as is the last to the middle, so is the middle to the first: then the middle becoming both first and last, and the last and the first passing each of them into a middle position, they become all of them necessarily the same, as to relation to each other. But, being made the same with each other, all are one. If, then, it were necessary that the universe should be a superficies only, and have no depth, one medium would indeed be sufficient, both for the purpose of binding itself and the natures which it contains. But now it is requisite that the world should be a solid; and solids are never harmonized together by one, but always with two mediums. Hence, the Divinity placed water and air in the middle of fire and earth, and fabricated them as much as possible in the same ratio to each other; so that fire might be to air as air to water; and that as air is to water so water might be to earth. And from this conjunction and composition he rendered the world visible and tangible. Hence, from things of this kind, which are four in number, it must be confessed that the body of the universe was generated through analogy, conspiring into friendship with itself from their conjunction, and so aptly cohering in all its parts, as to be indissoluble except by its artificer, who bound it in this union and consent.

The composition of the world, therefore, received one *whole* of each of these four natures. For its composing artificer constituted it from *all* fire, water, air, and earth; leaving no part of any one of these, nor any power external to the world. For by a reasoning process he concluded that it would thus be a whole animal, in the highest degree perfect from perfect parts: that, besides this, it would be one, as nothing would be left from which any other such nature might be produced; and lastly, that it would be neither obnoxious to old age nor disease. For he perceived that the heat and cold from which bodies are composed, and all such things as possess vigorous powers, when surrounding bodies externally, and acceding to them unseasonably, dissolve their union, and, introducing diseases and old age, cause them to perish by decay. Hence, through this cause and this reasoning process, he fabricated the universe one whole, composed from all wholes, perfect, undecaying, and without disease. He likewise gave to it a figure becoming and allied to its nature. For to the animal which was destined to comprehend

comprehend all animals in itself, that figure must be the most becoming which contains within its ambit all figures of every kind. Hence, he fashioned it of a spherical shape, in which all the radii from the middle are equally distant from the bounding extremities; as this is the most perfect of all figures, and the most similar to himself. For he considered that the similar was infinitely more beautiful than the dissimilar.

Besides this, he accurately polished the external circumference of the spherical world, and rendered it perfectly smooth <sup>1</sup>. Nor was the addition of eyes <sup>2</sup> requisite to the universe; for nothing visible remained external to itself.

<sup>1</sup> It is well observed here by Proclus, that, the whole universe being luminous, it is most lucid according to its external superficies, and full of divine splendour. For through this the poets also place Olympus at the extremity of the world, this being entirely luminous and self-splendid.

There a white splendour spreads its radiance round,

says Homer. But of this luminous subsistence smoothness is a symbol. Why, therefore, are the extremities of the universe smooth? We reply, That it may be spontaneously conjoined with soul and intellect, and that it may be harmoniously adapted to supermundane lights, through its similitude to them. Smoothness, therefore, is significant of extreme aptitude, through which the universe is able to receive the illuminations proceeding from intellect and soul; just as mirrors, by their smoothness, receive the representations of things. Proclus further observes, that a mirror was assumed by ancient theologians as a symbol of the aptitude of the universe to be filled with intellectual illumination. Hence, says he, they say that Vulcan made a mirror for Bacchus, into which the God looking, and beholding the image of himself, proceeded into the whole of a divisible fabrication. And you may say that the smoothness of the external surface of the universe, which is now mentioned by Plato, reminds us of the above-mentioned catoptric apparatus. The whole body of the universe, therefore, being externally smooth, becomes connate with its own intellect, and with that of the demiurgus. Hence, poets establish the demiurgus on the lofty summit of the world, which is allotted from him such an aptitude, in order to its participation of intelligible causes.

<sup>2</sup> By these words, says Proclus, Plato appears to do nothing else than to take away from the universe a divisible life, and divisible organs, which being suspended from us descend into generation, or the whole of a visible nature. For, while we remain on high, we are in no want of any one of these multiform lives and divisible instruments; but our lucid vehicle is sufficient, which contains in itself unitedly all the senses. As, therefore, when we are liberated from generation we are purified from every life of this kind, what ought we to think respecting the universe? Is it not this, that it has one simple life, to which the whole of it is excited, and that it is equally on all sides prepared to be filled with one life? Or ought we not much more to admit these things of the universe? For wholes are more divine than parts, and things which comprehend than those which are comprehended.

Plato, however, must not be supposed in what he now says to deprive the world of sense; for, according

itself. Nor were ears necessary; as there was nothing externally audible. Nor was the universe invested with surrounding air, that it might be indigent of respiration. Nor, again, was it in want of any organ through which it might receive nutriment into itself, and discharge it when concocted: for there was no possibility that any thing could either accede to or depart from its nature, since there was nothing through which such changes could be produced. For, indeed, the universe affords nutriment to itself through its own consumption; and, being artificially fabricated, suffers and acts all things in itself, and from its own peculiar operations. For its composing artificer considered that it would be much more excellent if sufficient to itself, than if indigent of foreign supplies. But he neither thought that hands<sup>1</sup> were necessary to the world, as there was nothing for it either to receive

according to him, the world is an animal, and an animal is characterized by sense. In order, therefore, to understand what the nature of that sense is which the world possesses, it will be necessary to make the following division. Of sense, therefore, the first and most principal is that which imitates intellect. For every where things which rank as first possess an imitation of things prior to them. Hence, that is conjoined with first natures which has a sensible perception of itself, comprehended in itself, not passing from one thing to another, for this would be divided sense, nor proceeding to externals, for this is imperfect, but possessing the whole of that which is sensible in itself, and which may be rather called consciousness than sense. The next to this is that which proceeds indeed, and does not abide like the former, but yet proceeds according to a perfect energy, and always, on all sides, similarly apprehends that which is known; which is likewise purified from all passion, and from all that imbecility which is peculiar to divisible and material organs. The third is that which is passive to things external, and is mingled from passion and knowledge; originating, indeed, from passion, but ending in knowledge. The last sense is that with which a most obscure knowledge is present, which is full of passion, and is proximate to physical sympathy, as not knowing the forms of sensibles; as, for instance, that what operates is hot or cold, but that what falls upon it is alone pleasant or painful; for such is the sense of plants, as Timæus informs us in the course of this dialogue, being the apprehension of that which is alone pleasant and painful from things sensible. Sense, therefore, thus supernally proceeding, the world is sensitive according to the first sense. For it is visible, and an eye, according to the whole of itself, since the sun also is called an eye, and each of the stars. The world, therefore, is wholly sight and the thing seen, and is *truly* to be comprehended by sense and opinion. Hence, it contains all-perfect knowledge, indivisible sense, and is itself sensible, the instrument of sense, and sense; just as also its artificer is intellect, intelligence, and the intelligible. And as it comprehends partial bodies in its whole body, so likewise it contains many senses in its total sense.

<sup>1</sup> These things, says Proclus, are by no means in the universe, though after another manner it contains both sense and motion. For, since every thing sensible is comprehended in it, and it is



receive or reject; nor yet feet, nor any other members which are subservient to progression and rest. For from among the seven species of local motion he selected one, which principally subsists about intellect and intelligence, and assigned it to the world as properly allied to its surrounding body. Hence, when he had led it round according to *same*, in *same*, and in itself, he caused it to move with a circular revolution. But he separated the other six motions from the world, and framed it void of their wandering progressions. Hence, as such a conversion was by no means indigent of feet, he generated the universe without legs and feet. When, therefore, that God who is a perpetually reasoning divinity cogitated about the God who was destined to subsist at some certain period of time, he produced his body smooth and equable; and every way from the middle even and whole, and perfect from the composition of perfect bodies. But, placing soul in the middle of the world, he extended it through the whole; and besides this, he externally invested the body of the universe with soul; and, causing circle to revolve in a circle, established the world one single, solitary nature, able through virtue to converse with itself, indigent of nothing external, and sufficiently known and friendly to itself. And on all these accounts he ren-

is itself the first sensible, it has also one sense conjoined with sensible of this kind; just as the intelligence of the demiurgus is conjoined with the whole of the intelligible, in consequence of which he is said by Orpheus to absorb the universe in himself. After this manner, therefore, the world absorbs itself by the sensible perception of itself, and comprehends the thing known by a connate knowledge. It also possesses powers which rule over, and are the guardians of, all things; and these are its hands. It likewise possesses perfective orders, which are analogous to nutritive parts; and receives vivific causes which correspond to the members of respiration. Further still, it also contains other powers, some of which fill it with unapparent causes, and others connect it with intelligible light. And of these powers, some are analogous to sight, and others to hearing. With this sense it likewise possesses an analogous motion; for, as it possesses a sensible perception of itself, so also it contains motion in itself, and a revolving about itself; and both these according to the similitude of its paradigm. For in Phanes, or animal itself, there is intelligence verging to itself, a life converted to itself, and a knowledge not subsisting according to transition and division, but self-perfect, and united with intelligibles themselves. For such is the intellect which is there, which in consequence of its being absorbed in superessential light may be said to energize prior to energy; because, according to the Chaldaic oracle, it has not proceeded, but abides in the paternal profundity, and in the adytum, according to a silence which is nourished by Deity.

dered the universe a happy<sup>1</sup> God. But indeed the artificer did not produce soul, as we just now began to say, junior to body: for he who conjoined these would never permit that the more antient nature should be subservient to the younger. But we, as being much conversant with that which casually occurs, assert things of this kind in an assimilative way; while, on the contrary, the artificer of the world constituted soul both in generation and virtue prior to, and more antient than, body, as being the proper lord and ruler of its servile nature; and that in the following manner:

From an essence impartible<sup>2</sup>, and always subsisting according to sameness of

<sup>1</sup> The happiness of any being is the proper perfection of that being; and hence, as the perfections of beings differ, so also do their felicities. A felicity, therefore, in the present case must be assumed, adapted to the universe. For, since the world is suspended from a paternal intellect and a total fabricative energy, and lives according to those causes, it is happy in a degree consequent to these. The world, therefore, living according to the will of the father, and preserving immutably the intellectual good which is thence imparted, is very justly said to be happy. But the first form of felicity, says Proclus, and which is all-perfect, is that of the world. The second is that of the mundane Gods, whom Plato in the *Phædrus* calls happy divinities, following the mighty Jupiter. The third is that which subsists in the genera superior to our nature, viz. angels, daemons, and heroes; for the felicity of each of these is different. The fourth is that which subsists in undefiled souls, who make blameless descents into mortality, and exhibit an inflexible and untamed life; such as were the souls of Hercules, Pythagoras, Socrates, Plato, &c. The fifth is the felicity of partial souls; and this is multiform: for a soul the attendant of the moon is not happy after the same manner as the soul that is suspended from the solar order; but as the form of life is different, so also the perfection is limited by different measures. And the last form of felicity is that which is seen in irrational animals.

<sup>2</sup> The Orphic writers, says Proclus, (in *Tim.* p. 184.) do not predicate the impartible of every intelligible or intellectual order, but, according to them, there is something better than this appellation; just as, with respect to other names, they do not adapt king and father to all orders. Where, then, shall we first perceive the indivisible according to Orpheus, that we may thus understand the divinely intellectual conception of Plato? Orpheus, therefore, establishing one demiurgus of all divided fabrication, who is analogous to the one father that generates total fabrication, produces from him the whole mundane intellectual multitude, the number of souls, and corporeal compositions. This demiurgus, (viz. Bacchus) therefore, generates all these unitedly; but the Gods who are placed about him divide and separate his fabrications. Orpheus says, that all the other fabrications of this divinity were separated into parts by the distributive Gods, but that his heart alone was preserved indivisible by the providence of Minerva. For, as he gave subsistence to intellects, souls and bodies, and souls and bodies receive in themselves much division and separation into parts, but intellect remains united and undivided, being all things in one, and comprehending

of being, and from a nature divisible about bodies, he mingled from both a third form of essence, having a middle subsistence between the two. And again, between that which is impartible and that which is divisible about bodies, he placed the nature of *same* and *different*. And taking these, now they are three, he mingled them all into one idea. But as the nature of *different* could not without difficulty be mingled in *same*, he harmonized them together by employing force in their conjunction. But after he had mingled these two with essence, and had produced one from the three, he again divided this whole into becoming parts; at the same time mingling each part from *same*, *different*, and *essence*. But he began to divide as follows:—In the first place, he received one part from the whole. Then he separated a second part, double of the first; afterwards a third, sesquialter of the second, but triple of the first: then a fourth, double of the second; in the next place a fifth, triple of the third; a sixth, octuple of the first; and lastly a seventh, twenty-seven times more than the first. After this, he filled up the double and triple intervals, again cutting off parts from the whole; and placed them fo between the intervals, that there might be two mediums in every interval;

prehending in one intelligence total intelligibles,—hence he says, that intellectual essence alone, and an intellectual number, were saved by Minerva. For, says he,

The intellectual heart alone was saved:

openly denominating it intellectual. If, therefore, the indivisible heart is intellectual, it will evidently be intellect and an intellectual number; not that it will, indeed, be every intellect, but that which is mundane; for this is the indivisible heart, since the divided God was the fabricator of this. But Orpheus calls intellect the indivisible essence of Bacchus; and denominates his prolific power that life which is distributed about body, which is physical and productive of seeds, and which he says Diana, who presides over all the generation in nature, and leads into light physical reasons, supernally extends as far as to subterranean natures. All the remaining body of the God is, according to Orpheus, mythologically considered as the composition pertaining to the soul, and is divided into seven parts. “All the parts into which they divided the boy were seven\*,” says the theologist, speaking concerning the Titans; just in the same manner as Timæus divides the soul into seven parts. And, perhaps, when Timæus says that soul is extended through the whole world, he reminds us of the Orphic Titanic division, through which not only the soul is spread round the universe like a veil, but is also extended through every part of it. With great propriety, therefore, does Plato call that essence impartible which is proximately placed above soul, following the Orphic fables, and wishing, as it were, to be an interpreter of what is said in the mysteries.

\* Ἑπτα δὲ πάντα μέρη κενού διμοίρσαντο φησὶν ὁ θεολόγος περὶ τῶν Τιτανῶν.

and

and that one of these might by the same part exceed one of the extremes, and be exceeded by the other; and that the other part might by an equal number surpass one of the extremes, and by an equal number be surpassed by the other. But as from hence sesquialter, sesquitercian, and sesquioctave intervals were produced, from those bonds in the first spaces, he filled with a sesquioctave interval all the sesquitercian parts, at the same time leaving a part<sup>1</sup> of each of these. And then again the interval of this part being

<sup>1</sup> It is well observed here by Proclus, (in Tim. p. 211.) that from each of the spheres from which the universe consists there are certain defluxions which extend as far as to the subterranean regions, and also certain dregs mingled together, of the elements themselves, possessing much of the tumultuous, dark and material, but at the same time contributing to the whole composition and harmony of the world. Plato (says he) placing the cause of this in the soul of the universe calls it a remainder (*λειμμα*), a term significant of ultimate subjection.

Proclus further observes, "that theologists also establish about subterranean places the powers of the highest Gods; and that Jupiter himself is represented by them as adorning those places in order to adapt them to the participation of such mighty Gods. That, if this be the case, we ought much more to think, concerning the soul of the universe, that it adorns every thing which appears to have a disordered subsistence, possesses the cause of its existence, and arranges it in a becoming manner according to this cause. For, how can it govern the universe, or conduct all things according to intellect, unless it orderly disposes that which is disordered, and co-harmonizes things last with the one life of the world? If also the causes of these subsist in the demiurgus, as Orpheus says, what wonder is it that the whole soul which possesses all such things in a manner adapted to itself, as a divine intellect possesses demiurgically, should also comprehend the cause of things last in the world, and of that which is as it were the sediment of wholes? For soul prior to the apparent and sensible comprehends an unapparent world."

Proclus concludes with observing, that the whole number of the essential monads in the soul is 105,947\* ; the soul thus proceeding according to all the orders of numbers. For it proceeds decadically indeed, that it may become the mundane soul; since the decad is the number of the world: but pentadically, that it may be converted to itself; for the pentad is self-convertive. It also proceeds enneadically (or according to the number 9), that it may not only connect the universe monadically, but may proceed to the last of things after departing from the monad: tetradically, as collecting the quadripartite division of things into one, and hebdomadically (or according to the number 7), as converting all things to the monad, to which the hebdomad is alone referred, this number being motherless and masculine. And the whole of this number is indeed in the soul of the world totally, viz. has a total subsistence; but in divine souls, as energizing towards the mundane soul, it is contained totally and partially. In demoniacal souls, as energizing yet more partially, it subsists on the contrary partially and totally; and in human souls partially and gnostically alone.

\* In the original *μυριαδες δεκα, χιλιαδες πεντε, εκατονταδες τεσσαρες*; but from what Proclus immediately after observes, it is evident that instead of *εκατονταδες τεσσαρες* we should read *εννεακονταδες τεσσαρακογες*.

affumed, a comparifon is from thence obtained in terms of number to number, fubfifting between 256 and 243. But now the whole of that mixture from which thefe were feperated was confumed by fuch a fection of parts. Hence he then cut the whole of this compofition according to length, and produced two from one; and adapted middle to middle, like the form of the letter X. Afterwards he bent them into a circle, connecting them, both with themfelves and with each other, in fuch a manner that their extremities might be combined in one directly oppofite to the point of their mutual interfection; and externally comprehended them in a motion revolving according to *fameness*, and in that which is perpetually the fame. And befides this, he made one of the circles external, but the other internal; and denominated the local motion of the exterior circle, the motion of that nature which fubfifts according to *fameness*; but that of the interior one, the motion of the nature fubfifting according to *difference*. He likewife caufed the circle partaking of *fameness* to revolve laterally towards the right hand; but that which partakes of *difference* diametrically towards the left. But he conferred dominion on the circulation of that which is *same* and *similar*: for he fuffered this alone to remain undivided. But as to the interior circle, when he had divided it fix times, and had produced feven unequal circles, each according to the interval of the double and triple; as each of them are three, he ordered the circles to proceed in a courfe contrary to each other:—and three of the feven interior circles he commanded to revolve with a fimilar fwiftnefs; but the remaining four with a motion diffimular to each other, and to the former three; yet fo as not to defert order and proportion in their circulations.

After, therefore, the whole compofition of the foul was completed according to the intention of its artificer, in the next place he fabricated within foul the whole of a corporeal nature; and, conciliating middle with middle, he aptly harmonized them together. But foul<sup>1</sup> being every way extended

<sup>1</sup> Soul proceeding fupernally as far as to the laft receffes of the earth, and illuminating all things with the light of life, the world being converted to it, becomes animated from its extremities, and alfo according to its middle, and the whole of its interval. It alfo externally enjoys the intellectual illumination of foul. Hence foul is faid to obtain the middle of the univerfe, as deposite in it its powers, and a fymbol of its proper prefence. It is alfo faid to extend itfelf to the extremities of heaven, as vivifying it on all fides; and to inveft the univerfe as with a veil, as poffeffing powers exempt from divisible bulks.

from

from the middle to the very extremities of the universe, and investing it externally in a circle, at the same time herself revolving <sup>1</sup> within herself, gave rise to the divine commencement of an unceasing and wise life, through the whole of time. And, indeed, the body of the universe was generated visible; but soul is invisible, participating of a rational energy and harmony <sup>2</sup>, and subsisting as the best of generated natures, through its artificer, who is the best of intelligible and perpetual beings. Since, therefore, soul was composed from the mixture of the three parts *same*, *different*, and *essence*, and was distributed and bound according to analogy, herself at the same time returning by a circular energy towards herself; hence, when she touches <sup>3</sup> upon any thing endued with a dissipated essence, and when upon that which is indivisible, being moved through the whole of herself, she pronounces concerning the nature of each—asserts what that is with which any thing is the same <sup>4</sup>, from what it is different, to what it is related, where it is situated, how

<sup>1</sup> Plato here evidently evinces, that the conversion of the soul to herself is a knowledge of herself, of every thing which she contains, and of every thing prior to and proceeding from her. For all knowledge may be said to be a conversion and adaptation to that which is known; and hence truth is an harmonious conjunction of that which knows with the object of knowledge. Conversion, however, being twofold, one as to *the good*, and the other as to *being*, the vital conversion of all things is directed to *the good*, and the gnostic to *being*.

<sup>2</sup> Harmony has a threefold subsistence; for it is either *harmony itself*, i. e. ideal harmony in a divine intellect; or *that which is first harmonized*, and is such according to the whole of itself; or *that which is secondarily harmonized*, and partly participates of harmony. The first of these must be assigned to intellect, the second to soul, and the third to body.

<sup>3</sup> Plato calls the gnostic motions of the soul *touchings*, indicating by this their immediate apprehension of the objects of knowledge, and their impartible communion with them. Since, however, one of the circles, viz. the dianoëtic power, knows intelligibles, and the other, i. e. the doxastic power, sensibles, what is it which says that these objects are different from each other, and that the one is a paradigm, but the other an image? We reply, that in the same manner as the common sense knows visibles and audibles, the former through sight, and the latter through hearing, and, in consequence of asserting that these are different from each other, must necessarily have a knowledge of both,—so this reason of which Plato now speaks, being different from the two circles, asserts through the whole soul some things concerning intelligibles, and others concerning sensibles. For, in as much as the soul is one essence, she possesses this one gnostic energy, which he calls reason: and hence we simply say that the whole soul is rational. This reason then is the one knowledge of the soul, which through the circle of sameness understands an impartible essence, and through the circle of difference that which is dissipated.

<sup>4</sup> The soul of the world, says Proclus (in Tim. p. 234.) comprehends all sensibles, together with every

how it subsists; and when any thing of this kind happens either *to be* or *to suffer* both in things which are generated and in such as possess an eternal sameness of being. Reason indeed, which is *becoming*<sup>1</sup> *to be* true according to sameness, when it is conversant as well with *different* as *same*, evolving itself without voice or sound in that which is moved by itself; when in this case it subsists about a sensible nature, and the circle characterized by *difference* properly revolving, enunciates any circumstance to every part of the soul with which it is connected; then stable and true opinions and belief are produced. But when again it evolves itself about that which is *logistic*<sup>2</sup>, and the circle of *sameness* aptly revolving announces any particular thing, intellect

every thing which they either do or suffer. For, since the universe is one animal, it sympathizes with itself, so that all generated natures are parts of the life of the world, as of one drama. Just as if a tragic poet should compose a drama in which Gods make their appearance, and heroes and other persons speak, and should permit such players as were willing, to utter the heroic speeches, or the speeches of other characters, he at the same time comprehending the one cause of all that is said. Thus ought we to conceive respecting the whole soul: that giving subsistence to all the life of the world, this life being one and various, and speaking like a many-headed animal with all its heads, partly in Grecian and partly in Barbaric language, it comprehends the causes of all generated natures; knowing particulars by universals, accidents by essences, and parts by wholes, but all things simply by the divinity which it contains. For a God so far as a God knows things partial, contrary to nature, and in short all things, even though you should say matter itself. For every thing, whatever it may be, is one, so far as it proceeds from *the one*. The knowledge, therefore, of all things simply and directly, is divine.

<sup>1</sup> This reason is the one power of the essence of the soul, according to which the soul is one, just as it is twofold according to *the same* and *different*. This reason, therefore, being one, knows according to *sameness*. For it does not at one time know the intelligible, and at another time a sensible nature, like our reason, which is unable to energize about both according to the same. Plato very properly says of this reason, that it is *becoming to be true* (*αρχησ γιγνομενος*) about intelligibles and sensibles, but is not *absolutely* true like intellect, in consequence of its transitive knowledge according to both these. Hence, by asserting that it knows according to *sameness*, he signifies the difference between the knowledge of a divine and partial soul; but when he says that it is *becoming to be true*, he indicates the difference between the knowledge of soul and intellect. You may also say, that it is *becoming to be true*, as being transitive in its twofold knowledges; but that it is true *according to the same*, as always comprehending the whole form of every thing which it knows, and not like our reason evolving every form, but with respect to every thing which it sees beholding the whole at once. For we see every thing according to a part, and not according to sameness.

<sup>2</sup> It appears from the comment of Proclus on this part, that we should read *λογιστικον*, and not *λογικον* as in all the printed editions of the Timæus. Proclus also well observes, that by *logistic*, here, we must understand *the intelligible*; for Plato opposes this to *the sensible*. He adds, that

intellect and science are necessarily produced in perfection by such an operation. Whoever, therefore, asserts that this<sup>1</sup> is ingenerated in any other nature than soul, asserts every thing rather than the truth.

But when the generating father understood that this generated resemblance of the eternal Gods<sup>2</sup> moved and lived, he was delighted with his work, and in consequence of this delight considered how he might fabricate it still more similar to its exemplar. Hence, as that is an eternal animal, he endeavoured to render this universe such, to the utmost of his ability. The nature indeed of the animal its paradigm is eternal, and this it is impossible to adapt perfectly to a generated effect. Hence he determined by a dianoëtic energy to produce a certain movable image of eternity: and thus, while he was adorning and distributing the universe, he at the same time formed an

Plato appears to call *the intelligible the logistic*, after the same manner as he afterwards calls *the sensible, sensitive*, (το αισθητον, αισθητικον). For *the sensible* is motive of sense, and *the intelligible* of the reasoning of the soul. After this he observes as follows: "By aptly revolving we must understand the intellectual, the unimpeded in transition, the circular, and the consummation of vigour, perfection in intellections, the energizing about a divine nature, the beneficent, and moving about the intelligible as a centre;"—"hastening to conjoin yourself with the centre of resounding light," says some one of the Gods. By *intellect* Plato here signifies intellect according to habit. For intellect is threefold: the first, that which is divine, such as the demiurgic; the second, that which is participated by the soul, but is at the same time essential and self-perfect; and the third, that which subsists according to habit, and through which the soul is intellectual. *Science* here signifies the first knowledge filled from intelligibles, and which has an undeviating and immutable subsistence. But it differs from intellect, so far as intellect is beheld in simple projections alone of the soul; for through this the soul understands at once the whole of every thing which is the object of intellection. For an energy at once collective is the peculiarity of intellect; but that of science consists in a knowledge from cause; since the composition and division of forms constitute the idiom of science.

<sup>1</sup> By *this*, says Proclus, we must understand *intellect* and *science*. Every thing, therefore, which is the recipient of intellect and science, of opinion and faith, is soul. For all the knowledges of the soul are rational and transitive. And because they are rational, indeed, they are exempt from irrational powers; but, because they are transitive, they are subordinate to intellectual knowledge. For, if science and intellect are in intelligibles, they are not *ingenerated* in them, as Plato here says they are in the soul.

<sup>2</sup> By the *eternal Gods* here we must not understand, as Proclus well observes, the *mundane Gods*; for Plato does not alone speak of the corporeal nature of the universe, but also discourses about it as animated, and an intellectual animal, which comprehends in itself the mundane Gods. We must understand, therefore, that the world is the resemblance of the intelligible Gods: for it is filled from them with deity, and the progressions into it of the mundane are as it were certain rivers and illuminations of the intelligible Gods.



eternal image flowing according to number, of eternity abiding in one; and which receives from us the appellation of time. But besides this he fabricated the generation of days<sup>†</sup> and nights, and months and years, which had

no

<sup>†</sup> What day and night, month and year, are, says Proclus, and how these are said to be parts of time, but *was* and *will be* species, and not parts, requires much discussion and profound consideration. If then we should say that day is air illuminated by the sun, in the first place, we should speak of something which takes place in day, and not that which day is; for, when we say that the day is long or short, we certainly do not predicate an increase or decrease of the air; and, in the next place, it is difficult to devise how this will be a part of time. But if we say that day is the temporal interval according to which the sun proceeds from the east to the west, we shall perhaps avoid the former objections, but we shall fall into more impervious difficulties. For whether, surveying this interval itself without relation to the sun, we say that it is day, how does it happen, since the same interval is every where according to the same, that day is not every where? And if we consider this interval in connection with the solar motion, if it is simply so considered, day will always be in the heavens, and there will be no night; and how is it possible that a part of time should not be every where? for night, day, and month, are here clearly said to be parts of time. But if we connect this interval with the circulation of the sun, not simply, but assert that day is the portion of the sun's course from east to west, but night that portion which is produced by his course from west to east, the heavens will not possess those nights and days which are said to be parts of time; and it is also evident that neither will they possess months and years. But we assert of time, both considered according to the whole of itself, and every part of its progression, that it is present to the whole world: for one and the same *now* is every where the same. It is necessary, therefore, that day and the other parts of time should be every where the same, though they are participated partly, and with division by sensible fabrications. Assigning, therefore, to these a more principal subsistence, conformably to the custom of our father\*, we must say, that night and day are demiurgic measures of time, exciting and convolving all the apparent and unapparent life and motion, and orderly distribution of the inerratic sphere: for these are the true parts of time, are present after the same manner to all things, and comprehend the primary cause of apparent day and night, each of these having a different subsistence in apparent time; to which also Timæus looking reminds us how time was generated together with the world. Hence he says in the plural number *nights* and *days*, as also *months* and *years*. But these are obvious to all men: for the unapparent causes of these have a uniform subsistence prior to things multiplied, and which circulate infinitely. Things immovable also subsist prior to such as are moved, and intellectual natures are prior to sensibles. Such, therefore, must be our conceptions of night and day according to their first subsistence.

By *month* we must understand that truly divine temporal measure which convolves the lunar sphere, and every termination of the other † circulation. But *year* is that which perfects and connects the whole of middle fabrication, according to which the sun is seen possessing the

\* Meaning his preceptor Syrianus, as being his true father, the father of his soul.

† Viz. of the circulation about the zodiac.

no subsistence prior to the universe, but which together with it rose into existence. And all these, indeed, are the proper parts of time. But the terms *it was* and *it will be*, which express the species of generated time, are transferred by us to an eternal essence, through oblivion of the truth. For we assert of such an essence that it *was, is, and will be*; while according to truth the term *it is* is alone accommodated to its nature. But we should affirm, that *to have been* and *to be hereafter* are expressions alone accommodated to generation, proceeding according to the flux of time: for these

greatest strength, and measuring all things in conjunction with time. For neither day nor night, nor month, is without the sun, nor much more year, nor any other mundane nature. I do not here speak according to the apparent fabrication of things alone, for the apparent sun is the cause of these measures, but also according to that fabrication which is unapparent. For, ascending higher, we shall find that the more true\* sun measures all things in conjunction with time, being itself in reality time of time, according to the oracle† of the Gods concerning it. For that Plato not only knew these apparent parts of time, but also those divine parts to which these are homonymous, is evident from the tenth book of his Laws. For he there asserts that we call hours and months divine, as having the same divine lives, and divine intellects presiding over them, as the universe. But, if he now speaks about the apparent parts of time, it is by no means wonderful; because now his design is to physiologize. Let these, therefore, be the parts of time, of which some are accommodated to the inerratic Gods, others to the Gods that revolve about the poles of the oblique circle, and others to other Gods, or attendants of the Gods, or to mortal animals, or the more sublime or more abject parts of the universe.

But Plato says that *was* and *will be* are species and not parts of time, in the same manner as days and nights, and months and years: for by these he represents to us those divine orders which give completion to the whole series of time; and on this account he calls them parts of time. But *was* and *will be* are entirely beheld according to each of these; and hence they are certain species, not having as it were a peculiar matter; I mean a diurnal or nocturnal matter, or any other of this kind. If then these are the species of time which was generated together with the world, there was no generation prior to the world. Neither, therefore, was there any motion: for in every motion there are these species of time, because there are prior and posterior. But, if there was not motion, neither was there inordinate motion. In vain, therefore, do the followers of Atticus say, that there was time prior to the generation of the world, but not subsisting in order: for where time is there also there is past and future; and where these are, *was* and *will be* must likewise be found. But *was* and *will be* are species of time generated by the demiurgus: and hence time was not prior to the fabrication of the world. Proclus after this observes, that *was* indicates the perfective order of time, but *will be* the unfolding, in the same manner as *is*, the connective order of time. For time unfolds things which yet are not, connects things present, and perfects things past, and introduces a boundary to them adapted to their periods.

\* Viz. the sun considered according to its subsistence in the supermundane order of Gods.

† Viz. one of the Chaldean Oracles.

parts of time are certain motions. But that which perpetually subsists the same and immovable, neither becomes at any time older or younger; neither has been generated in some period of the past, nor will be in some future circulation of time; nor receives any circumstance of being, which generation adapts to natures hurried away by its impetuous whirl. For all these are nothing more than species of time imitating eternity, and circularly rolling itself according to number. Besides this, we likewise frequently assert that a thing which was *generated*, is *generated*: that what subsists in BECOMING TO BE, IS *in generation*; that what WILL BE, IS TO BE; and that NON-BEING IS NOT: no one of which assertions is accurately true. But perhaps a perfect discussion of these matters is not adapted to the present disputation.

But time † was generated together with the universe, that being produced together they might together be dissolved, if any dissolution should ever  
 happen

† Plato, says Proclus, asserts that time was generated together with the universe, animated and endued with intellect, because the world first participates of time according to soul and according to a corporeal nature. But when he says, “that, being produced together, they may together be dissolved, if any dissolution should ever happen to these,” he clearly shows that the universe is unbegotten and incorruptible. For, if it was generated, it was generated in time; but, if it was generated together with time, it was not generated in time: for neither is time generated in time, lest there should be time prior to time. If, therefore, the universe was generated together with time, it was not generated\*: for it is necessary that every thing which is generated should be posterior to time; but the universe is by no means posterior to time. Again, if every thing which is dissolved, is dissolved on a certain time, but time cannot be dissolved in a part of itself, time can never be dissolved; so that neither will the universe be dissolved, since it is indissoluble, as long as time is indissoluble. Time also is indissoluble through the simplicity of its nature, unless some one should denominate the contrariety which arises through its procession from, and regression to, the demiurgus, generation and dissolution: for thus also the universe possesses dissolution and generation according to cause. Just, therefore, as if some one, wishing to indicate that the circulations of the other nature † are odd in number, should say that the heptad is confubfistent with them, that if at any time the heptad should become an even number, those circulations also may become even, signifying that the circulations will never be changed into an even number,—after the same manner must we conceive respecting the all-various indissolubility of the world and of time, in consequence of time possessing an indissoluble nature. One cause, therefore, of time being generated together with the universe is, that the universe may be indissoluble

\* Viz. it was not generated according to the usual acceptation of the word generated.

† Viz. the circulations about the zodiac.

and

happen to these. And time was generated according to the exemplar of an eternal nature, that this world might be the most similar possible to such a nature. For its exemplar is permanent being, through the whole of eternity; but the universe alone *was* generated, *is*, and *will be*, through the whole of time. After this manner, therefore, and from such a dianoëtic energy of Divinity about the generation of time <sup>1</sup>, that he might give birth to its flowing subsistence, he generated the sun and moon, and the five other stars, which are denominated planets, for the purpose of distinguishing and guarding the numbers of time. But the Divinity, as soon as he had produced the bodies of these stars, placed them, being seven in number, in the seven circulations formed by the revolution of the nature distinguished by *difference*. The moon, indeed, he fixed in the first circulation about the earth; the sun in the second above the earth; the star called Lucifer <sup>2</sup>, and that which is sacred to Mercury, in circulations revolving with a swiftness equal to the sun, to whom at the same time they are allotted a contrary power; in consequence

and perpetual; but a second cause is, that it may become most similar to its paradigm. How, therefore, does the universe become more similar to its paradigm animal itself (*αὐτῷ ζῳῳ*) through time? Because, says Plato, as the intelligibles from which animal itself consists receive all the power of eternity, which is unific, and connective, and subsists at once, collectively and unitedly, so the world receives partly and divisibly all the measured motion of time; through which it was, and is, and will be, not possessing these three in the whole of time, but each in a part of time.

<sup>1</sup> The one monad itself of time (says Proclus) is an all-perfect number; but from this monad there is also in each of the celestial revolutions a proper measure, Saturnian, or Jovian, or Lunar, receiving its peculiarity from the soul and motive deity contained in each of the spheres. For one number is adapted to the sun, another to a horse, and another to a plant; but the mundane number is common to all that the world contains. Hence also we say that the same time is every where. For the world has one life, in the same manner as it has one nature, and one intellect. But if it has one life, it has also one temporal measure. And as, with respect to the parts which it contains, each lives according to the nature which subsists in the world as a whole, so also it is measured according to *total* time; and this is the common measure of all things. But after this monad there is a triad, of which the summit is the measure of the first circulation, viz. of the motion of the inerratic sphere; but the middle is the measure of the revolutions of the planets, (for there is one life, one period, and one time, restoring things to their pristine condition, of all the planets as of one animal), and the third is the measure of the circular motion in generation. For through this the mutations of the elements, and the opposition and regeneration of the things moved, again receive their subsistence. But, after this triad, time proceeds according to different numbers, measuring wholes, and bounding all things by appropriate measures.

<sup>2</sup> Venus.

of which, these stars, the Sun, Lucifer, and Mercury, mutually comprehend and are mutually comprehended by each other in a similar manner. But with respect to the other <sup>1</sup> stars, if any one should think proper to investigate their circulations, and through what causes they are established, the labour would be greater than that of the discourse itself, for the sake of which they were introduced. An accurate discussion, therefore, of these particulars may, perhaps, be undertaken by us hereafter, if convenient leisure should fall to our lot.

When, therefore, each of the natures necessary to a joint fabrication of time had obtained a local motion adapted to its condition, and their bodies became animals through the connecting power of vital bonds, they then learned their prescribed order; that according to the oblique revolution of the circle of *difference*, which moves in subjection to the circle of *sameness*, these orbs should, by their revolution, partly form a more ample and partly a more contracted circle; and that the orb which formed a lesser circle should revolve swifter; but that which produced a greater, more slow:—but that in consequence of the motion of the circle of *sameness*, the orbs which circu-

<sup>1</sup> By the *other stars*, says Proclus, Plato means Mars, Jupiter, and Saturn; and by the word *established*, he signifies the perpetual and incorruptible fabrication of them. After this Proclus observes, that it is here requisite to call to mind the order of all the mundane spheres, which is as follows:—The inerratic sphere ranks as a monad, being the cause to all mundane natures of an invariable subsistence. But of the triad under this monad, viz. Saturn, Jupiter, Mars, the first is the cause of connected comprehension, the second of symmetry, and the third of separation. And again, the moon is a monad, being the cause of all generation and corruption; but the triad consists from the elements\* in generation under the moon; and the planets whose course is equal † subsist between these. And the Sun, indeed, unfolds truth into light, Venus beauty, and Mercury the symmetry of reasons, or the productive principles of nature. Or, you may say that the Moon is the cause of nature to mortals, she being the self-conspicuous image of fontal ‡ nature. But the Sun is the demiurgus of every thing sensible, since he is also the cause of seeing and being seen. Mercury is the cause of the *motions* of the phantasy; for the sun gives subsistence to the phantastic *essence*. Venus is the cause of the appetites of desire; and Mars of all natural irascible motions. Jupiter is the common cause of all vital, and Saturn of all *gnostic* powers. For all the irrational forms are divided into these, and the causes of these are comprehended in the celestial spheres.

\* Viz. from fire, air, and water.

† Viz. Mercury and Venus subsist between the triad Saturn, Jupiter, Mars, and the Moon.

‡ Viz. of Nature, considered as subsisting in its divine cause Rhea.

late most swiftly, comprehending other orbs as they revolve, should themselves appear to be comprehended by the revolution of the more slow. But all these circles revolve with a spiral motion, because they are agitated at one and the same time in two contrary directions: and in consequence of this, the sphere endued with the slowest revolution is nearest to that to which its course is retrograde, and which is the swiftest of all. And that these circles might possess a certain conspicuous measure of slowness and swiftness with reference to each other, and that the motion of the eight circulations might be manifest, the Divinity enkindled a light which we now denominate the Sun <sup>†</sup>, in the second revolution from the earth; that the heavens might

<sup>†</sup> Plato, says Proclus, here delivers the one and the leading cause of apparent time. For, as the demiurgus gives subsistence to unapparent, so the sun to apparent time, which measures the motion of bodies: for the sun, through light, leads into the apparent every temporal interval, bounds all periods, and exhibits the measures of restorations to a pristine state. Very properly, therefore, does Plato call the sun a *conspicuous measure*, as especially unfolding the progression \* of time into the universe, according to number. For it has a more accurate period than the five planets, being freed from advancing and receding motions, and also revolves more accurately than the moon, in consequence of always bounding its progressions to the north and south, according to the same sign. But, if it has a more accurate period, it is deservedly said to be the measure of measures, and to know from itself the periodic measures of the other planets, the ratios which they contain, and the swiftness of some of them compared with others. It also imitates in a greater degree than the other planets the permanency of eternity, through perpetually revolving after the same invariable manner. Such then is its difference with respect to the planets.

But the sun is after another manner a more conspicuous measure of the inerratic sphere; since this sphere also has a certain appropriate measure, and an appropriate interval, and one invariable number of its proper motion. The solar light, however, makes this measure, and all the evolution of apparent time, conspicuous and known. Hence Plato says "that these circles might possess a certain conspicuous measure:" for though there is a certain measure in the other stars, yet it is not *conspicuous*. But the sun unfolds into light both other intelligibles and time itself. You must not, however, say, that the solar light was therefore generated for the sake of measuring; for how is it possible that wholes can have a subsistence for the sake of parts, governing natures for the sake of the governed, and things eternal for the sake of such as are corruptible? But we should rather say that light manifests total time, possessing an unfolding power, and calls forth its supermundane monad, and one measure, to a mensuration of the periods of bodies. It is the light of the sun, therefore, which makes every thing that is moved to have a conspicuous measure. And this, indeed, is its total good. But after wholes it also secondarily benefits parts; for it gives the generation of number and a measure to such things as are fit participants of these.

\* In the original *περιόδον*, but the sense requires we should read *προόδον*.

might become eminently apparent to all things, and that such animals might participate of number as are adapted to its participation, receiving numerical

For irrational natures are destitute of these; but the genera of demons follow the periods of the Gods, and men become partakers of number and measure. The communications, therefore, of the sun, supernally beginning from wholes, descend as far as to parts, conferring good through light. And if, commencing from things apparent, you are willing to speak of things unapparent, the sun illuminates the whole world, makes the corporeal nature of it divine, and the whole of it to be totally filled with life. It also leads souls through undefiled light, and imparts to them an undefiled and elevating power, and by its rays governs the world. It likewise fills souls with empyrean fruits. For the order of the sun proceeds supernally from supermundane natures; and hence Plato does not here give subsistence to its light from a certain place, but says that the demiurgus *enkindled* it, as forming this sphere from his own essence, and emitting from the solar fountain a divulsed and nascent life; which also theologists assert concerning the supermundane firmaments. On this account, also, Plato appears to me to deliver a twofold generation of the sun; one together with the seven governors of the world, when he fashions their bodies and places them in their revolving spheres; but the other the *enkindling* of its light, according to which he imparts to it supermundane power. For it is one thing to generate itself by itself, the whole bulk of the sun, and another to generate it together with a governing idiom, through which it is called the king of every thing visible, and is established as analogous to the one fountain of good. For, as *the good itself*, being better than *the intelligible*, illuminates both intellect and the intelligible, so the sun, being better than the visible essence, illuminates sight, and whatever is visible. But if the sun is above the visible essence, it will have a supermundane nature: for the world is visible and tangible, and possesses a body. We must, therefore, survey the sun in a twofold respect; as one of the seven mundane governors, and as the leader of wholes, as mundane and as supermundane, according to which also he illuminates with divine light. For, as *the good* generates truth, which descends both the intelligible and intellectual orders; as Phanes, according to Orpheus, emits intelligible light, which fills all the intellectual Gods with intelligence; and as Jupiter enkindles an intellectual and demiurgic light in all supermundane natures, so the sun illuminates every thing visible through this undefiled light. But that which illuminates is always in an order more elevated than the things which are illuminated. For neither is *the good* intelligible, nor is Phanes intellectual, nor Jupiter supermundane. From this reasoning, therefore, the sun being supermundane emits the fountains of light. And the most mystic of discourses place the *aboleutēs* of the sun in the supermundane order; for there a solar world and total light subsist, as the oracles of the Chaldeans say, and as I am persuaded. And thus much concerning these particulars.

Proclus afterwards, near the end of his commentary on this part, observes, that if by the heavens here we understand that which is moved in a circle, the sun does not illuminate the whole of this: for there are shadows there, through the obscurations of the stars and the moon. But nothing in the world is pure from shadow, (as neither is there any thing mundane pure from matter, supermundane natures alone being without shadow and immaterial,) except

numerical information from the revolution of a nature similar and the same. From hence, therefore, night and day arose; and through these revolving bodies the period of one most wise circulation was produced.

And *month* indeed was generated, when the moon having run through her circle passed into conjunction with the sun. But *year*, when the sun had completely wandered round his orb. As to the periods of the other stars, they are not understood except by a very few of mankind; nor do the multitude distinguish them by any peculiar appellation; nor do they measure them with relation to each other, regarding the numbers adapted to this purpose. Hence, it may be said, they are ignorant that the wanderings of these bodies are in reality time; as these wanderings are endued with an infinite multitude, and an admirable variety of motions. But it is easy to conceive, that a perfect number of time will then accomplish a perfect year, when the eight circulations concurring in their courses with each other become bounded by the same extremity; being at the same time measured by the circle subsisting according to sameness. But the stars, whose revolutions are attended with a procession through the heavens, were generated, that the whole of this visible animal the universe might become most similar to the most perfect intelligible animal from an imitation of a perpetual nature.

the sun. Hence, the sun is truly shadowless and without generation, every thing else receiving at different times different illuminative additions. Why, then, some one may say, was not the light of the sun enkindled in the first of the periods from the earth? Because, I reply, the effulgence of the sun is of itself incommensurate with generation; but the moon, existing as a medium, and first receiving his light, renders it more commensurate with generation. For, as Aristotle says, the moon is, as it were, a lesser sun. And it is requisite that what is proximately above generation should not be the most splendid and luminous. For it is not lawful that a thing of this kind should approach to that which is dark; but what is proximate to the darkness of generation must necessarily be luminous in a secondary degree, always possessing, indeed, its proper light, but evincing a mutation in its participation of a more excellent light. It is likewise requisite that it should exhibit this mutation in an orderly manner, that through this mutation it may be the paradigm of that very mutable nature which matter introduces to generated things.

But that the stars, and all heaven, receive light from the sun, may be easily perceived. For that which is common in many things derives its subsistence from one cause, which is either exempt or coordinate; and the coordinate cause is that which first participates of that form. But that first participates in which this form especially subsists the first. If, therefore, light especially subsists in the sun, the sun will be the first light, and from this the light in other things will be derived.

And



And indeed the artificer fabricated other forms, as far as to the generation of time, according to the similitude of the world's exemplar.

But as the universe did not yet contain all animals in its capacious receptacle, in this respect it was dissimilar to its exemplar. Its artificer, therefore, supplied this defect by impressing it with forms, according to the nature of its paradigm. Whatever ideas, therefore, intellect perceived by the dianoëtic energy in animal itself, such and so many he conceived it necessary for the universe to contain. But these ideas are four: One, the celestial genus of Gods; another, winged and air-wandering; a third, the aquatic form; and a fourth, that which is pedestrian and terrene. The idea, therefore, of that which is divine, or the inerratic sphere, he for the most part fabricated from fire, that it might be most splendid and beautiful to behold. And as he meant to assimilate it to the universe, he rendered it circular; placed it in the wisdom of the best nature; ordered it to become the attendant of that which is best; and gave it a circular distribution about the heavens, that it might be a *true world*, adorned with a fair variety in its every part. But he adapted to each of the divine bodies two motions; one by which they might revolve in *same* according to *same*, by always cogitating the same things in themselves about *same*; the other through which they might be led with an advancing motion from the dominion of the *same* and *similar* circulation. He likewise rendered them immovable and stable as to the other five motions, that each of them might become in an eminent degree the best. And on this account such of the stars as are inerratic were generated, which are divine animals; and, in consequence of this, always abide revolving in that which is *same*. But, the stars, which both revolve and at the same time wander in the manner we have described above, were produced next to these. But he fabricated the earth the common nourisher of our existence; which being conglobed about the pole extended through the universe, is the guardian and artificer of night and day, and is the first and most antient of the Gods which are generated within the heavens. But the harmonious progressions of these divinities, their concursions with each other, the revolutions and advancing motions of their circles, how they are situated with relation to each other in their conjunctions and oppositions, whether direct among themselves or retrograde, at what times and in what manner they become concealed, and, again emerging to our view,

cause terror, and exhibit tokens of future events to such as are able to discover their signification—of all this to attempt an explanation, without inspecting the resemblances of these divinities, would be a fruitless employment. But of this enough; and let this be the end of our discourse concerning the nature of the visible and generated Gods.

But to speak concerning the other dæmons<sup>1</sup>, and to know their generation, is a task beyond our ability to perform. It is, therefore, necessary in this case

<sup>1</sup> Plato here calls the sublunary Gods who proximately preside over, and orderly distribute, the realms of generation, dæmons; for a God who proximately presides over any thing is a dæmon according to analogy.

Proclus, in speaking concerning dæmons who fill up all the middle space between Gods and men, observes as follows:—"There is a triad which conjoins our souls with the Gods, proceeding analogous to the three \* primary causes of things, though Plato is accustomed to call the whole of it dæmoniacal. For the angelic preserves an analogy to the intelligible, which first unfolds itself into light from the arcane and occult fountain of things; on which account it also unfolds the Gods, and announces their occult nature. The dæmoniacal is analogous to infinite life; and hence it proceeds every where according to many orders, and possesses various species and a multitude of forms. But the heroic subsists according to intellect and a convertive energy; and hence it is the inspective guardian of purification, and a magnificently operating life. Again, the angelic proceeds according to the intellectual life of the demiurgus; and hence it also is essentially intellectual, and interprets and transmits a divine intellect to secondary natures. The dæmoniacal governs according to the demiurgic providence and nature of wholes, and rightly gives completion to the order of all the world. But the heroic subsists according to a providence convertive of all these. Hence this genus is sublime, elevates souls on high, and is the cause of the grand and robust. And such are the triple genera which are suspended from the Gods, viz. from the celestial Divinities, and from the inspective guardians of generation. For about each of these Gods there is an appropriate number of angels, dæmons, and heroes: for each is the leader of a multitude which receives the form of its ruling Deity. And on this account the angels, dæmons, and heroes of the celestial Gods are celestial; of the Gods that preside over generation, they are generative; of those that elevate souls on high, they are anagogic; of those that are immutable, they are immutable; and so on. And again, in those Gods of an anagogic characteristic, the angels, dæmons, and heroes of the Saturnian Gods are saturnine, but those of the Solar Gods are solar. And in those that are vivific, the attendants of the Lunar Deities are lunar, and of the Mercurial Gods, mercurial: for they derive their appellations from the Deities from which they are suspended, as being continuous with them, and receiving one idea with remission. And why is this wonderful, since partial souls also, knowing their presiding and leading Gods, call themselves by their names? Or, whence did the Æsculapiuses, the Bacchuses, and the Dioscuri

\* Viz. *Being, life, and intellect*, which considered according to their first subsistence form the intelligible triad, or the first procession from the ineffable principle of things. See the *Parmenides*.

case to believe in antient men; who being the progeny of the Gods, as they themselves assert, must have a clear knowledge of their parents. It is impossible, therefore, not to believe in the children of the Gods, though they should speak without probable and necessary arguments: but as they declare that their narrations are about affairs to which they are naturally allied, it is proper that, complying with the law, we should assent to their tradition. In this manner, then, according to them, the generation of these Gods is to be described:

That Ocean and Tethys were the progeny of heaven and earth. That from hence Phorcys, Saturn, and Rhea, and such as subsist together with these, were produced. That from Saturn and Rhea, Jupiter, Juno, and all such as we know are called the brethren of these descended. And lastly, others which are reported to be the progeny of these. When, therefore, all such Gods as visibly revolve, and all such as become apparent when they please, were generated, the Artificer of the universe thus addressed them: "Gods of Gods<sup>1</sup>, of whom I am the demiurgus and father, whatever is generated by

receive their appellations? As, therefore, in the celestial Gods, so also in those that preside over generation, it is requisite to survey about each of them a coordinate, angelic, dæmoniacal, and heroic multitude; the number suspended from each bearing the name of its monad, so that there is a celestial God, dæmon, and hero. With respect to Earth, also, Ocean, and Tethys, it is requisite to consider that these proceed into all orders, and in a similar manner other Gods. For there is a Jovian, Junonian, and Saturnian multitude, which is denominated through the same name of life. Nor is there any thing absurd in this, since we call man both intelligible and sensible, though the restoration to their pristine condition is in these more abundant. And thus much in common concerning the generation-producing Gods and dæmons, that, conjoined with the Gods, we may also survey the discourse about dæmons: for Plato comprehends each of the genera in the same names. And he seems to call the same powers both dæmons and Gods on this account, that we may understand that the dæmoniacal genus is suspended at the same time together with these Gods, and that we may also adapt the names as to Gods. This he also does in other places, indicating the every way extended nature of the theory, and the eye of science surveying all things together and in connection."

<sup>1</sup> The scope of this speech, says Proclus, is, as we have said, to insert demiurgic power and providence in the mundane genera of Gods, to lead them forth to the generation of the remaining kinds of animals, and to place them over mortals, analogously to the father of whales over the one orderly distribution of the universe. For it is necessary that some things should be primarily generated by the demiurgic monad, and others through other media; the demiurgus, indeed, producing all things from himself, at once and eternally, but the things produced in order, and first proceeding

by me is indissoluble, such being my will in its fabrication. Indeed every thing which is bound is dissoluble; but to be willing to dissolve that which is

proceeding from him, producing, together with him, the natures posterior to themselves. Thus, for instance, the celestial produce sublunary Gods, and these generate mortal animals; the demiurgus at the same time fabricating these in conjunction with the celestial and sublunary Divinities. For in speaking he understands all things, and by understanding all things he also makes the mortal genera of animals; these requiring another proximate generating cause, so far as they are mortal, and through this receiving a progression into being. But the character of the words is enthusiastic, shining with intellectual intuitions, pure and venerable as being perfected by the father of the Gods, differing from and transcending human conceptions, delicate, and at the same time terrific, full of grace and beauty—at once concise and perfectly accurate. Plato, therefore, particularly studies these things in the imitations of divine speeches; as he also evinces in the Republic, when he represents the Muses speaking sublimely, and the prophet ascending to a lofty feat. He also adorns both these speeches with conciseness and venerableness, employing the accurate powers of colons, directly shadowing forth divine intellections through such a form of words. But in the words before us he omits no transcendency either of the grand and robust in the sentences and the names adapted to these devices, or of magnitude in the conceptions and the figures which give completion to this idea. Besides this, also, much distinction and purity, the unfolding of truth, and the illustrious prerogatives of beauty, are mingled with the idea of magnitude, this being especially adapted to the subject things, to the speaker, and to the hearers. For the objects of this speech are, the perfection of the universe, an assimilation to all-perfect animal, and the generation of all mortal animals; the maker of all things at the same time pre-fabricating and adorning all things, through exempt transcendency, but the secondary fabricators adding what was wanting to the formation of the universe. All, therefore, being great and divine, as well the persons as the things, and shining with beauty and a distinction from each other, Plato has employed words adapted to the form of the speech.

Homer also, when energizing enthusiastically, represents Jupiter speaking, converting to himself the twofold coordinations of Gods, becoming himself, as it were, the centre of all the divine genera in the world, and making all things obedient to his intellection. But at one time he conjoins the multitude of Gods with himself without a medium, and at another through Themis as the medium.

But Jove to Themis gives command to call  
The Gods to council.

This Goddess pervading every where collects the divine number, and converts it to the demiurgic monad. For the Gods are both separate from mundane affairs, and eternally provide for all things, being at the same time exempt from them through the highest transcendency, and extending their providence every where. For their unmingled nature is not without providential energy, nor is their providence mingled with matter. Through transcendency of power they are not filled with the subjects of their government, and, through beneficent will, they make all things similar to themselves; in permanently abiding, proceeding, and in being separated from all things,  
being

is beautifully harmonized, and well composed, is the property of an evil nature. Hence, so far as you are generated, you are not immortal, nor in every

being similarly present to all things. Since, therefore, the Gods that govern the world, and the dæmons the attendants of these, receive after this manner unmingled purity and providential administration from their father; at one time he converts them to himself without a medium, and illuminates them with a separate, unmingled, and pure form of life. Whence also I think he orders them to be separated from all things, to remain exempt in Olympus, and neither convert themselves to Greeks nor Barbarians; which is just the same as to say, that they must transcend the twofold orders of mundane natures, and abide immutably in undefiled intellection. But at another time he converts them to a providential attention to secondary natures, through Themis, and calls upon them to direct the mundane battle, and excites different Gods to different works. These Divinities, therefore, especially require the assistance of Themis, who contains in herself the divine laws according to which providence is intimately connected with wholes. Homer, therefore, divinely delivers twofold speeches, accompanying the twofold energies of Jupiter; but Plato through this one speech comprehends those twofold modes of discourse. For the demiurgus renders the Gods unmingled with secondary natures, and causes them to provide for, and give existence to, mortals. But he orders them to fabricate in imitation of himself: and in an injunction of this kind both these are comprehended, viz. the unmingled through the imitation of the father, for he is separate, being exempt from mundane wholes; but providential energy, through the command to fabricate, nourish and increase mortal natures. Or rather, we may survey both in each; for in imitating the demiurgus they provide for secondary natures, as he does for the immortals; and in fabricating they are separate from the things fabricated. For every demiurgic cause is exempt from the things generated by it; but that which is mingled with and filled from them is imbecil and inefficacious, and is unable to adorn and fabricate them. And thus much in common respecting the whole of the speech.

Let us then, in the first place, consider what we are to understand by "Gods of Gods," and what power it possesses: for that this invocation is collective and convertive of multitude to its monad, that it calls upwards the natures which have proceeded to the one fabricator of them, and inserts a boundary and divine measure in them, is clear to those who are not entirely unacquainted with such-like discourses. But how those that are allotted the world by their father are called Gods of Gods, and according to what conception, cannot easily be indicated to the many; for there is an unfolding of one divine intelligence in these names. Proclus then proceeds to relate the explanations given by others of these words; which having rejected as erroneous, he very properly, in my opinion, adopts the following, which is that of his preceptor, the great Syrianus. All the mundane Gods are not simply Gods, but they are wholly Gods which participate: for there is in them that which is separate, unapparent, and supermundane, and also that which is the apparent image of them, and has an orderly establishment in the world. And that, indeed, which is unapparent in them is primarily a God, this being undistributed and one; but this vehicle which is suspended from their unapparent essence is secondarily a God. For if, with respect to us, man is twofold, one inward, according to the soul, the other apparent, which we see, much more must both these be ascribed of the Gods; since Divinity also is twofold, one

every respect indissoluble: yet you shall never be dissolved, nor become subject to the fatality of death; my will being a much greater and more excellent bond than the vital connectives with which you were bound at the commencement of your generation. Learn, therefore, what I now say to you indicating my desire. Three genera of mortals yet remain to be produced. Without the generation of these, therefore, the universe will be imperfect; for it will not contain every kind of animal in its spacious extent. But it ought to contain them, that it may become sufficiently perfect. Yet if these are generated, and participate of life through me, they will become equal to the Gods. That mortal natures, therefore, may subsist, and that the universe may be truly all, convert yourselves, according to your nature, to the fabrication of animals, imitating the power which I employed in your generation. And whatever among these is of such a nature as to deserve the same appellation with immortals, which obtains sovereignty in these, and willingly pursues justice, and reverences you—of this I myself will deliver the seed and beginning: it is your business to accomplish the rest; to weave<sup>1</sup> together

unapparent and the other apparent. This being the case, we must say that “Gods of Gods” is addressed to all the mundane Divinities, in whom there is a connection of unapparent with apparent Gods; for they are Gods that participate. In short, since twofold orders are produced by the demiurgus, some being supermundane and others mundane, and some being without and others with participation,—if the demiurgus now addressed the supermundane orders, he would have alone said to them, “Gods:” for they are without participation, are separate and unapparent:—but since the speech is to the mundane Gods, he calls them Gods of Gods, as being participated by other apparent Divinities. In these also dæmons are comprehended; for they also are Gods, as to their order with respect to the Gods, whose idiom they indivisibly participate. Thus also Plato, in the Phædrus, when he calls the twelve Gods the leaders of dæmons, at the same time denominates all the attendants of the Divinities Gods, adding, ‘and this is the life of the Gods.’ All these, therefore, are Gods of Gods, as possessing the apparent connected with the unapparent, and the mundane with the supermundane.

<sup>1</sup> It is well observed here by Proclus, that the animal spirit (*το πνευμα*) comprehends the summits of the irrational life, which summits subsist eternally with the vehicle of the soul, as being produced by the demiurgus; but that these, being extended and distributed, make this life which the junior Gods weave together, being indeed mortal, because the soul must necessarily lay aside this distribution, when, being restored to her pristine state, she obtains purification, but subsisting for a much longer time than the life of this body; and that, on this account, the soul also in Hades chooses a life of this kind. For, in consequence of verging to a corporeal nature, she receives this mortal life from the junior Gods. If these things then be admitted, the demiurgus gives

together the mortal and immortal nature; by this means fabricating and generating animals, causing them to increase by supplying them with aliment, and receiving them back again when dissolved by corruption.”

Thus spoke the demiurgus; and again into the same crater <sup>1</sup>, in which mingling he had tempered the soul of the universe, he poured mingling the remainder <sup>2</sup> of the former mixture: in a certain respect indeed after the same

gives subsistence to the *summit* of the irrational life, but does not produce this life; since, giving subsistence to dæmons, he certainly also produces the irrational life which they contain, but not this life which the junior Gods weave together in us; for this is alone adapted to souls falling into generation. The mundane Gods, therefore, illuminate their depending vehicles with rational lives; for they possess intellectual souls. But those dæmons who are properly defined according to reason use irrational powers, which they keep in subjection; but our souls much more possess a life in the vehicle, which is irrational with relation to them. It superabounds however by receiving another irrational life, which is an apostacy from that life in the vehicle which was woven by the junior Gods. All *that* is immortal, therefore, which souls possess according to an imitation of wholes, but the addition of the secondary life is mortal. If, therefore, in the summit of the irrational life, there is one impassive sense, this in the pneumatic vehicle will generate one passive sense; and this latter will produce in the shelly body many and passive senses. The orectic or appetitive power, also, in this summit, will produce many orectic powers in the spirit, possessing something separate from the shelly body, and capable of being disciplined; and these will produce in the body ultimate and material appetitive powers.

<sup>1</sup> Viz. the vivific Goddess Juno.

<sup>2</sup> It is well observed here by Proclus, that souls possess essential differences, and not differences according to energies only. For, says he, some souls look to total and others to partial intellects; and some employ undivided intellections, but others at times depart from the contemplation of true beings. Some perpetually fabricate and adorn wholes, but others only sometimes revolve with the Gods. And some always move and govern fate, but others sometimes subsist under the dominion of fate, and are subject to its laws. Some are the leaders to intelligible essence, and others are sometimes allotted the order of those that follow. Some are divine only, and others are transferred into a different order, daemoniacal, heroic, human. Some employ horses that are good, but others such as are mingled from good and evil. And some possess that life alone which they received from the one fabrication of things, but others the mortal form of life, which was woven to their nature by the junior Gods. Some energize according to all their powers, but others at different times draw forth different lives. By no means, therefore, do our souls possess the same essence with divinity: for the rational nature is different in the two, being in the Gods intellectual, but in our souls mingled with the irrational; and in the middle genera it is defined according to their middle subsistence. In like manner, with respect to every thing else, such as reasons, the form of life, intelligence and time, these subsist divinely in divine souls, but in a human manner in ours.

Proclus also further observes, that the common definition of all souls is as follows: Soul is an essence subsisting between true essence and generation, being mingled from middle genera, divided

same manner<sup>1</sup>, yet not similarly incorruptible according to the same, but deficient from the first in a second and third degree. And having thus composed

into essential number, bound with all media, diatonically harmonized, living one and a twofold life, and being gnostic in one and a twofold manner.

<sup>1</sup> Timæus, says Proclus, by these words indicates the similitude, subjection and different progression of partial to total souls. For he not only describes their difference together with their alliance, according to first and second demiurgic energy, nor alone according to their union with and separation from the crater of life, nor yet alone according to excess or defect of genera, but also according to the mode of mixture, which is the same, and yet not the same. For neither is the temperament of the genera similar, nor the unmingling of difference; since this is more abundant in partial souls. Hence, of the horses in these, one is good, but the other contrary, and consisting from contraries, as it is said in the Phædrus, in consequence of difference having dominion. For the whole mixture is no longer incorruptible, according to the same, and after the same manner, but in a second and third degree; since in these there are subjection and order. But by *incorruptible*, here, we must understand the immutable, the undeviating, the inflexible, the immaculate form of essence, that which is not converted to secondary natures, and which does not receive mutation, or subjection of life, that which is established beyond the reach of mortality, and that which is exempt from the laws of fate: for these things are common to every genus of souls which perpetually transcend generation. But the contraries of these are adapted to powers which descend into generation, viz. a mutation of life from intelligence to action, the becoming sometimes subject to fate, and the being mingled with mortal affairs. Neither is the immovable present with these according to the same, since they sometimes proceed into generation, nor, when it is present, is it present after the same manner: for that which always understands is better than that which sometimes departs from its proper intellection. Since, however, in these souls also there is an order, and some are undefiled, rarely associating with generation and deserting their own order, but others are rolled in all-various frowns, and wander myriads of periods,—hence Timæus indicates the difference of these, when he says “in a second and third degree.” For souls which descend, and become defiled with evil, are very much separated from those that perpetually abide on high, and are free from evil: but souls of a middle order are such as descend indeed, but are not defiled. For, vice versa, it is not lawful to be defiled, and yet abide on high; since evil is not in the Gods, but in the mortal place, and in material things.

Again, therefore, from these things it appears that the first genus of souls is divine; for every where that which is the recipient of deity has a leading order, in essences, in intellects, in souls and in bodies. But the second genus is that which is perpetually conjoined with the Gods, that, through this, souls which sometimes depart from may again be recalled to the Gods. The third genus is that which falls into generation, but descends with purity, and changes a subordinate for a more divine life, but is exempt from vice and passions; for this genus is continuous with souls that perpetually abide on high, and are perpetually undefiled. But the fourth and last genus is that which abundantly wanders, which descends as far as to Tartarus, and is again excited from its dark profundities, evolving all-various forms of life, employing various manners, and at different times different passions. It also obtains various forms of animals, demoniacal, human, irrational, but



posed the universe, he distributed souls equal in number to the stars, inserting each in each: and causing them to ascend as into a vehicle <sup>1</sup>, he pointed out to

but is at the same time corrected by Justice, returns from earth to heaven, and is circularly led from matter to intellect, according to certain orderly periods of wholes. By the words, therefore, "in a certain respect indeed after the same manner, yet not similarly incorruptible according to the same," he signifies that partial souls are in a certain respect incorruptible, as for instance, according to their essence alone, but that in a certain respect they are not incorruptible, viz. being mingled in their energies with all-various destinies, and conversant with mortal things, and not possessing these energies with invariable sameness, and entire, but sometimes more, and at others less, an all-various inequality subsisting in souls, according to their habitude to mortal natures, from which they derive the privation of incorruptibility according to life.

<sup>1</sup> Vulcan, who is the artificer of the whole of a corporeal essence, gives subsistence to the vehicles of the soul; for he receives souls sent into the world from the intelligible region, and gives different habitations to different souls. The demiurgus of all things also gives subsistence to these vehicles; for he is the fabricator of animals, and the completions of the universe, so that he not only produces souls, but also produces them with their proper vehicles. As Proclus likewise well observes, the conception of Plato here is truly wonderful: for he does not represent the demiurgus as fashioning these vehicles from the *exhalation*es which are now produced, but he says that he makes these, the junior Gods lending parts, and from them composing bodies. But this is an evident argument, that each of these vehicles is in a certain respect self-composed, and not fabricated by an ablation from other things, lest it should require to be again poured back into something else. For every thing which subsists by an abscission from other things, being cut off with a diminution of the whole to which it belonged, must necessarily be returned to the whole from which it was cut off. For it is necessary that every whole in the universe should perpetually remain a whole: and hence every such vehicle is perpetual, and the same vehicle is always suspended from the soul. Besides, how can the soul be any longer said to be mundane, if its vehicle is corrupted? for that of which there is nothing in the universe cannot be mundane. For, if partial souls are superior to a life in conjunction with vehicles, they will also be superior to divine souls: but if they are inferior to such a life, how does the demiurgus immediately after their generation introduce them into these vehicles? And how can they use them in Hades, and in the Heavens, unless they had them perpetually suspended from their essence? For, that they use them in Hades, is evident from what Socrates says in the *Phædo*, viz. that souls ascending into their vehicles proceed to Acheron: and that they also use them in the Heavens, is evident from the *Phædrus*, in which Socrates says that the vehicles of the Gods proceed equally balanced, but those of the attendants of the Gods, with great difficulty.

From this, also, we may perceive the difference between partial and divine souls: for with respect to the latter the demiurgus is said to place their bodies in their souls, as being every way comprehended by them, these souls not being converted to the objects of their government, but employing one immutable intellection: but, with respect to partial souls, he is said to cause them to ascend into their vehicles; for these are naturally adapted to be frequently in subjection to bodies, and to convert themselves to the subjects of their government; when they also become

to them the nature of the universe, and announced to them the laws of fate; showing them that the first generation orderly distributed to all was one, left any particular soul should be allotted a less portion of generation than another. But when he had disseminated them through the several instruments of time adapted to each, he declared to them it was necessary that an animal the most religious of all others should make its appearance. But as the human nature is twofold, he showed them that the more excellent kind was that which would afterwards be called man. And as souls are from necessity engrafted in bodies, and as something accedes to and something departs from such bodies, he declared to them that, in the first place, one connate sense<sup>1</sup> produced by violent

parts of the universe as well as their vehicles, act in subserviency to the laws of fate, and no longer live with purity under the divine light of Providence. It must likewise be observed, that the demiurgus among other causes contains that of Nature in himself, to which also he converts souls. For, by showing Nature to souls, he also beholds it himself. But he alone beholds things prior to and in himself. Now, therefore, he beholds Nature in himself, which he comprehends supernaturally, or according to cause.

<sup>1</sup> The demiurgus, says Proclus, comprehends the whole of a material and mortal life in three boundaries, and establishes the causes of it in souls, that they may obtain dominion over it: for dominion is not derived from any thing else than essential precedency. The irrational life, therefore, subsists *intellectually* in the demiurgus, but *rationally* in souls. Nor is this wonderful, since body also subsists incorporeally in the intelligible causes of all things. But this connate sense produced by violent passions, of which Plato now speaks, is that corporeal life which is gnostic of things falling upon it externally, which produces this knowledge through instruments, does not subsist from itself, but from the natures by which it is used, is mingled with material masses, and knows what it knows with passion. For it is necessary to sensation, that a certain agitation should be produced about the instruments of sense; since neither do the motions in the soul pervade every where, and as far as to the body, but there is a motion of the soul belonging to itself by itself, such as is that which is intellectual; nor does every thing about the body extend as far as to the soul, but there is also a certain corporeal passion, which through its obscurity is not able to move the soul. Sense, therefore, is produced not from all passions, but from such as are violent, and which are attended with much agitation. And this is corporeal sense, which is divisible and material, and forms its judgment mingled with passions. But there is another sense prior to this, in the vehicle of the soul, which with respect to this is immaterial, and is a pure impassive knowledge, itself subsisting by itself, but which is not liberated from form, because it also is corporeal, as being allotted its subsistence in body. And this sense, indeed, has the same nature with the phantasy; for the being of both is common; but externally proceeding it is called sense, and abiding internally, and surveying in the spirit (*ἐν τῷ πνεύματι*) forms and figures, it is called phantasy. So far also as it is divided about the spirit, it is sense. For, again, the basis of the rational life is opinion; but the phantasy is the summit of the second, or the irrational life.

Opinion

violent passions was necessary to all; and, in the second place, love mingled with pleasure and grief. That after these, fear and anger were necessary, with whatever else is either consequent to these, or naturally discordant from a contrary nature. That such souls as subdue these would live

Opinion also and phantasy are conjoined with each other, and the second is filled from the more excellent with powers. But the middle of the irrational life does not receive the impression of the natures superior to it, but is alone the recipient of things external. It is common, however, to this also to know that which is sensible with passivity: but external sense alone pertains to things externally falling upon and moving it, not being able to possess spectacles in itself, since it is partible and not one; for it is distributed about the organs of sense. There is one sense, therefore, which is impassive and common, another which is common and passive, and a third which is distributed and passive. The first of these belongs to the first vehicle of the soul, the second, to the irrational life, and the third, to the animated body.

After sense, Plato arranges desire. And this indeed is life, and is also corporeal; but it is a life which perpetually unweaves the body, and affords a solace to its wants, and about which pleasure and pain are beheld. For these passions are also present to other parts of the soul; since you may perceive pleasures and pains, both in reason and anger. But corporeal pleasure and pain are produced according to desire. For, with respect to the body, a way contrary to nature, and a privation of life, produce pain in it; but a regression according to nature, and an adaptation to life, are the sources of its pleasure. And that which is afflicted or delighted in these is the desiderative part of the soul. But since these two passions are primary, and the fountains of the other passions, as Plato says in the Philebus and the Laws, through the mixture of these giving a generation to the other passions, he also denominates love a mixture of pleasure and pain. For, so far as it is conversant with the lovely, it is present with pleasure, but, so far as it is not yet present with it in energy, it is mingled with pain. But he characterizes all the life of desire through love, because this passion is most vehement about it.

In the third place, therefore, he enumerates anger. Anger then is also life, but a life which removes every thing painful, and which disturbs the body. Excess and defect also are surveyed about it, such as rashness and timidity, and the things consequent to these, ambition and contention, and all such particulars as take place about mortal concerns. And such is the order of these three generated powers. For as soon as the body is formed it participates of sense: since it would not be an animal, nor would possess appetite, if it were not sensitive. For appetites subsist in conjunction with sense, but the senses are not entirely in conjunction with appetites; and hence the animal is more characterized by the sensitive than by the appetitive nature. But after the possession of sense the animal appears to be pleased and pained, afflicted by the cold, but cherished by the bandages, and led to a condition according to nature. After desire, as age advances, the animal is angered: for anger is the power of a more robust nature. Hence also, among irrational animals, such as are more material alone live according to desire, and partake of pleasure and pain; but such as are more perfect are allotted a more irascible life. But prior to these appetites, as we also said of sense, there is a certain summit of them in the spirit of the soul, which summit is a power impulsive and motive of the spirit, guarding and connecting its essence, at one time extending and distributing itself, and at another being led to bound and order, and measured by reason.

justly,

justly, but such as are vanquished by them unjustly. And again, that he who lived well during the proper time of his life, should, again returning to the habitation of his kindred star <sup>1</sup>, enjoy a blessed life. But that he whose conduct was depraved, should in his second generation be changed into the nature of a woman. \* That both these, at the expiration of a thousand years, should return to the allotment and choice of a second life; each soul receiving a life agreeable to its choice. That in this election the human soul should pass into the life of a brute: \* and that in case the inclination to evil should not even then cease, but the defilement of vice remain according to a similitude of the mode of generation, then the soul should be changed into the nature of a brute correspondent to its disposition. And that it should not be freed from the allotment of labours <sup>2</sup>, till, following the

<sup>1</sup> Since Plato now discourses concerning souls that are restored to their pristine state in their legitimate star, after their first generation, and says that on leaving the body they possess a happy life, it may be asked how this accords with what is said in the Phædrus? For, there, he who chooses a philosophic life is restored to his pristine state through three lives. We reply, with Proclus, that Plato does not here assert that the soul passes into that very state whence it came, for this is accomplished through three chiliads of periods, but that the soul returns to the star under which it was essentially arranged, and leads a life in common with it. For it is possible for those that are not philosophers to be elevated by Justice to a certain place in the heavens, and there to live in a manner adapted to their life while in a human form: for this is asserted in the Phædo respecting the souls of such as are not philosophers; since the restoration to the same condition again is one thing, and the ascent to the kindred star another. And the former of these requires three periods, but the latter may be effected by one period. The former also leads back the soul to the intelligible, from which it descended, but the latter to a subordinate form of life. For there are measures of felicity, and the ascent is twofold; one, of those that have yet to ascend still higher, and the other, of those that have no further flight to take. So that it is possible for the soul having arrived at its kindred star, either to be conjoined with the mundane powers of its God, or to proceed still higher; but to be led back to the intelligible requires a period of three thousand years. For through this the highest flight is accomplished.

\* The translation of the part between the two stars is omitted by Ficinus.

<sup>2</sup> The one safety of the soul herself, says Proclus, which is extended by the demiurgus, and which liberates her from the circle of generation, from abundant wandering, and an inefficacious life, is her return to the intellectual form, and a flight from every thing which naturally adheres to us from generation. For it is necessary that the soul which is hurled like seed into the realms of generation, should lay aside the stubble and bark, as it were, which she obtained from being disseminated into these fluctuating realms; and that, purifying herself from every thing circumjacent, she should become an intellectual flower and fruit, delighting in an intellectual life instead of doxastic nutriment, and pursuing the uniform and simple energy of the period of sameness, in-

the revolution of that *same* and *similar* nature contained in its essence, it vanquishes those abundantly turbulent affections, tumultuous and irrational, adhering to it afterwards from fire, water, air, and earth, and returns to the first and best disposition of its nature.

When he had instructed souls in all these particulars, that he might be in no respect the cause of the future evil of each, he diffused some of them into the earth, others into the moon, and others into the remaining different instruments of time. But after this semination he delivered to the junior Gods the province of fabricating mortal bodies, and generating whatever else remained necessary to the human soul; and gave them dominion over

stead of the abundantly wandering motion of the period which is characterized by difference. For she contains each of these circles and twofold powers. And of her horses, one is good, and the other the contrary: and one of these leads her to generation, but the other from generation to true being; the one also leads her round the circle of sense, but the other round an intellectual essence. For the period of the same and the similar elevates to intellect, and an intelligible nature, and to the first and most excellent habit. But this habit is that according to which the soul being winged governs the whole world, becoming assimilated to the Gods themselves. And this is the universal form of life in the soul, just as that is the partial form when she falls into the last body, and becomes something belonging to an individual instead of belonging to the universe. The middle of these also is the partial universal, when she lives in conjunction with her middle vehicle, as a citizen of generation. Dismissing, therefore, her first habit, which subsists according to an alliance to the whole of generation, and laying aside the irrational nature which connects her with generation, likewise governing her irrational part by reason, and extending intellect to opinion, she will be circularly led to a happy life, from the wandering about the regions of sense; which life those that are initiated by Orpheus in the mysteries of Bacchus and Proserpine pray that they may obtain, together with the allotments of the sphere, and a cessation of evil. But if our soul necessarily lives well, when living according to the circle of sameness, much more must this be the case with divine souls. It is, however, possible for our soul to live according to the circle of sameness, when purified, as Plato says. Cathartic virtue, therefore, alone must be called the salvation of souls; since this cuts off and vehemently obliterates material natures, and the passions which adhere to us from generation, separates the soul, and leads it to intellect, and causes it to leave on earth the vehicles with which it is invested. For souls descending receive from the elements different vehicles, aerial, aquatic, and terrestrial; and thus at last enter into this gross bulk. For how, without a medium, could they proceed into this body from immaterial spirits? Hence, before they come into this body, they possess the irrational life, and its vehicle, which is prepared from the simple elements, and from these they enter into the tumultuous, which is so called as being foreign to the connate vehicle of souls, composed from all various vestments, and causing souls to become heavy. In short, the connate vehicle makes the soul mundane, the second vehicle, a citizen of generation, and the shelly body, (το σαρκευδές), terrestrial.

every

every thing consequent to their fabrications. He likewise commanded them to govern as much as possible in the best and most beautiful manner the mortal animal, that it might not become the cause of evil to itself. At the same time he who orderly disposed all these particulars remained in his own accustomed abiding habit. But in consequence of his abiding, as soon as his children understood the order of their father, they immediately became obedient to this order; and receiving the immortal principle of mortal animal, in imitation of their artificer, they borrowed from the world the parts of fire and earth, water and air, as things which they should restore back again; and conglutinated the received parts together, not with the same indissoluble bonds which they themselves participated, but gave them a tenacious adherence from thick fet nails, invisible through their smallness; fabricating the body of each, one from the composition of all; and binding the circulations of the immortal soul in the influxive and effluxive nature of body.

But these circulations †, being merged in a profound river, neither govern nor are governed, but hurry and are hurried along with violence: in consequence

† Plato, says Proclus, immediately conjoining the soul to the body, omits all the problems pertaining to the descent of the soul, such as the prophet, the allotments, the lives, the elections, the dæmon, the residence in the plain of oblivion, the sleeping, the oblivious potion, the thunders, and all such particulars as the fable in the Republic discusses. But neither does he here deliver such things as pertain to the soul after its departure from the body, such as the terrors, the rivers, Tartarus, those savage and fiery dæmons, the thorns, the bellowing mouth, the triple road, and the judges, concerning which the fable in the Republic, in the Gorgias, and in the Phædo, instructs us. What, then, you will say, is the cause of this omission? We reply, Because Plato preserves that which is adapted to the design of the dialogue. For here he admits whatever is physical in the theory respecting the soul, and its association with the body.

It is requisite, however, to inquire why souls fall into bodies. And we may reply, with Proclus, Because they wish to imitate the providential energies of the Gods, and on this account proceed into generation, and leave the contemplation of true being: for, as Divine perfection is twofold, one kind being intellectual, and the other providential, and one kind consisting in an abiding energy, and the other in motion, hence souls imitate the prolific, intellectual, and immutable energy of the Gods by contemplation, but their providential and motive characteristic through a life conversant with generation. As the intelligence, too, of the human soul is partial, so likewise is her providence; but, being partial, it associates with a partial body. But still further, the descent of the soul contributes to the perfection of the universe; for it is necessary that there should not only be immortal and intellectual animals, such as are the perpetual attendants of the Gods,

quence of which, the whole animal is indeed moved, yet in a disorderly manner; since from every kind of motion its progression is fortuitous and irrational. For it proceeds backwards and forwards, to the right and left, upwards and downwards, and wanders every way according to the six differences of place. For though the inundating<sup>1</sup> and effluxive waves pour  
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Gods, nor yet mortal and irrational animals only, such as are the last progeny of the demiurgus of the universe, but likewise such as subsist between these, and which are by no means immortal\*, but are capable of participating reason and intellect. And in many parts of the universe there are many animals of this kind; for man is not the only rational and mortal animal, but there are other such-like species, some of which are more dæmoniacal, and others approximate nearer to our essence. But the descents of a partial soul contribute to the perfect composition of all animals, which are at the same time mortal and rational.

Should it be again asked, Why, therefore, are partial souls descending into generation filled with such material perturbation, and such numerous evils? we reply, that this takes place through the inclination arising from their free will; through their vehement familiarity with body; through their sympathy with the image of soul, or that divisible life which is distributed about body; through their abundant mutation from an intelligible to a sensible nature, and from a quiet energy to one entirely conversant with motion; and through a disordered condition of being, naturally arising from the composition of dissimilar natures, viz. of the immortal and mortal, of the intellectual and that which is deprived of intellect, of the indivisible and that which is endued with interval. For all these become the cause to the soul of this mighty tumult and labour in the realms of generation; since we pursue a flying mockery which is ever in motion. And the soul, indeed, by verging to a material life, kindles a light in her dark tenement the body, but she herself becomes situated in obscurity; and by giving life to the body, she destroys herself and her own intellect, in as great a degree as these are capable of receiving destruction. For thus the mortal nature participates of intellect, but the intellectual part of death, and the whole becomes a prodigy, as Plato beautifully observes in his *Laws*, composed of the mortal and immortal, of the intellectual, and that which is deprived of intellect. For this physical law, which binds the soul to the body, is the death of the immortal life, but is the cause of vivification to the mortal body.

<sup>1</sup> The philosopher here, says Proclus, refers the whole of this tumult to two causes, viz. the nutritive and sensitive life; and these are the appetitive and gnostic powers of all the irrational part, into which we are accustomed to divide all the powers of the soul, asserting that some of them are vital, and others gnostic. For the nutritive life, verging to bodies, produces in them an abundant flux; through their material moisture sending forth a great efflux, and through vital heat receiving an influx of other things. But the sensitive life suffers from the external bodies of fire and air, earth and water, falling upon it; and, considering all the passions as mighty, through the vileness of its life, causes tumult to the soul. And to all these things, indeed, those that are arrived at maturity are accustomed; but to those that are recently born, the smallest things,

\* For the whole composite which we call man is not immortal, but only the rational soul.

along with impetuous abundance, which afford nutrition to the animal, yet a still greater tumult and agitation is produced through the passions arising from external impulsions: and this either when the body is disturbed by the sudden incursion of external fire, or by the solidity of earth, or receives an injury from the whirling blasts of the air. For from all these, through the medium of the body, various motions are hurried along, and fall with molestation on the soul. But on this account all these were afterwards, and are even now, denominated senses. And these, indeed, both at first and at present<sup>1</sup>, are the sources of an abundant and mighty motion, in conjunction with

through their being unusual, become the causes of astonishment. For, what a great fire is to the former, that the flame of a lamp is to the latter; and what the magnitude of the highest mountains is to men, that the smallest stone in the fields is to infants. And what whirlwinds and cataclysms of rain are to others, that a weak motion of the air, or the falling of a little moisture, is to those that are recently born. For sense, being agitated by all these particulars, astonishes the soul of infants, and leads them to desperation and tumult. These, then, in short, are the causes of the disturbance of souls, viz. the motions of the nutritive part, and the impulses of sense. We must not, however, suppose that the soul suffers any thing through these particulars. For, as if some one standing on the margin of a river should behold the image and form of himself in the floating stream, he indeed will preserve his face unchanged, but the stream being all-variously moved will change the image, so that at different times it will appear to him different, oblique and upright, and perhaps divided and continuous. Let us suppose, too, that such a one, through being unaccustomed to the spectacle, should think that it was himself that suffered this distortion, in consequence of surveying his shadow in the water, and, thus thinking, should be afflicted and disturbed, astonished and impeded. After the same manner the soul, beholding the image of herself in body, borne along in the river of generation, and variously disposed at different times, through inward passions and external impulses, is indeed herself impassive, but thinks that she suffers, and, being ignorant of, and mistaking her image for, herself, is disturbed, astonished, and perplexed. This passion particularly takes place in infants: but it is also seen in the dreams of those that have arrived at maturity; as when some one, in consequence of nature being wearied in the concoction of food, thinks in a dream that he is wearied through long journeys, or carrying heavy burdens, or suffers something else of this kind. But to return to the words of Plato, the *waves* do not signify, says Proclus, the externally blowing wind, as some say, but the collected agitation, and abundant influx and efflux which take place in youth. But the *inundation* first strikes upon and makes the pneumatic vehicle heavier, for it is this which expresses stains and vapours; and in the second place it strikes upon the soul, for she also is disturbed by the collected and the sudden.

<sup>1</sup> Sense, says Proclus, is of the present, in the same manner as memory is of the past, but hope of the future. Sense, therefore, excites souls in the present time, and this in conjunction with the nutritive power, which by influxions applies a remedy to the perpetual effluxions of the

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with that perpetually flowing river, moving and vehemently agitating the circulations of the soul, every way fettering the revolution of the nature characterized by *Sameness*, through flowing in a contrary direction, and restraining its energies by their conquering and impetuous progressions. But they agitate and tear in pieces the circulation of the nature distinguished by *Difference*. Hence, they whirl about with every kind of revolution each of the three intervals of the double and triple, together with the mediums and conjoining bonds of the sesquitercian, sesquialter, and sesquioctave ratios, which cannot be dissolved by any one except the artificer by whom they were bound: and besides this, they induce all the fractures and diversities of circles which it is possible to effect; so that, scarcely being connected with each other, they are borne along indeed, yet in an irrational manner, at one time in a contrary, at another time in an oblique, and then again in a resupine situation. Just as if any one, in an inverted position, should fix his head on the earth and raise his feet on high; for in such a situation both the inverted person and the spectators would mutually imagine the right hand parts to be on the left, and the left to be on the right. So with respect to the circulations of the soul, the very same affections, and others of a similar kind, vehemently

the body, and again composes what was analysed, after the manner of Penelope's web. For this is the perpetually flowing river, which is properly so called, as being a part of the whole river of generation. Hence, in conjunction with this, it agitates and disturbs the periods of the immortal soul, and *feters*, indeed, the circle of *Sameness*, but *agitates* the circle of *Difference*. For, as there are twofold circles in the soul in imitation of divine souls, the dianoëtic circle, which contemplates intelligibles, is only restrained in its energy, but sustains no distortion: but the doxastic circle is distorted; and this very properly, since it is possible to opine not rightly, but it is not possible to know scientifically falsely. If it should be said that the dianoëtic part may be ignorant in a twofold respect, and that a thing which suffers this is distorted; we reply, that twofold ignorance does not simply belong to the dianoëtic part, but, originating indeed from thence, is implanted in the doxastic part. For, so far as it is ignorance, and a privation of science, so far, being an immobility of the scientific power, it originates from the dianoëtic part. For science and ignorance subsist about the same thing. But, so far as it also adds a false opinion of knowledge, it subsists in the doxastic part. And ignorance is the insanity of the dianoëtic part, possessing, indeed, but concealing, the productive principles of knowledge; but false conception is the insanity of opinion, of which it is also the distortion. For, being false, it also depraves its possessor; since what vice is in action, that falsehood is in knowledge. The period of *Sameness*, therefore, is alone fettered, and is similar to those that are bound, and on this account are impeded in their energies; but the period of *Difference* is agitated, being filled with false opinions. For its proximity to the irrational nature causes it to receive a certain passion from externals.

take place ; and hence, when this is the case, if any thing external occurs, characterized by the nature of *same* or *different*, they denominate things the same with, or different from, others in a manner contrary to the truth. Hence they become false, and destitute of intelligence ; nor is any revolution to be found among them in such a situation which energizes with the authority of a ruler and chief.

But when certain senses, borne along externally, strike against the soul and attract the whole of its receptacle, then the circulations which are in reality in subjection appear to have dominion : and hence, in consequence of all these passions, the soul becomes insane at present, and was so from the first period of her being bound in a mortal body. However, when the river of increase and nutrition flows along with a more gentle and less abundant course, the circulations, being again restored to tranquillity, proceed in their proper path ; in process of time become more regular and steady, and pass into a figure accommodated to their nature. Hence, in this case, the revolutions of each of the circles becoming direct, and calling both *same* and *different* by their proper appellations, they render the being by whom they are possessed prudent and wise. If any one, therefore, receives a proper education in conjunction with convenient nutriment, such a one will possess perfect health, and will every way avoid the most grievous disease. But when this is neglected by any individual, such a one, proceeding along the path of life in a lame condition, will again pass into Hades imperfect and destitute of intelligence. These are particulars, however, which happen posterior to the production of mankind. But it is our business at present to discourse more accurately concerning the first composition of our nature, and to show, in the first place, from assimilative reasons, through what cause and providence of the Gods the several members of the body were accommodated to the several employments of the soul.

In the first place, then, the Gods bound the two divine circulations of the soul in a spherical body, in imitation of the circular figure of the universe : and this part of the body is what we now denominate the head ; a most divine member, and the sovereign ruler of our whole corporeal composition, through the decree of the Gods, who considered that it would participate of all possible motions. Left, therefore, the head, by rolling like a cylinder on the earth, which is distinguished by all-various heights and depths, should  
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be unable to pass over its inequalities and asperities, the Gods subjected this upright figure of the body, as a pliable vehicle to the head. Hence, in consequence of the body being endued with length, they extended four naturally flexible members; Divinity fabricating a progression through which the body might apprehend any object, might receive a stable support, and might be able to pass through every place, bearing on high the head, our most divine and sacred habitation. For this purpose, therefore, they furnished us with legs and hands. And as the Gods considered that the anterior parts are more honourable and adapted to rule than the posterior, they gave us a motion for the most part consisting of a forward progression. Beside this, it was requisite that the anterior parts of our body should be divided from each other, and be dissimilar: and on this account they first placed about the cavity of the head the face; fixed in it organs subservient to all the providential energies of the soul, and determined that the natural government of man should consist in this anterior part of the body. But they fabricated the luciferous eyes the first of all the corporeal organs, binding them in the face on the following account. Of that fire which does not burn, indeed, but which comprehends our proper diurnal light, the Gods fabricated the orbs of the eyes. For the fire contained within our body, and which is the genuine brother of this diurnal fire, they caused to flow through the eyes with smoothness, and collected abundance, condensed indeed in the whole, but especially in the middle of these lucid orbs; so as that the more dense fire might remain concealed within the recesses of the eyes, and the pure might find a passage and fly away. When, therefore, the diurnal light subsists about the effluxive river of the sight, then, similar concurring and being mingled with similar, one domestic body is constituted according to the direct procession of the eyes; and this too in that part where the internally emitted light resists that which is externally adduced. But the whole becoming similarly passive through similitude, when it either touches any thing else or is itself touched by another, then the motion produced by this contact diffusing itself through the whole body of the eye, as far as to the soul, causes that sensation which we denominate sight. But when this kindred fire departs into night, the conjunct on being dissolved, sight loses its power. For in this case, proceeding into a dissimilar nature, it is changed, and becomes extinct: since it is by no means connate with the proximate surrounding air, which is naturally destitute

destitute of fire. Hence it ceases from seeing; and, besides this, becomes the introducer of sleep. For the Gods fabricated the nature of the eye-lids as a salutary guardian of the sight; that, these being compressed, the inward fiery power of the eye might be restrained from any further emission; that, besides this, they might sprinkle over and equalize the eye's internal motions; and that, when equalized, rest might be produced.

But when much rest takes place, sleep attended with few dreams is produced. On the contrary, if certain more vehement motions remain, then such as is the nature of these relics, and the places in which they were produced, such and so many will be the similar phantasms within, and of which we shall possess the remembrance when we are externally roused. But with respect to the images produced in mirrors, and all such things as are visible in that which is apparent and smooth, there is nothing in these difficult of solution. For, from the communication of the external and internal fire with each other, and from that fire which subsists about the smooth body, and becomes abundantly multiplied, all such appearances are necessarily produced as take place when the fire of the eyes mingles itself with the fire diffused about the smooth and splendid object of vision. But the right hand parts appear to be the left, because a contact takes place between the contrary parts of the sight and the contrary parts of the object, different from the accustomed mode of perception. On the contrary, the right hand parts appear on the right, and the left hand on the left, when the mingled light leaps forth, together with that with which it is mingled. When the smoothness of the mirrors receives this here and there in an elevated manner, it repels the right hand part of the sight to the left of the mirror, and the left to the right. But if the mirror is turned according to the length of the countenance, it causes the whole face to appear reflexive, by repelling the downward part of the splendour towards the upward part, and again the upper towards the downward part. All such particulars as these, therefore, are but causal assistants, which the Divinity employed as subservient to rendering the idea of that which is best as far as possible complete. *But the multitude are of opinion that these are not causal assistants, but the real causes of all things; I mean such things as are capable of giving cold and heat, rarity and density, with whatever produces such-like affections, but is incapable of possessing reason and intellect.* For soul must be considered as the only thing among beings by which intellect

can be possessed. And this is invisible. But fire and water, air and earth, are all of them visible bodies. *It is, however, necessary that the lover of intellect and science should explore the first causes of prudent nature; and that he should consider such things as are moved by others, and at the same time necessarily give motion to other things, as nothing more than secondary causes.* Hence it is proper that we should speak concerning both kinds of causes; separately of such as fabricate things beautiful and good in conjunction with intellect, and of such as, being left destitute of wisdom, produce each particular in a casual and disorderly manner. Concerning the second causes of the eyes, therefore, which contribute to the possession of the power they are now allotted, what has been already said is sufficient.

But the greatest employment of the eyes, with respect to the use for which they were bestowed on us by the Divinity, we shall now endeavour to explain. For, in my opinion, the sight is the cause of the greatest emolument to us on the present occasion; since what we are now discoursing concerning the universe could never have been discovered without surveying the stars, the sun, and the heavens. But now, from beholding day and night, we are able to determine by arithmetical calculation the periods of months and years; to acquire a conception of time, and to scrutinize the nature of the universe. But from all this we obtain the possession of philosophy; a greater good than which never was nor ever will be bestowed by the Gods on the mortal race. And this is what I call the greatest benefit of the eyes. But why should I celebrate other particulars of less consequence, which he who is not a philosopher, since destitute of sight, may attempt to explore, but will explore in vain? By us, indeed, it is asserted that Divinity bestowed sight on us for this purpose, that on surveying the circulations of intellect in the heavens we may properly employ the revolutions of our dianoëtic part, which are allied to their circulations; and may recall the tumultuous motions of our discursive energies to the orderly processions of their intellectual periods. That besides this, by learning these and participating right reason according to nature, and imitating the revolutions of Divinity which are entirely inerratic, we may give stability to the wanderings of our dianoëtic energy.

But concerning voice and hearing, we again assert that they were bestowed on us by the Gods on the same account. For the acquisition of speech pertains to these, and is of the greatest advantage to their possession.

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And whatever utility musical voice brings to the sense of hearing, was bestowed for the sake of harmony. But harmony, possessing motions allied to the revolutions of our soul, is useful to the man who employs the Muses in conjunction with intellect; but is of no advantage to irrational pleasure, though it appears to be so at present. Indeed, it was given us by the Muses for the purpose of reducing the dissonant circulation of the soul to an order and symphony accommodated to its nature. Rhythm too was bestowed on us for this purpose; that we might properly harmonize that habit in our nature, which for the most part is void of measure, and indigent of the Graces. And thus far, a few particulars excepted, have we shown the fabrications of intellect. But it is likewise requisite to give a place in our discourse to the productions of necessity. For, the generation of the world being mingled, it was produced from the composition of intellect and necessity. But intellect ruling over necessity persuaded it to lead the most part of generated natures to that which is best; and hence necessity being vanquished by wise persuasion, from these two as principles the world arose. If, then, any one truly asserts that the universe was generated according to these, he should also mingle with it the form of an erratic cause, which it is naturally adapted to receive. In this manner then let us return; and, assuming a convenient principle of these, again discourse concerning them as about the former particulars, commencing our discussion from their origin. Let us, therefore, speculate the nature and passions of fire and water, air and earth, prior to the generation of the heavens. No one, indeed, as yet has unfolded the generation of these: but we speak of fire, and the other elements, as if the nature of each was known; and place them as the principles of the universe, when at the same time they ought not to be assimilated to elements, not even as in the rank of syllables, by men who in the smallest degree merit the appellation of wise. But now we shall not speak of the principle or principles, or whatever other denomination they may receive, of all things; and this for no other reason than the difficulty of delivering what appears to be the truth about these in the present mode of disputation. Neither, therefore, is it proper that you should expect me to speak, nor that I should persuade myself into a belief of being able to speak with perfect rectitude on so difficult a subject. But it is proper, as I told you in the beginning of this discourse, that, preserving all the force of assimilative reasons, we should endeavour to

deliver

deliver that which is not less assimilative of the truth than the doctrine of others; and that in this manner we should discourse from the beginning concerning particulars and the whole. In the first place, therefore, invoking the Divinity who is the favour of discourse, and beseeching him to lead us from an absurd and unusual exposition to an assimilative doctrine, we shall again begin to speak.

But it is necessary that the beginning of our present disputation should receive a more ample division than the former one. For then we made a distribution into two species: but now a third sort must be added. In the former disputation two species were sufficient; one of which was established as the form of an exemplar, intelligible and always subsisting according to *same*; but the other was nothing more than the imitation of the paradigm, generated and visible. But we did not then distribute a third, because we considered these two as sufficient. However, now reason seems to urge as a thing necessary, that we should endeavour to render apparent by our discourse the species which subsists as difficult and obscure. What apprehension then can we form of its power and nature? Shall we say that it is in an eminent degree the receptacle, and as it were nurse, of all generation? Such an assertion will, indeed, be true; but it is requisite to speak more clearly concerning it. And this will certainly be an arduous undertaking on many accounts, but principally because it will be necessary to doubt previous to its discussion concerning fire and the rest of the elements, why any one of these should be called water rather than fire, or air rather than earth; or why any one should be denominated some definite particular rather than all. For it is indeed difficult to frame any certain opinion, or to employ any stable discourse about such intricate forms. After what manner, then, and in what respect, and what of an assimilative nature shall we assert in this dubious inquiry?

In the first place, then, that which we now denominate water, when it loses its fluidity by concretion, appears to become stones and earth; but, when liquefied and dispersed, it forms vapour and air. Likewise, air when burnt up becomes fire. And, on the contrary, fire becoming concrete and extinct passes again into the form of air. And again, air becoming collected and condensed produces mists and clouds. But from these still more compressed rain descends. And from water, again, earth and stones derive

their subsistence. And thus, as it appears, they mutually confer on each other generation in a certain circular progression. But since these never appear to be the same, who without being covered with confusion can confidently assert that any one of these is this rather than that? Certainly, no one. Hence it will be far the most safe method of proceeding to speak about them as follows: That the nature which we always perceive becoming something different at different times, such, for instance, as fire, is not fire absolutely, but something fiery. And again, that the nature which we denominate water is not absolutely so, but such-like, or watery; and that it is not at any time any thing else, as if it possessed any stability of essence. And lastly, that they cannot be distinguished by any word, such as we are accustomed to employ when endeavouring to show that any particular is either this thing or that. For they fly away, incapable of sustaining the affirmation which asserts them to be *this thing, of such a nature, belonging to this*; and all such appellations as would evince them to be something permanent and real. Hence, we ought not to denominate any one of these either this, or that; but something such-like, and a perpetually-revolving similitude. Thus, we should assert that fire is every where *such-like*, and should speak in the same manner of every thing endued with generation. But we should alone distinguish by the appellations of this, or that, the subject in which each of these appears to be generated, and again to suffer a dissolution. But this subject is by no means to be denominated *such-like*, as for instance hot or white, or any quality belonging to contraries, or any thing which contraries compose. However, let us endeavour to explain more clearly what we mean to express. For if any one, fashioning all possible figures from gold, should without ceasing transform each figure into all; and if, during this operation, some one who is present should, pointing to one of these figures, inquire what it is; it might most safely, with respect to truth, be replied, that it was gold: but he who should assert that it is a triangle, or any other of the figures which are continually generated, and which ought by no means to be denominated beings, would fall from the truth in the midst of his assertion. But we ought to be content with that answer as most safe, which denominates it *such-like*, or of such a determinate nature.

In the same manner we should speak concerning that nature which is the general receptacle of all bodies. For it never departs from its own proper  
power,



power, but perpetually receives all things ; and never contracts any form in any respect similar to any one of the intromitted forms. It lies indeed in subjection to the forming power of every nature, becoming agitated and figured through the supernally intromitted forms : and through these it exhibits a different appearance at different times. But the forms which enter and depart from this receptacle are the imitations of perpetually true beings ; and are figured by them in a manner wonderful and difficult to describe, as we shall afterwards relate. At present, however, it is necessary to consider three sorts of things : one, that which is generated ; another, that in which it is generated ; and the third, that from which the generated nature derives its similitude. But it is proper to assimilate that which receives to a mother ; that from whence it receives to a father ; and the nature situated between these to an offspring. It is likewise necessary to understand that the figured nature can never become distinguished with an all-possible variety of forms, unless its receptacle is well prepared for the purpose, and is destitute of all those forms which it is about to receive. For, if it were similar to any one of the supernally intromitted forms, when it received a nature contrary to that to which it is similar, or any form whatever, it would very imperfectly express its similitude, while at the same time it exhibited the very same appearance with the supernally acceding form. And hence it is necessary, that the receptacle which is destined to receive all possible forms should itself be destitute of every form. Just as those who are about to prepare sweet-smelling unguents, so dispose a certain humid matter as the subject of the ensuing odour, that it may possess no peculiar smell of its own ; and as those who wish to impress certain figures in a soft and yielding matter, are careful that it may not appear impressed with any previous figure, but render it as much as possible exquisitely smooth. In the same manner, it is necessary that the subject which is so often destined to receive in a beautiful manner, through the whole of itself, resemblances of eternal beings, should be naturally destitute of all that it receives. Hence, we should not denominate this mother and receptacle of that which is generated, visible and every way sensible, either earth, or air, or fire, or water ; nor, again, any one of the composites from these, or any thing from which these are generated : but we should call it a certain invisible species, and a formless universal recipient, which in the most dubious and scarcely explicable manner partici-

pates of an intelligible nature. Of itself, indeed, we cannot speak without deception; but so far as it is possible to apprehend its nature from what has been previously said, we may with the greatest rectitude assert as follows: that fire appears to be its inflamed part; water its moist part; and that earth and air are its parts in a similar manner, so far as it receives the imitations of these. But we ought rather thus to inquire about these, distinguishing and separating them by a reasoning process; whether there is a certain fire, itself subsisting in itself; and whether this is the case with all such particulars which we perpetually assert to subsist from themselves; or whether such things alone as are the objects of sight, and which are perceived through the ministry of the body, possess being and truth; so that nothing besides these has in any respect any subsistence; that we in vain assert there is a certain intelligible form of each of these; and that all such forms are nothing but words. Indeed, whether such a doctrine is true or not, must not be asserted rashly and without examination: nor is it proper to add to the present disputation, which is naturally prolix, any thing tedious and foreign from the purpose. But if any definition can be employed in this affair, comprehending things of great moment in a short compass, such a one will be very opportune to our present design. In this manner then I shall relate my opinion on the subject.

If intellect and true opinion are two kinds of things, it is every way necessary that there should be forms, subsisting by themselves, which are not the objects of sense, but which are apprehended by intelligence alone. But if, as appears to some, true opinion differs in no respect from intellect, every thing which is perceived through body is to be considered as possessing the most certain and stable nature. But in reality these ought to be denominated two distinct things, because they are generated separate from each other, and are dissimilar. For the one of these subsists in us through learning, but the other through persuasion. And the one is indeed always attended with true reason, but the other is irrational. The one is not to be moved by persuasion; the other, on the contrary, is subject to this mutation. And lastly, of true opinion every man participates; but of intellect all the Gods, and but a few of mankind. Such then being the case, we must confess that the form which subsists according to *fame*, is unbegotten and without decay; neither receiving any thing into itself externally, nor itself proceeding

ceeding into any other nature. That it is invisible, and imperceptible by sense; and that this is the proper object of intellectual speculation. But the form which is synonymous and similar to this, must be considered as sensible, generated, always in agitation, and generated in a certain place, from which it again recedes, hastening to dissolution; and which is apprehended by opinion in conjunction with sense. But the third nature is that of place; which never receives corruption, but affords a seat to all generated forms. This indeed is tangible without tangent perception; and is scarcely by a certain spurious reasoning the object of belief. Besides, when we attempt to behold this nature, we perceive nothing but the delusions of dreams, and assert that every being must necessarily be somewhere, and be situated in a certain place: and we by no means think that any thing can exist, which is neither in the earth nor comprehended by the heavens. All these, and all such opinions as are the sisters of these, we are not able to separate from our cogitation of that which subsists about a vigilant and true nature: and this because we cannot rouse ourselves from this fallacious and dreaming energy, and perceive that in reality it is proper for an image to subsist in something different from itself; since that in which it is generated has no proper resemblance of its own, but perpetually exhibits the phantasm of something else; and can only participate of essence in a certain imperfect degree, or it would become in every respect a perfect non-entity. But to true being, true reason bears an assisting testimony, through the accuracy of its decisions; affirming, that as long as two things are different from each other, each can never become so situated in either, as to produce at the same time one thing, and two things essentially the same.

This, then, is summarily my opinion:—that, prior to the generation of the universe, these three things subsisted in a triple respect, viz. being, place, and generation. And that the nurse of generation, fiery and moist, receiving the forms of earth and air, and suffering such other passions as are the attendants of these, appeared of an all-various nature to the view. But because it was neither filled with similar powers, nor with such as are equally balanced, it possessed no part in equilibrium; but through the perfect inequality of its libration it became agitated by these passions, and again through its motion gave agitation to these. But the parts in motion, being separated from each other, were impetuously hurried along in different directions,

directions, similar to the agitations and ventilations which take place in the operations of textorial instruments, and such as are employed in the purgation of corn. For in this case the dense and the heavy parts are borne along one way, and the rare and the light are impelled into a different feat. In the same manner, these four natures being agitated by their receptacle tumultuously moving like the instrument of corn, such as were dissimilar became far separated from each other, and such as were similar became again amicably united. And hence they passed into different feats before the universe was from the mixture of these distributed into beautiful order; but at the same time they all subsisted irrationally, and without the limitation of measure.

But when the artificer began to adorn the universe, he first of all figured with forms and numbers fire and earth, water and air, which possessed indeed certain traces of the true elements, but were in every respect so constituted, as it becomes any thing to be from which Deity is absent. But we should always persevere in asserting that Divinity rendered them as much as possible the most beautiful and the best, when they were in a state of existence opposite to such a condition. I shall now, therefore, endeavour to unfold to you the distribution and generation of these by a discourse unusual indeed, but, to you who have trod in all the paths of erudition, through which demonstration is necessarily obtained, perspicuous and plain. In the first place, then, that fire and earth, water and air, are bodies, is perspicuous to every one. But every species of body possesses profundity; and it is necessary that every depth should comprehend the nature of a plane. Again, the rectitude of the base of a plane is composed from triangles. But all triangles originate from two species; one of which possesses one right angle, and the other two acute angles. And one of these contains one right angle distributed with equal sides; but in the other unequal angles are distributed with unequal sides. Hence, proceeding according to assimilative reasons, conjoined with necessity, we shall establish a principle of this kind, as the origin of fire and all other bodies. The supernal principles of these indeed are known to Divinity, and to the man who is in friendship with Divinity.

But it is necessary to relate by what means four most beautiful bodies were produced; dissimilar indeed to each other, but which are able from certain dissolutions into each other to become the sources of each other's generation.

generation. For, if we are able to accomplish this, we shall obtain the truth concerning the generation of earth and fire, and of those elements which are situated according to analogy between these. And then we shall not assent to any one who should assert that there are visible bodies more beautiful than these, each of which subsists according to one kind. We must endeavour, therefore, to harmonize the four sorts of bodies excelling in beauty; and to evince by this means that we sufficiently comprehend the nature of these. Of the two triangles indeed the isosceles is allotted one nature, but the oblong or scalene is characterized by infinity. We ought therefore to choose the most beautiful among infinities, if we wish to commence our investigation in a becoming manner. And if any one shall assert that he has chosen something more beautiful for the composition of these, we shall suffer his opinion to prevail; considering him not as an enemy, but as a friend. Of many triangles, therefore, we shall establish one as most beautiful (neglecting the rest); I mean the equilateral, which is composed from three parts of a scalene triangle. To assign the reason of this would indeed require a prolix dissertation; but a pleasant reward will remain for him who by a diligent investigation finds this to be the case. We have, therefore, selected two triangles out of many, from which the body of fire and of the other elements is fabricated; one of which is isosceles, but the other is that which always has its longer side triply greater in power than the shorter.

But that which we formerly asserted without sufficient security, it is now necessary more accurately to define. For it appeared to us, though improperly, that all these four natures were mutually generated from each other: but they are in reality generated from the triangles which we have just described:—three of them, indeed, from one triangle containing unequal sides; but the fourth alone is aptly composed from the isosceles triangle. All of them, therefore, are not able, by a dissolution into each other, to produce from many small things a mighty few, or the contrary. This indeed can be effected by three of them. For, as all the three are naturally generated from one triangle, when the greater parts are dissolved, many small parts are composed from them, receiving figures accommodated to their natures. And again, when the many small parts being scattered according to triangles produce a number of one bulk, they complete one mighty species  
of

of a different kind. And thus much may suffice concerning their mutual generation.

It now remains that we should speak concerning the quality of each of their kinds, and relate from what concurring numbers they were collected together. The first species indeed is that which was composed from the fewest triangles, and is the element of that which has its longer side twice the length of the shorter side, which it subtends. But two of these being mutually placed according to the diameter, and this happening thrice, the diameters and the shorter sides passing into the same, as into a centre, hence one equilateral triangle is produced from six triangles. But four equilateral triangles being composed, according to three plane angles, form one solid angle; and this the most obtuse of all the plane angles from which it is composed. Hence, from four triangles of this kind receiving their completion, the first solid species was constituted, distributive of the whole circumference into equal and similar parts. But the second was formed from the same triangles, but at the same time constituted according to eight equilateral triangles, which produced one solid angle from four planes: so that the second body received its completion from the composition of six triangles of this kind. And the third arose from the conjunction of twice sixty elements, and twelve solid angles, each of which having twenty equilateral bases is contained by five plane equilateral triangles. In this manner, then, the other elements generated these. But the isosceles triangle, being constituted according to four triangles, and collecting the right angles at the centre, and forming one equilateral quadrangle, generated the nature of the fourth element. But six such as these being conjoined produced eight solid angles, each of which is harmonized together, according to three plane right angles. Hence the figure of the body thus composed is cubical, obtaining six plane quadrangular equilateral bases. There is also a certain fifth composition, which Divinity employed in the fabrication of the universe, and when he delineated those forms the contemplation of which may justly lead some one to doubt whether it is proper to assert that the number of worlds is infinite or finite;—though indeed to affirm that there are infinite worlds, can only be the dogma of one who is ignorant about things in which it is highly proper to be skilful. But it may with much less absurdity be doubted whether there is in reality but one world, or whether there are five. According to our opinion,

opinion, indeed, which is founded on assimilative reasons, there is but one world: though some one, regarding in a certain respect other particulars, may be of a different opinion. But it is proper to dismiss any further speculations of this kind.

Let us now, therefore, distribute the four sorts of things which we have generated, into fire, earth, water, and air. And to earth indeed let us assign a cubical form: for earth is the most immovable of all these four kinds, and the most plastic, or adapted to formation, of all corporeal natures. But it is in the most eminent degree necessary that this should be the case with that which possesses the most secure and stable bases. Among the triangles, indeed, established at the beginning, such as are equilateral possess firmer bases than such as contain unequal sides. And hence, among the plane figures composed from each, it will be found that the isosceles is necessarily more stable than the equilateral, and the square than the triangle, both when considered according to parts and to the whole. On this account, by distributing this figure to the earth, we shall preserve an assimilative reason. This will be the case too by assigning to water that figure which is more difficultly movable than the other three; to fire, the most easily movable form; and to air, that figure which possesses a middle nature. Besides this, we should assign the smallest body to fire, the greatest to water, and one of a middle kind to air. And again, the most acute body to fire, the second from this to air, and the third to water. But, among all these, it is necessary that the body which possesses the fewest bases, should be the most easily movable: for, being every way the most acute, it becomes the most penetrating and incisive of all. It is likewise the most light, because composed from the fewest parts. But that which is second to this, possesses these properties in a secondary respect; and that which ranks as the third, in a third gradation. Hence, according to right and assimilative reason, the solid form of the pyramid is the element and seed of fire. But we must assign that form which is second according to generation to air; and that which is the third to water. And it is necessary to consider all these such, with respect to their smallness, that no one of the several sorts can be discerned by us, on account of its parvitude; but that, when many of them are collected together, their bulks become the objects of our perception. And besides this, all these were accurately absolved and harmonized by the Divinity, both

as to their multitude, motions, and powers, in such a proportion as the willing and persuaded nature of necessity was able to receive.

But, among all those natures whose kinds we have above related, the following circumstances appear to take place. And first with respect to earth: when it meets with fire, becoming dissolved by its acuteness, it is borne along; and remains in this dissolved state either in fire, or in the bulk of air, or in that of water—till its parts, associating themselves together, and again becoming mutually harmonized, produce again a body of earth; for it can never pass into another form. But water, when it is distributed into parts by fire or air, when its parts become again collected, produces one body of fire, but two bodies of air. And the sections of air form from one dissolved part two bodies of fire. Again, when fire receives into itself either air or water, or a certain earth, and, being itself small, is moved in many natures; and besides this, when, through opposing, being vanquished by the agitated forms, it becomes broken in pieces, then two bodies of fire coalesce into one form of air. And when air becomes vanquished and separated into parts, then, from two wholes and a half, one whole form of water is produced. But, again, let us consider this matter as follows: When any one of the other forms, becoming invested by fire, is cut by the acuteness of its angles and sides, then, passing into the nature of fire, it suffers no further discernption. For no species is ever able to produce mutation or passivity, or any kind of alteration, in that which is similar and the same with itself: but as long as it passes into something else, and the more imbecil contends with the more powerful, it will not cease to be dissolved.

Again, when the lesser are comprehended in the greater many, and the few being lacerated are extinguished,—if they are willing to pass into the idea of the conquering nature, they cease to be extinguished, and air becomes generated from fire, and water from air. But if, when this transition is accomplished, the composite opposes any of the other species, the agitated parts will not cease to be dissolved, till, on account of their dissoluble subsistence being every way impelled, they fly to their kindred nature; or being vanquished, and becoming one from many, similar to their vanquisher, they abide with the victor in amicable conjunction. But, in consequence of these passions, they all of them mutually change the receptacles which they once possessed. For the multitude of each kind is distinguished, according to its  
proper



proper place, through the motion of its recipient seat. But such as become dissimilar to each other are borne along through the agitation to the place of the natures to which they are similar. Such bodies, therefore, as are unmixed, and the first, are generated from such causes as these. But that other genera are naturally inherent in these forms, is owing to the composition of each element; which not only from the first produces a triangle, together with magnitude, but also such things as are greater and less: and this so many in number as there are different kinds in the forms themselves. And hence, these being mingled in themselves, and with each other, produce an infinite variety; which it is proper he should contemplate who is about to employ assimilative reasons in the investigation of nature. He, therefore, who does not apprehend in what manner, and in conjunction with what particulars, the motion and composition of these take place, will find many impediments in the remaining part of this disputation. And these indeed we have already partly discussed; but a part still remains for our investigation.

And, in the first place, motion is by no means willing to reside in smoothness: for it is difficult, or rather impossible, that a thing in motion should subsist without a mover, or a mover without that which is in motion. Hence, it is impossible that these should be at any time equable and smooth. And, in consequence of this, we should always place an abiding nature in smoothness, and motion in that which is unequal and rough. Inequality, indeed, is the cause of roughness: and we have already treated concerning the generation of inequality. But we have by no means explained how the several sorts, being undistributed according to their kinds, cease to be moved and borne along through each other. This, therefore, must be the subject of our present discussion. The circulation then of the universe, since it comprehends the different sorts of things in its circumference, being of a circular form, and naturally desiring to pass into union with itself, compresses all things within its spacious receptacle, and does not suffer a void place any where to subsist. On this account, fire in the most eminent degree penetrates through all things; and air next to this, ranking as the second to fire, on account of the subtilty and tenuity of its parts. And the same reasoning must be extended to the other elements, which are posterior to these. For such as are composed from the greatest parts leave also the greatest vacuity in their composition; but, on the contrary, such as are the smallest leave the

least vacuity. But the coalition of compression thrusts the small parts into the void spaces of the large; and on this account, the small parts being placed with the large, and the former separating the latter, but the larger being mingled with the smaller, all of them are borne upwards and downwards to their respective places of abode. For each, upon changing its magnitude, changes also its situation. Hence, through these causes the generation of a nature contrary to smoothness being always preserved, affords a perpetual motion of these, both at present and in all future periods of time.

But, in the next place, it is necessary to understand that there are many kinds of fire: as for instance, flame, and that which is enkindled from flame; which burns, indeed, but exhibits no light to the eyes—and which, when the flame is extinguished, abides in the ignited nature. In like manner, with respect to air, one kind is most pure, which is denominated ether; but another most turbulent, and at the same time obscure and dark; and after this another nameless kind is produced, through the inequality of the triangles. But, with respect to water, it is in the first place twofold; one kind of which is humid, but the other fusile. The humid, therefore, through its participating such parts as are small and unequal, becomes movable, both from itself and another, through inequality and the idea of its figure. But that which is composed from large and smooth parts is more stable than this kind of water, and coalesces into a heavy body through smoothness and equality of parts. But through fire entering into and dissolving its composition, in consequence of losing its equability and smoothness, it participates more of a movable nature. Hence, becoming easily agile, driven about by the proximate air, and extended over the earth, it liquefies, which is denominated a purification of bulk, and falls upon the earth, which is called a defluxion. Again, fire flying upwards from hence, since it does not depart into a vacuum, the proximate air being agitated, impels the moist bulk as yet movable into the seats of fire, with which at the same time it mingles itself. But when the bulk becomes collectively thrust downwards, and again receives equability and smoothness of parts, then fire, the artificer of inequality, departing, the whole mass passes into a sameness with itself. And this departure of fire we denominate refrigeration; but the coalition which takes place when fire is

‡ Instead of *ὄρε*, in this part read *ἀρε*.

absent we call a concretion, and cold rigidity. But among all those which we denominate fusile waters, that which, becoming most dense from the most attenuated and equable parts, is of a uniform kind, and participates a splendid and yellow colour, is that most honoured and valuable possession gold, which is usually impelled through a rock. And a branch of gold, on account of its density most hard and black, is called a diamond. But that which contains parts proximate to gold, which possesses more than one species, surpasses gold in density, and participates but a small and attenuated part of earth, so that it becomes of a harder nature, but from its internally possessing great intervals is lighter;—this is one kind of splendid and concrete waters, and is denominated brass. But when an earthly nature, being mingled with this, is through antiquity separated from other parts of the brass, and becomes of itself conspicuous, it is then denominated ruit. In a similar manner other particulars of this nature may be investigated without much labour by the assistance of assimilative reasons. And if any one, for the sake of relaxation, omitting for a while the speculation of eternal beings, should pursue the assimilative arguments concerning generation, and should by this means possess a pleasure unattended with repentance, such a one will establish for himself in life a moderate and prudent diversion.

This being admitted, let us run over the assimilative reasons concerning the particulars which yet remain for discussion. When such water then as is attenuated and moist is mingled with fire, (being denominated moist through its motion and rolling progression on the earth, and likewise soft, because its bases being less stable than those of earth easily yield to impulsion,) this, when separated from fire and deserted by air, becomes more equable, and through the departure of these is compelled into itself: and being thus collected, if it suffers this alteration above the earth, it becomes hail; but if upon the earth, ice; which then takes place in consequence of extreme congelation. But when it is less congealed, if this happens above the earth, it becomes snow; but when upon the earth, and this from collected dew, it then becomes frost. But when many species of water are mingled with each other, the whole kind, which is strained from the earth through plants, is called moisture or liquor. These liquors, being dissimilar on account of their mixtures, exhibit many other nameless kinds: but four, which are of a fiery species, and which become in an eminent degree diaphanous, are allotted appellations.

appellations. And that which heats the soul in conjunction with the body is called wine. But that which is smooth, and segregative of the sight, and on this account splendid, refulgent, and unctuous to the view, is an oleaginous species, and is pitch, gum, oil, and other things endued with a similar power. Again, that which possesses a power of diffusing the things collected about the mouth, and this as far as nature will permit, at the same time bringing sweetness with its power, is generally denominated honey. And lastly, that which dissolves the flesh by burning, is of a frothy nature, and is secreted from all liquors, is called juice. But the species of earth strained through water produces a stony body in the following manner:—When collected water fails in mingling, it passes into the form of air; but, becoming air, it returns to its proper place. Hence, as there is no vacuum, it impels the proximate air; and this, if the impulsion is weighty, being poured round the bulk of earth, becomes vehemently compressed, and betakes itself to those seats from whence the new air ascended. But earth, when indissolubly associated with water, through the ministry of air composes stones: the more beautiful sort indeed being such as are resplendent from equal and plane parts, but the deformed being of a contrary composition. But when all the moisture is hurried away by the violence of fire, and the body by this means becomes more dry, then a species of earth which is denominated stérile is produced. Sometimes, likewise, when the moisture is left behind, and the earth becomes fusile through fire, then through refrigeration a stone with a black colour is generated. But when this species of strained earth in a similar manner through mixture is deprived of much moisture, but is composed from more attenuated parts of earth, is salt and semiconcrete, and again emerges through water; then it is partly called nitre, a cathartic kind of oil, and earth, and partly salt, a substance most elegantly and legitimately adapted to the common wants of the body, and most grateful to divinity. But the parts common to both these are not soluble by water, but through some such thing are thus collected together by fire. Again, fire and air do not liquefy the bulk of earth. For since these naturally consist of parts smaller than the void spaces of earth, they permeate through its most capacious pores without any violence, and neither subject it to dissolution nor liquefaction. But the parts of water, because they are greater and pass along with violence, dissolve and liquefy the mass of earth. Hence,  
water

water alone dissolves earth when violently composed, but fire alone when it is properly composed; for an entrance in this case is afforded to nothing but fire.

Again, fire alone permeates the most violent association of the parts of water; but both fire and air diffuse themselves through its more debile collection; air through its void, and fire through its triangular spaces. But nothing is capable of dissolving air when collected together by violence, except it operates according to an element: but when it coheres together without force, it is resolved by fire alone. Again, bodies which are so composed from water and earth that the water compressed by force obstructs the void spaces of earth, cannot in this case afford an ingress to the water externally approaching; and in consequence of this, the water flowing round such a body suffers the whole mass to remain without liquefaction. But the parts of fire entering into the void spaces of water, as water into those of earth, and influencing water in the same manner as fire influences air, become in this case the causes of liquefaction to a common body. But these partly possess less water than earth; such as the whole genus of glasses, and such stones as are denominated fusile: and partly, on the contrary, they possess more of water; such as all those bodies which coalesce into waxen and vaporific substances. And thus we have nearly exhibited all those species, which are varied by figures, communications and mutations into each other; but it is now necessary that we should endeavour to render apparent the causes through which the passions of these are produced.

In the first place, then, sense ought always to be present with discourses of this kind. But we have not yet run through the generation of flesh, and such things as pertain to flesh, together with that part of the soul which is mortal. For all these are inseparable from the passions subsisting with sense, and cannot without these passions be sufficiently explained; though, indeed, even in conjunction with these, it is scarcely possible to unfold their production. We should, therefore, first of all establish other things; and then consider such things as are consequent to these. That in our disputation, therefore, the passions themselves may follow the genera in succession, let our first investigations be concerning such things as pertain to body and soul. Let us then first of all inquire why fire is called hot. And the reason of this we shall be able to perceive by considering the separation and division of fire about our bodies;

bodies: for that this *passion* is a certain sharpness is nearly evident to all. But we ought to consider the tenuity of its angles, the sharpness of its sides, the smallness of its parts, and the velocity of its motion, through all which it becomes vehement and penetrating, and swiftly divides that with which it meets; calling to mind for this purpose the generation of its figure. For fire, indeed, and no other nature, separating our bodies and distributing them into small parts, produces in us that *passion* which is very properly denominated heat. But the *passion* contrary to this, though sufficiently manifest, ought not to pass without an explanation. For the moist parts of bodies larger than our humid parts, entering into our bodies, expel the smaller parts; but, not being able to penetrate into their receptacles, coagulate our moisture, and cause it through equability to pass from an unequable and agitated state into one immovable and collected. But that which is collected together contrary to nature, naturally opposes such a condition, and endeavours by repulsion to recall itself into a contrary situation. In this contest and agitation a trembling and numbness takes place; and all this *passion*, together with that which produces it, is denominated cold. But we call that hard to which our flesh gives way; and soft, which yields to the pressure of our flesh. And we thus denominate them with reference to each other. But every thing yields to pressure which is established on a small base. But that which rests on triangular bases, on account of its being vehemently firm, is of a most resisting nature; and, because it is dense in the highest degree, strongly repels all opposing pressure.

Again, the nature of heavy and light will become eminently apparent, when investigated together with upwards and downwards. But indeed it is by no means rightly asserted that there are naturally two certain places distant by a long interval from each other: one denominated downwards, to which all bodies tend endued with bulk, but the other upwards, to which every thing is involuntarily impelled. For, the whole universe being spherical, all such things as by an equal departure from the middle become extremes, ought to become naturally extremes in a similar manner. But the middle, being separated from the extremes according to the same measures, ought to be considered as in a situation just opposite to all things. Such, then, being the natural disposition of the world, he who places any one of the above-mentioned particulars either upwards or downwards, will justly appear

by such appellations to wander from the truth. For the middle place in the universe cannot be properly called either naturally downwards or upwards, but can only be denominated that which is the middle. But that which environs is neither the middle, nor contains any parts in itself differing from each other with reference to the middle, nor does it possess any thing corresponding to an opposite direction. But to that which is every way naturally similar how can any one with propriety attribute contrary names? For, if there be any thing solid, and endued with equal powers, in the middle of the universe, it will never tend to any part of the extremities, through the perfect similitude which they every where possess. But if any one moves about this solid in a circle, he will often stand with his feet in opposite directions, and will denominate the same part of himself both upwards and downwards. Since the universe, therefore, as we have just observed, is of a spherical figure, it is not the part of a prudent man to assert that it has any place which is either upwards or downwards. But from whence these names originate, and, in what things existing, we transfer them from thence to the universe, it is our business at present to investigate. If any one then should be seated in that region of the world which for the most part belongs to the nature of fire, and to which it on all sides tends, and if such a one should acquire a power of taking away the parts of fire, and of causing them to balance; or, placing the parts in a scale, should violently seize on the beam, and, drawing out the fire, hurl it downwards into dissimilar air—it is evident that in this case a less portion of fire would be more easily compelled than a greater. For, when two things are at the same time suspended from one power, it is necessary that the less quantity should more easily, and the greater with less readiness, yield to the oppressive force. Hence, the one is called heavy, and tending downwards; but the other light, and tending upwards. The same thing happens to us who inhabit this terrestrial region. For, walking on the earth, and separating the terrene genera from each other, we sometimes violently hurl a fragment of earth into its dissimilar the air, and this with a motion contrary to its nature; each region at the same time retaining that to which it is allied. But the less portion, being more easily impelled into a dissimilar place than the larger, first of all yields to the violence: and this we denominate light, and call the place into which it is violently hurled, upwards. But the passion contrary to this we denominate

heavy and downwards. Hence it is necessary that these should mutually differ from each other; and this through the multitude of genera obtaining contrary situations. For that which is light in one place is contrary to that which is light in a contrary situation: likewise the heavy to the heavy, the downward to the downward, and the upward to the upward. For all these will be found to be contrary, transverse, and every way different from each other. One thing however is to be understood concerning all these, that the progression of each, tending to its kindred nature, renders the proceeding body heavy, and the place to which it tends, downwards. But this progression influences in a different manner such as are differently affected. And thus have I unfolded the causes of these passions.

But again, any one who beholds the cause of the *passion* of smoothness and roughness may be able to disclose it to others. For hardness mingled with inequality produces the one, and equality with density the other. But among the common *passions* which subsist about the whole body, that is the greatest which is the cause of pleasure and pain: to which may be added, such as through the parts of the body detain the senses, and have in these pleasures and pains as their attendants. In this manner, then, we should receive the causes of every passion, both sensible and insensible, calling to mind the distinctions which we formerly established concerning the easily and difficultly movable nature. For in this manner we ought to pursue all such things as we design to apprehend. Thus, with respect to that which is naturally easily movable, when any slender passion falls upon it, the several parts give themselves up to each other in a circular progression, producing the same effect; till, having arrived at the seat of prudence, they announce the power of that by which the passion was induced. But that which is affected in a contrary manner, being stable and without a circular progression, alone suffers; but does not move any of the parts to which it is proximate. Hence, the parts not mutually giving themselves up to each other, and the first passion in them becoming immovable with respect to the whole animal, that which suffers is rendered void of sensation. This last case indeed happens about the bones and hairs, and such other parts of our composition as are mostly terrene. But the circumstances belonging to the easily movable nature take place about the instruments of sight and hearing, through their containing the most abundant power of fire and air. But it is necessary to consider the peculiarities  
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of pleasure and pain as follows:—When a *passion* is produced in us contrary to nature, and with violence and abundance, then it becomes the occasion of pain. And again, when a *passion* conformable to our nature is excited, and this with abundance, it causes pleasure and delight. But that which is contrary to these produces contrary effects. But a *passion*, the whole of which is induced with great facility, is eminently indeed the object of sensation, but does not participate of pleasure and pain. And of this kind are the *passions* subsisting about the sight; to which, as we have above asserted, our body is allied. For such objects as exhibit sections and burnings, and other *passions* of a similar kind, do not cause pain to the sight; nor, again, does the sight receive pleasure when it is restored to the same form as before. But the most vehement and clear sensations influence it with pain, so far as it suffers any thing, strikes against, or comes into contact with, any object. For no violence subsists in the separation or concretion of the sight. But such bodies as are composed from larger parts, and which scarcely yield to impulsion, when they transfer the induced motions to the whole body, contain in themselves pleasures and pains; when varied, indeed, pains, but, when restored to their pristine situation, pleasures. Again, whatever bodies in a small degree receive departures and evacuations of themselves, accompanied at the same time with abundant repletions,—since such bodies have no sense of evacuation, but are sensible of repletion, they do not affect the mortal part of the soul with any pain, but, on the contrary, influence it with the greatest delight. And the truth of this is manifest from the sensation of sweet odours. But such bodies as suffer an abundant variation, and are scarce able to be restored in a small degree to their pristine situation, are totally affected in a manner contrary to those we have just described. And the truth of this is manifest in the burnings and sections of the body. And thus have we nearly discussed the common passions of the whole body, and the appellations assigned to the causes by which they are produced.

Let us now endeavour to explain those passions which take place in particular parts of our bodies, and relate from whence they arise, and by what causes they are induced. In the first place, let us if possible complete what we formerly left unfinished concerning humours; since these are passions subsisting about the tongue. But these, as well as many other things, appear to be produced by certain separations and concretions; and, besides this, to

employ smoothness and roughness more than the rest. For certain small veins extend themselves from the tongue to the heart, and are the messengers of tastes. And when any thing falls upon these so as to penetrate the moist and delicate texture of the flesh, which through its terrestrial nature is moderately liquefied, it then contracts and dries the veins. Hence, if these penetrating substances are of a more rough nature, they produce a sharp taste; but, if less rough, a sour taste. But such things as are purgative of these veins, and which wash away whatever is found adhering to the tongue, if they accomplish this in an immoderate degree, so as to liquefy something of the nature of the tongue, such as is the power of nitre;—all such as these are denominated bitter. But whatever is subordinate to this property of nitre, and purges in a more moderate degree, appears to us to be salt, without the roughness of bitterness, and to be more friendly to our nature. Again, such things as, communicating with the heat of the mouth, and being rendered smooth by it, heat also in their turn the mouth—and which through their lightness are elevated towards the senses of the head, at the same time dividing whatever they meet with in their ascent;—all these, through powers of this kind, are denominated sharp. But sometimes these several particulars, becoming attenuated through rottenness, enter into the narrow veins, and compel the interior parts, as well the terrene as those containing the symmetry of air, to be mingled together by moving about each other; and when mingled cause some of the parts to glide round, some to enter into others, and when entered to render them hollow and extended; and this in the place where a hollow moisture is extended about the air. This moisture too being at one time terrene and at another pure, a moist orbicular receptacle of air is produced from the hollow water. But that which is produced from pure water is on all sides diaphanous, and is called a bubble. On the contrary, that which owes its subsistence to a more earthly moisture, and which is at the same time agitated and elevated, is denominated fervid, and a fermentation. But the cause of all these passions receives the appellation of acute. And a passion contrary to all that has been asserted concerning these proceeds from a contrary cause. But when the composition of the things entering into moist substances is naturally accommodated to the quality of the tongue, it polishes and anoints its asperities, and collects together or relaxes such parts as were either assembled or dissipated contrary to nature, and restores

restores them to their proper and natural habit. Hence, all such substances are pleasant and friendly to every one, become the remedies of violent passions, and are denominated sweet. And thus much may suffice concerning particulars of this kind.

There are, however, no species about the power of the nostrils: for all odours are but half begotten. But it happens to no species to be commensurate with any odour. And our veins, with respect to particulars of this kind, are too narrow to admit the genera of earth and water, and too broad to receive those of fire and air; and hence no one ever perceives an odour of any one of these. But odours are always produced from the madefaction, corruption, liquefaction or evaporation of the elements. For, water becoming changed into air, and air into water, odours are generated in the middle of these. And all odours are either smoke or mists. But, of these, that which passes from air into water is a mist; but that which is changed from water into air, smoke. And hence it comes to pass that all odours are more attenuated than water, and more dense than air. But the truth of this is sufficiently evident when any one, in consequence of a disagreeable smell, violently draws his breath inwards; for then no odour is washed off, but breath alone follows unattended by smell. On this account, the varieties of these subsist without a name; as they are neither composed from many nor from simple species. But two of these alone receive an appellation, the pleasant and the disagreeable: the latter of which disturbs and violently assaults all that cavity which lies between the top of the head and the navel; but the former allures this part of the body, and by its amicable ingreſs preserves it in a condition accommodated to its nature. But we ought to consider the third sensitive part of our composition, hearing, in such a manner that we may explain through what causes the passions with which it is conversant subsist. We ought, therefore, entirely to define voice a certain pulsation of the air, penetrating through the ears, brain, and blood, as far as to the soul: and we should call the motion arising from hence, which commences from the head and ends in the seat of the liver, hearing. When this motion is swift, a sharp sound is produced; but, when slow, a flat sound. And the former of these is equal and smooth, but the latter rough. Many voices too produce a great sound, but a small sound is the result of a few. But it is necessary that we should speak about the symphonies of these in the subsequent part

of this discourse. The fourth sensitive genus now remains for our discussion; which contains in itself an abundant variety, all which are denominated colours. But colour is a flame flowing from bodies, and possessing parts commensurate to the sight with respect to perception. But we have already considered the causes from which sight is produced. It appears then that we may now speak of colours according to assimilative reasons as follows:

Of things which, proceeding from other parts, fall on the sight, some are greater, others less, and others equal to the parts of the sight. Such as are equal, therefore, cannot be perceived; and these we denominate diaphanous. But, among such as are larger or smaller, some of these separate, but others mingle the sight, similar to the operations of heat and cold about the flesh, or to things sour, acute and hot about the tongue. But things which affect the sight in this manner are called black and white; which are indeed the passions of those particulars we have just related, being their sisters, as it were, and the same with them in a different genus; but which, nevertheless, through these causes appear to be different. We should, therefore, speak of them as follows:—That the colour which is segregative of the sight is white; but that which produces an effect contrary to this, black. But when a more acute motion, and of a different kind of fire, falls upon and separates the sight, as far as to the eyes, at the same time violently propelling and liquefying the transitions of the eyes, then a collected substance of fire and water flows from thence, which we denominate a tear; but the motion itself is a fire meeting with the sight in an opposite direction. And, indeed, when a fire, leaping as it were from a certain corruption, becomes mingled with another fire, penetrating and extinguished by moisture, from this mixture colours of all-various kinds are produced. In this case we call the passion a vibrating splendour, and that which produces it fulgid and rutilating. But a kind of fire which subsists in the middle of these, arriving at the moisture of the eyes, and becoming mingled with it, is by no means splendid: but in consequence of the rays of fire being mingled through moisture, and producing a bloody colour, we denominate the mixture red. And when splendour is mingled with red and white, it generates a yellow colour. But to relate in what measure each of these is mingled with each, is not the business of one endued with intellect, even though he were well informed in this affair; since he would not be able to produce concerning these either a  
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neccessary or an assimilative reason. But red, when mingled with black and white, produces a purple colour. And when to these, mingled and burnt together, more of black is added, a more obscure colour is produced. A ruddy colour is generated from the mixture of yellow and brown; but brown from the mixture of black and white. A pallid colour arises from the mingling of white and yellow. But that which is splendid conjoined with white, and falling upon abundance of black, gives completion to an azure colour. And azure mingled with white generates a gray colour. But from the temperament of a ruddy colour with black, green is produced. All the rest will be nearly evident from these, to any one who, imitating the former mixtures, preserves assimilative reasons in his discourse. But if any one undertakes the investigation of these, for the sake of the things themselves, such a one must be ignorant of the difference between a divine and human nature: since a God is indeed sufficient for the purpose of mingling many things into one, and of again dissolving the one into many, as being at the same time both knowing and able: but there is no man at present who is able to accomplish either of these undertakings, nor will there ever be one in any future circulation of time. But all these which thus naturally subsist from necessity, were assumed in the things which are generated by the artificer of that which is most beautiful and best, when he produced a self-sufficient and most perfect God; employing, indeed, causes which are subservient to these, but operating himself in the best manner in all generated natures. On this account it is requisite to distinguish two species of causes; the one necessary, but the other divine. And we should inquire after the divine cause in all things, for the sake of obtaining a blessed life in as great a degree as our nature is capable of receiving it; but we should investigate the necessary cause for the sake of that which is divine. For we should consider, that without these two species of causes, the objects of our pursuit can neither be understood nor apprehended, nor in any other way become participated. But since to us at present, as to artificers, matter lies in subjection, the genera of causes serving as prepared materials from which the remaining discourse is to be woven, let us again return with brevity to our first discussions, and swiftly pass from thence to the place at which we are now arrived; by this means endeavouring to establish an end and summit to our disputation, which may harmonize with its beginning.

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Indeed, as we asserted towards the commencement of our discourse, when all sensible natures were in a disordered state of subsistence, Divinity rendered each commensurate with itself, and all with one another, and connected them as much as possible with the bands of analogy and symmetry. For then nothing participated of order except by accident; nor could any thing with propriety be distinguished by the appellation which it receives at present, such for instance as fire, water, and the rest of this kind. But the demiurgus in the first place adorned all these, afterwards established the world from their conjunction, and rendered it one animal, containing in itself all mortal and immortal animals. And of divine natures, indeed, he himself became the author; but he delivered to his offspring the junior Gods the fabrication of mortal natures. Hence, these imitating their father's power, and receiving the immortal principle of the soul, fashioned posterior to this the mortal body, assigned the whole body as a vehicle to the soul, and fabricated in it another mortal species of soul, possessing dire and necessary passions through its union with the body. The first indeed of these passions is pleasure, which is the greatest allurements to evil; but the next is pain, which is the exile of good. After these follow boldness and fear, those mad advisers; anger, hard to be appeased; hope, which is easily deceived; together with irrational sense, and love, the general invader of all things. In consequence, therefore, of mingling these together, the junior Gods necessarily composed the mortal race. And religiously fearing lest the divine nature should be defiled through this rout of molestations more than extreme necessity required, they lodged the mortal part, separate from the divine, in a different receptacle of the body; fabricating the head and breast, and placing the neck between as an isthmus and boundary, that the two extremes might be separate from each other.

In the breast, therefore, and that which is called the thorax, they seated the mortal genus of the soul. And as one part of it is naturally better, but another naturally worse, they fabricated the cavity of the thorax; distributing this receptacle in the woman different from that of the man, and placing in the middle of these the midriff or diaphragm. That part of the soul, therefore, which participates of fortitude and anger, and is fond of contention, they seated nearer the head, between the midriff and the neck; that becoming obedient to reason, and uniting with it in amicable conjunction,

junction, it might together with reason forcibly repress the race of desires, whenever they should be found unwilling to obey the mandates of reason, issuing her orders from her lofty place of abode. But they established the heart, *which is both the fountain of the veins, and of the blood, which is vehemently impelled through all the members of the body in a CIRCULAR PROGRESSION*, in an habitation corresponding to that of a satellite; that when the irascible part becomes inflamed, reason at the same time announcing that some unjust action has taken place externally, or has been performed by some one of the inward desires, then every thing sensitive in the body may swiftly through all the narrow pores perceive the threatenings and exhortations, may be in every respect obedient, and may thus permit that which is the best in all these to maintain the sovereign command.

But as the Gods previously knew that the palpitation of the heart in the expectation of dreadful events, and the effervescence of anger, and every kind of wrathful inflation, would be produced by fire, they implanted in the body the idea of the lungs, artificially producing them as a guardian to the heart. And, in the first place, they rendered them soft and bloodless, and afterwards internally perforated with hollow pipes like a sponge; that through their receiving spirit and imbibing moisture, they might become themselves refrigerated, and might afford respiration and remission to the heart in its excessive heat. Hence they deduced the arteries as so many canals through the substance of the lungs; and placed the lungs like a soft thicket round the heart, that when anger rages in it with too much vehemence it may leap into submission, and becoming refrigerated may be subject to less endurance, and may be able together with anger to yield with greater facility to the authority of reason. But they seated that part of the soul which is desiderative of meats and drinks, and such other things as it requires through the nature of body, between the præcordia and the boundary about the navel; fabricating all this place as a manger subservient to the nutriment of the body, and binding in it this part of the soul as a rustic and savage animal. But it is necessary that this part should nourish its conjoined body, if the mortal race has a necessary existence in the nature of things. That this part, therefore, might be always fed at the manger, and might dwell remote from the deliberative part, molesting it in the smallest degree with its tumults and clamours, and permitting it, as that which is most excellent in our composition, to consult in quiet for the

common utility of the whole animal; on this account the Gods assigned it such a subordinate situation.

However, as the Divinity perceived that this part would not be obedient to reason, but that it would naturally reject its authority in consequence of every sensible impression, and would be animafically hurried away by images and phantafms both by day and night—confidering this, he conftituted the form of the liver, and placed it in the habitation of this defiderative part; compofing it denfe and fmoth, fplendid and fweet, and at the fame time mingled with bitternefs; that the power of cogitations, defcending from intellect into the liver as into a mirror receiving various refemblances and exhibiting images to the view, might at one time terrify this irrational nature by employing a kindred part of bitternefs and introducing dreadful threats, fo that the whole liver being gradually mingled might reprefent bilious colours, and becoming contracted might be rendered throughout wrinkled and rough; and that, befides this, it might influence its lobe, ventricle, and gates, in fuch a manner, that by diftorting and twifting fome of thefe from their proper difpofition, and obftructing and fhutting in others, it might be the caufe of damages and pains. And again, that at another time a certain infpiration of gentlenefs from the dianoëtic power, by defcribing contrary phantafms and affording reft to bitternefs, through its being unwilling either to excite or apply itfelf to a nature contrary to its own; and befides this, by employing the innate fweetnefs of the liver, and rendering all its parts properly difpofed, fmoth, and free, might caufe that part of the foul which refides about the liver to become peaceful and happy, fo that it might even refrain from excefs in the night, and employ prophetic energies in fleep: fince it does not participate of reafon and prudence. For thofe who compofed us, calling to mind the mandate of their father, that they fhould render the mortal race as far as poffible the beft, fo conftituted the depraved part of our nature that it might become connected with truth; eftablifhing in this part a prophetic knowledge of future events. But that Divinity assigned divination to human madnefs may be fufficiently inferred from hence; that no one while endued with intellect becomes connected with a divine and true prophecy; but this alone takes place either when the power of prudence is fettered by fleep, or fuffers fome mutation through difeafe, or a certain enthufiaftic energy: it being in this cafe the employment of prudence to  
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understand what was asserted either sleeping or waking by a prophetic and enthusiastic nature; and so to distinguish all the phantastic appearances as to be able to explain what and to whom any thing of future, past, or present good is portended. But it is by no means the office of that which abides and is still about to abide in this enthusiastic energy, to judge of itself either concerning the appearances or vociferations. Hence it was well said by the ancients, that to transact and know his own concerns and himself, is alone the province of a prudent man. And on this account the law orders that the race of prophets should preside as judges over divine predictions; who are indeed called by some diviners—but this in consequence of being ignorant that such men are interpreters of ænigmatical visions and predictions, and on this account should not be called diviners, but rather prophets of divinations. The nature, therefore, of the liver was produced on this account, and seated in the place we have mentioned, viz. for the sake of prediction. And besides this, while each of such like parts is living, it possesses clearer indications; but when deprived of life it then becomes blind, and the divination is rendered too obscure to signify any thing sufficiently clear. But an intestine which subsists for the sake of the liver, is placed near it on the left hand, that it may always render the liver splendid and pure, and prepared like a mirror for the apt reception of resemblant forms. On this account, when certain impurities are produced about the liver through bodily disease, then the spleen, purifying these by its rarity, receives them into itself from its being of a hollow and bloodless contexture. Hence, being filled with purgations, it increases in bulk, and becomes inflated with corruption. And again, when the body is purified, then becoming depressed it subsides into the same condition as before. And thus we have spoken concerning both the mortal and divine part of the soul, and have related where they are situated, in conjunction with what natures, and why they are separated from each other. That all this indeed is unfolded according to indisputable truth, can only be asserted when confirmed by the vocal attestation of a God: but that it is spoken according to assimilative reasons, we should not hesitate to evince both now and hereafter by a more diligent discussion of what remains.

It is proper to investigate in a similar manner the subsequent part of our disputation; and this is no other than to relate how the other members

of the body were produced. It is becoming, therefore, in the most eminent degree that they should be composed as follows: Those artificers then of our race well knew that we should be intemperate in the assumption of meats and drinks, and that we should often through gluttony use more than was moderate and necessary. Hence, lest sudden destruction should take place through disease, and the mortal race thus becoming imperfect should presently cease to exist; the Gods previously perceiving this consequence, fabricated in the lower parts a hollow receptacle for the purpose of receiving a superabundance of solid and liquid aliment; and, besides this, invested it with the spiral folds of the intestines, lest, the assumed nutriment swiftly passing away, the body should as swiftly require an accession of new aliment; and, by producing an insatiable appetite through gluttony, should render our whole race void of philosophy and the muses, and unobedient to the most divine part of our composition. But the nature of the bones and flesh, and other things of this kind, was constituted as follows: In the first place, the generation of the marrow serves as a principle to all these. For the bonds of that life which the soul leads through its conjunction with the body, being woven together in the marrow, become the stable roots of the mortal race. But the marrow itself is generated from other particulars. For, among the triangles, such as are first, being unbent and smooth, were particularly accommodated to the generation of fire and water, air and earth; and the Divinity separating each of these apart from their genera, and mingling them commensurate with each other, composing by this means an all-various mixture of feeds for the mortal race, produced from these the nature of the marrow. But afterwards disseminating in the marrow, he bound in it the genera of souls. Besides, in this first distribution, he immediately separated as many figures and of such kinds as it was requisite the marrow should possess. And he fashioned indeed that part of the marrow in which as in a cultivated field the divine seed was to be sown, every way globular, and called it *εγκεφαλον*, or the brain; because in every animal, when it has acquired the perfection of its form, the receptacle of this substance is denominated the head. But he distinguished with round and at the same time oblong figures, that receptacle of the body which was destined to contain the remaining and mortal part of the soul; and was willing that the whole should receive the appellation of marrow. And besides this, hurling from these as anchors the bonds of all the

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the soul, he fabricated the whole of our body about the substance of the marrow, and invested it on all sides with a covering of bones.

But he thus composed the nature of the bones. In the first place, bruising together pure and smooth earth, he mingled and moistened it with marrow; after this he placed it in fire, then merged it in water, then again seated it in fire, and after this dipped it in water. And thus, by often transferring it into each, he rendered it incapable of being liquefied by both. Employing therefore this nature of bone, he fashioned like one working with a wheel a bony sphere, and placed it round the brain; leaving a narrow passage in the sphere itself. And besides this, forming certain vertebræ from bone about the marrow of the neck and back, he extended them like hinges, commencing from the head and proceeding through the whole cavity of the body. And thus he preserved all the seed, by fortifying it round about with a stony vestment. He likewise added joints, for the purpose of motion and inflection, employing the nature of that which is distinguished by *difference* in their fabrication, as this is endued with a certain middle capacity. But, as he thought that the habit of the bony nature would become more dry and inflexible than it ought to be, and that, when it became heated and again cooled, it would in consequence of ulceration swiftly corrupt the seed which it contained, on this account he fashioned the genus of nerves and flesh; that the nerves, by binding all the other members, and becoming stretched and remitted about those hinges the vertebræ, might render the body apt to become inflected and extended as occasion required: but that the flesh might serve as a covering from the heat and a protection from the cold; and, besides this, might defend it from falls, in the same manner as external supports, gently and easily yielding to the motions of the body. He likewise placed a hot moisture in the nature of the flesh, that, becoming in summer externally dewy and moist, it might afford a kindred refrigeration to the whole body; and that again in winter, through its own proper fire, it might moderately repel the externally introduced and surrounding cold. When, therefore, the plastic artificer of our bodies had perceived all this through a dianoëtic energy, having mingled and harmonized together water, fire, and earth, and added to the mixture a sharp and salt ferment, he gradually composed soft and succulent flesh.

But he mingled the nature of the nerves from bone and unfermented flesh,

composing one middle substance from the power of both, and tingeing it with a yellow colour. And on this account it comes to pass that the power of the nerves is more intense and viscous than that of the flesh, but more soft and moist than that of the bones. Hence, the Divinity bound the bones and marrow to each other with the nerves, and afterwards invested them all supernally with the flesh, as with a dark concealing shade. Such of the bones, therefore, as were the most animated he covered with the least flesh; but such as were the least animated he invested with flesh the most abundant and dense. And, besides this, he added but a small quantity of flesh to the joints of the bones, except where reason evinces the necessity of the contrary: and this lest they should be a hindrance to the inflections, and retard the motions of the body; and again, lest in consequence of their being many and dense, and vehemently compressed in one another, they should cause through their solidity a privation of sense, a difficulty of recollection, and a remission of the dianoëtic energy. On this account he invested with abundance of flesh the bones of the groin, legs, loins, the upper part of the arms, and that part which extends from the elbow to the wrist, and such other parts of our bodies as are without articulation, together with such inward bones as through the paucity of soul in the marrow are destitute of a prudential energy. But he covered with a less quantity of flesh such bones as are endowed with prudence: unless, perhaps, the fleshy substance of the tongue, which was produced for the sake of sensation, is to be excepted. In other parts, the case is such as we have described. For a nature which is generated and nourished from necessity can by no means at one and the same time receive a dense bone and abundant flesh, united with acuteness of sensation. But this would be most eminently the case with the composition of the head, if all these were willing to coalesce in amicable conjunction: and the human race, possessing a fleshy, nervous, and robust head, would enjoy a life twice as long, or still more abundantly extended, healthy and unmolested, than that which we at present possess.

Again, in consequence of those artificers of our generation considering whether they should fabricate our race possessing a life more lasting indeed but of a worse condition, or of a shorter extent but of a more excellent condition, it appeared to them that a shorter but more excellent life was by all means to be preferred to one more lasting but of a subordinate condition.

Hence

Hence they covered the head with a thin bone, but did not invest it with flesh and nerves, because it was destitute of inflections. On all these accounts, therefore, the head was added to the body as the most sensitive and prudent, but at the same time by far the most imbecil part of all the man. But through these causes, and in this manner, the Divinity placing the nerves about the extreme part of the head, conglutinated them in a circle about the neck, (after a certain similitude), and bound with them those lofty cheek-bones situated under the countenance; but he diffeminated the rest about all the members, connecting joint with joint. Besides, those adorners of our race ornamented us with the power of the mouth, teeth, tongue, and lips, and this for the sake of things which are at the same time both necessary and the best; producing ingression for the sake of necessaries, but egression for the sake of such as are best. Every thing, indeed, which being introduced affords nutriment to the body, is necessary; but the stream of words flowing forth externally, and becoming subservient to prudence, is the most beautiful and best of all effluxions. Besides, it was not possible that the head could remain without any other covering than that of a naked bone, through the extremities of heat and cold in the different seasons; nor, again, could it become the instrument of knowledge when invested with darknefs, dulled, and without sensation, through the perturbation of flesh. Hence, a part of a fleshy nature, not entirely dried, and surpassing the residue, was separated from the rest; and which is now denominated a membrane. This membrane passing into union with itself, and blossoming about the moisture of the brain, circularly invests the head. But the moisture flowing under the futures of the head irrigates this membrane, and, causing it to close together at the crown, connects it, as it were, in a knot. But an all-various species of futures is generated through the power of the circulations and the nutriment; the variety becoming greater when these oppose each other with greater violence, but less when they are in a state of less opposition. All this membrane the divine artificer of our bodies circularly pierced with fire. And hence, becoming as it were wounded, and the moisture externally flowing through it, whatever is moist, hot, and pure, passes away; but whatever is mingled from the same natures as the membrane itself, this, in consequence of receiving an external production, becomes extended into length, and possesses a tenuity equal to the punctuation of the membrane. But this substance,

substance, from the slowness of its motion, being continually thrust back by the externally surrounding spirit, again revolves itself under the membrane, and there fixes the roots of its progression. Hence, from these passions the race of hairs springs up in the membrane of the head, being naturally allied to, and becoming, as it were, the reins of this membrane, at the same time that they are more hard and dense through the compression of cold. For every hair, when it proceeds beyond the membrane, becomes hardened through cold. After this manner, then, the artificer planted our head with hairs, employing for this purpose the causes which we have mentioned.

But at the same time he understood by a dianoëtic energy, that instead of flesh a light covering was necessary for the security of the brain; which might sufficiently shade and protect it like a garment from the extremities of heat and cold, but by no means hinder the acuteness of sensation. But that comprehension of nerve, skin, and bone about the fingers, being a mixture of three substances, and becoming of a drier nature, produced one common hard membrane from the whole. These indeed were the ministrant causes of its fabrication; but the most principal cause consists in that cogitation which produced this membrane for the sake of future advantage. For those artificers of our nature well knew that at some time or other women and other animals would be generated from men; and that nails would be of the greatest advantage in many respects to the bestial tribes. Hence they impressed in men the generation of nails, at the very period of their production. But from this reason, and through these causes, they planted the skin, hairs, and nails in the members situated at the extremities of the body. However, as all the parts and members of a mortal animal were generated in alliance with each other, and necessarily possessed their life in the union of fire and spirit, lest the animal becoming resolved and exhausted by these should swiftly decay, the Gods devised the following remedy:—For mingling a nature allied to the human with other forms and senses, they planted, as it were, another animal; such as those mild trees, plants, and seeds, which, being now brought to perfection through the exercise of agriculture, are friendly to our nature; though prior to this they were of a rustic kind, being more ancient than such as are mild. For whatever participates of life we may justly and with the greatest rectitude denominate an animal. But this which we are now speaking of participates the third species of soul, which

we place between the præcordia and the navel : and in which there is neither any thing of opinion, reason, or intellect ; but to which a pleasant and painful sense, together with desires, belongs. For it continually suffers all things. But when it is converted in itself, about itself, and, rejecting external, employs its own proper motion, it is not allotted by its generation a nature capable of considering its own concerns by any thing like a reasoning energy. On this account it lives, and is not different from an animal ; but, becoming stably rooted, abides in a fixed position, through its being deprived of a motion originating from itself.

But when those superior artificers of our composition had implanted all these genera for the purpose of supplying nutriment to our nature, they deduced various channels in our body as in a garden, that it might be irrigated as it were by the accession of flowing moisture. And, in the first place, they cut two occult channels under the concretion of the skin and flesh, viz. two veins in the back, according to the double figure of the body on the right hand and the left. These they placed with the spine of the back, so as to receive the prolific marrow in the middle, that it might thus flourish in the most eminent degree ; and, by copiously flowing from hence to other parts, might afford an equable irrigation. But after this, cutting the veins about the head, and weaving them with each other in an opposite direction, they separated them ; inclining some from the right hand to the left hand parts of the body, and some from the left to the right, that the head, together with the skin, might be bound to the body, as it is not circularly divided with nerves about its summit ; and besides this, that the passion of the senses might from each of these parts be deduced on all sides through the whole of the body. In this manner, then, they deduced an aqueduct from hence ; the truth of which we shall easily perceive by assenting to the following position. That all such things as are composed from lesser parts are able to contain such as are greater ; but such as consist from greater cannot invest those composed from lesser parts. But fire, among all the genera of things, is constituted from the smallest parts. Hence, it penetrates through water, earth, and air, and the composites from these ; and this in such a manner, that nothing can restrain its pervading power. The same must be understood of that ventricle our belly ; that it is able to retain the intromitted meat and drink, but cannot stay spirit and fire, because these consist of smaller parts than those from

which the belly is composed. These, therefore, the Divinity employed for the purpose of producing an irrigation from the belly into the veins; weaving from fire and air a certain flexible substance like a bow-net, and which possesses a twofold gibbosity at the entrance. One of these he again wove together, divided into two parts; and circularly extended these parts from the curvatures like ropes through the whole body, as far as to the extremities of the net. All the interior parts therefore of the net-work he composed from fire; but the gibbosities and the receptacle itself from air. And lastly, receiving these, he disposed them in the animal new formed as follows:—In the first place, one of the gibbous parts he assigned to the mouth; but, as the gibbosity of this part is twofold, he caused one part to pass through the arteries into the lungs, but the other along with the arteries into the belly. But having divided the other gibbous part according to each of its parts, he caused it to pass in common to the channels of the nose, so that, when the one part does not reach the mouth, all its streams may be filled from this. But he placed the other cavity of this gibbous substance about the hollow parts of the body; and caused the whole of this at one time to flow together gently into the gibbous parts, as they were of an aerial texture, and at another time to flow back again through the convex receptacles. But he so disposed the net, as being composed from a thin body, that it might inwardly penetrate and again emerge through this substance. Besides this, he ordered that the interior rays of fire should follow in continued succession, the air at the same time passing into each of the parts; and that this should never cease to take place as long as the mortal animal continued to subsist. But, in assigning an appellation to a motion of this kind, we denominate it expiration and respiration. But all this operation and the whole of this passion in our nature take place in the body by a certain irrigation and refrigeration conducive to our nutriment and life. For, when the breath passes inwardly and outwardly, an interior fire attends it in its course; and being diffused through the belly, when it meets with solid and liquid aliments, it reduces them to a state of fluidity; and, distributing them into the smallest parts, educes them as from a fountain through the avenues of its progression: pouring these small particles into the channels of the veins, and deducing rivers through the body as through a valley of veins.

But let us again consider the passion of respiration, and investigate through  
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what causes it was generated, such as we perceive it at present. We should consider it, therefore, as follows:—As there is no such thing as a vacuum into which any thing in motion can enter, and as breath passes from us externally, it is evident to every one that it cannot proceed into a void space, but must thrust that which is nearest to it from its proper seat; that again the repulsed nature must always expel its neighbour; and that from a necessity of this kind every thing which is impelled into that seat from which the emitted breath is excluded, must, when it has entered into and filled up this space, attend on the breath in its progression. And all this must take place like the revolution of a wheel, through the impossibility of a vacuum. Hence, when the breast and the lungs externally dismiss the breath, they are again replenished through the air which surrounds the body entering into and riding round the avenues of the flesh. But the air being again externally dismissed, and flowing round the body, impels the respiration inward, through the passages of the mouth and nostrils.

But we should establish the following as the cause from which the origin of these was derived. Every animal belonging to the universe possesses a heat in the veins and the blood, like a certain fountain of fire; and this heat we compared to a bow-net, extended through the middle of the body, and wholly woven from fire; all such things as are external being composed from air. But it must be confessed that heat naturally proceeds externally into a region to which it is allied. But as there are two progressions, one according to the body externally, but the other again according to the mouth and nostrils, hence, when the breath is impelled inward, it again thrusts back that by which it was impelled. And that which is drawn back, meeting with fire, becomes heated; while that which is exhaled becomes refrigerated. In consequence, therefore, of the heat being changed, and such things as subsist according to the other transition becoming more hot, and that again which is more fervid verging to its own nature,—hence, one thing strikes against and repels another in its course; and as they always suffer and mutually influence each other in the same manner, leaping this way and that in a circular progression, they give birth to the expiration and respiration of the breath. But in this manner also we should investigate the causes of those passions which arise from medical cupping-glasses, from drinking, from things

things violently hurled, whether upwards or on the ground; together with such sounds as appear swift and flow, sharp and flat, and which are at one time borne along unharmoniously, through the dissimilitude of the motion which they cause within us, and at another time attended with harmony, through the similitude of motion which they produce. For, the motions of such sounds as are prior and swifter ceasing, and proceeding to a nature similar to their own, are comprehended by such as are slower, which now succeed to the swifter, and set them again in motion. But during their comprehension of these they do not disturb them by introducing another motion, but lead on the beginning of the slower lation in conformity to that of the swifter. And these, adapting to themselves a similitude of the ceasing motion, mingle together one passion from the union of sharp and flat. From whence they afford pleasure to the unwise, but joy to the wise, through the imitation of divine harmony subsisting in mortal motions. And, indeed, with respect to all effluxions of water, the falling of thunder, and the wonderful circumstances observed in the attraction of amber, and of the Herculean stone;—in all these, nothing in reality of attraction takes place: but, as a vacuum cannot any where be found, and these particulars mutually impel each other,—hence, from the individuals when separated and mingled together tending to their proper seats, and from these passions being interwoven with each other, such admirable effects present themselves to the view of the accurate investigator. And indeed respiration (from whence our discourse originated) is generated from these causes, and after this manner, as we asserted above. For fire, dividing the aliment and becoming elevated internally, attending at the same time the breath in its ascent, fills the veins from the belly by this joint elevation; and this in consequence of drawing upwards from thence the dissected parts: so that by this means, through the whole body of every animal, the streams of nutriment are abundantly diffused. But the parts which are recently dissected and separated from their kindred natures, some of which are fruits and others grafts, and which were produced by Divinity for the nourishment of our bodies, possess all-various colours through their mixture with each other: but for the most part a red colour predominates in them, whose nature is fabricated from a section of fire, and an absterfion in a moist substance. And hence, the colour of that which flows about the

body is such as appears to the sight, and which we denominate blood; being the pasture of the flesh and of the whole body; from whence an irrigation becoming every where diffused, it copiously replenishes all the exhausted parts.

But the manner of impletion and evacuation is produced in the same way as in the universe the lation of every thing takes place, viz. from that cause through which every kindred nature tends to itself. For the natures by which we are externally invested perpetually liquefy and distribute our bodies, dismissing every species to its kindred form. But the sanguineous parts, being distributed and comprehended within us, as is the case with every animal constituted under the heavens, are compelled to imitate the local motion of the universe. Each, therefore, of the divided parts within us, being borne along to its kindred nature, replenishes again that which is void. But when the effluxions surpass the accessions, a corruption of the whole animal ensues; and when the contrary takes place, it receives an increase. The recent composition, therefore, of every animal possessing new triangles, like ships formed from timbers unimpaired by age, causes a strong enclosure of them within each other: but the whole of its delicate bulk unites in amicable conjunction, as being generated from most recent marrow, and nourished in milk. Those triangles, therefore, from which the liquid and solid aliments are composed, approaching externally, and being received into the animal, as they are more ancient and imbecil than its own proper triangles, are vanquished and cut in pieces by the new triangles: and the animal is rendered of a large size, through its being nourished from a multitude of similar parts. But when it relaxes the root of its triangles, in consequence of becoming wearied and tamed, through many contests with many particulars in a long course of time; then it is no longer able to reduce by section the received aliment into a similitude of itself, but its own parts become easily dissipated by the natures which are externally introduced. Hence the whole animal, becoming by this means vanquished, decays; and the passion itself is denominated old age. But the end of its existence then arrives, when the jointly harmonized bonds of the triangles about the marrow no longer possess a detaining power, but becoming separated through the weariness of labour, desert the bonds of the soul. The soul, however, in this case being concealed in a state according to nature, flies away with pleasure and delight. For every thing contrary to nature is painful; but that which happens naturally

rally is pleasant. Hence, the death which is produced through wounds and disease is painful and violent ; but that which is caused from old age, proceeding to an end according to nature, is of all deaths the most free from labour, and is rather accompanied with pleasure than pain.

But it must be obvious to every one from whence diseases are produced. For, since there are four genera from which the body is composed, viz. earth, fire, water, and air, the unnatural abundance and defect of these, and a translocation from their own proper to a foreign seat, in consequence of which each of these does not receive that which is accommodated to its nature, together with all such circumstances as these, produce contentions and disease. For, each of these subsisting and being transferred in a manner contrary to nature, such things as were formerly heated become cold, such as were once dry become moist, such as were light heavy, and every thing receives all possible mutations. For we assert that when the same thing approaches to, and departs from, the same, in the same manner, and according to analogy, then alone it permits that which is the same to abide healthy and safe. But that which inordinately wanders, either in acceding or departing, produces all-various mutations, diseases, and infinite corruptions. Likewise a second apprehension of diseases may be obtained by any one who is so disposed, from the second compositions of things constituted according to nature. For, since the concretion of marrow, bone, flesh, and nerve, is derived from these, as likewise the blood, though from a different mode of coalition, hence many events happen in the same manner as those we have mentioned above ; but the greatest and most severe diseases subsist as follows: When the generation of these second compositions takes place inversely, then they become subject to corruption. For the flesh and nerves are naturally generated from blood: the nerves indeed from fibres, through the alliance subsisting between these ; but the flesh from the coalition of that which when separated from the fibres passes into a state of concretion. But that substance again which arises from nerves and flesh, being glutinous and fat, increases at the same time by nutrition the flesh, which for the most part subsists about the nature of the bones ; and likewise the bone itself, with which the marrow is surrounded. And again, that which trickles through the density of the bones, being the most pure kind of the triangles, and the most smooth and unctuous, while it drops and distils from the bones, irrigates the

the marrow. And hence, when each particular subsists in this manner, a healthy condition of body is produced; but a diseased condition when the contrary is the case. For, when the flesh becoming liquefied again transmits the consumption into the veins, then the blood, together with spirit, becoming abundant and all-various in the veins, diversified with colours and density, and infected with acid and salt qualities, generates all-various bile, corruption, and phlegm. And all these, being again thus generated and corrupted, in the first place destroy the blood itself; and this, no longer affording nutriment to the body, is every where borne along through the veins, without observing a natural order in its circulations. But these indeed are unfriendly to each other, because they derive no mutual advantages from the properties with which each is endued. They likewise war upon the natural habit of the body, and its perseverance in its proper state, by introducing dissolutions and liquefactions.

A most ancient portion of flesh, therefore, when it is liquefied and rendered difficult of digestion, grows black through ancient burning; but through its being entirely macerated it becomes bitter, and adverse to all the other parts of the body which are not yet infected with corruption. And then indeed the black colour possesses sharpness instead of bitterness; that which was bitter becoming more attenuated: and the bitterness, being again tinged with blood, possesses a redder colour; but, from the black which is mingled with this, becomes of a bilious nature. But, besides this, a yellow colour is mingled with bitterness, when the new flesh liquefies through the fire subsisting about flame. And, indeed, either some physician will assign to all these the common appellation of bile, or some one who is able to consider things many and dissimilar, and to behold one genus in many particulars deserving one denomination. But such other things as are called species of bile receive an appellation peculiar to each, according to colour. But corruption (*εχωρ*), which is the defluxion or whey of the blood, is gentle and mild: but that which is the sediment of black and sharp bile is of a ferocious and rustic nature, when it is mingled through heat with a saline power. And a substance of this kind is denominated acid phlegm. But a portion of recent and delicate flesh is often liquefied together with the air, and is afterwards inflated and comprehended by moisture: and from this passion bubbles are produced, which taken separately are invisible on account of their smallness.

ness, but which, when collected into a large bulk, become conspicuous, and possess a white colour on account of the generation of froth. And we denominate all this liquefaction of delicate flesh, and which is woven together with spirit, white phlegm. But we call the sediment of recent phlegm tears and sweat; together with every thing of that kind into which the body is every day resolved. And all these, indeed, become the instruments of disease, when the blood does not naturally abound from liquid and solid aliment, but increases from contraries in such a manner as to violate the laws of nature. When, therefore, any part of the flesh is cut off, but at the same time the foundation of it remains, the calamity possesses but half its power; for it is capable of being easily recovered. But when that which binds the flesh to the bones becomes diseased, and the blood flowing from it and the nerves no longer nourishes the bones and binds the flesh, but, instead of being fat, smooth, and glutinous, becomes rough and salt through bad diet; then, in consequence of suffering all this, and being separated from the bones, it is refrigerated under the flesh and nerves. For the flesh, falling from its roots, leaves the nerves bare, and drenched in a salt humour; and hence, gliding again into the circulation of the blood, it increases the number of the diseases we have already described. And these passions, indeed, which subsist about the body, are of a grievous nature: but those which precede these are still more afflictive and troublesome. But this takes place when the bone through the density of the flesh does not admit sufficient respiration, but, being heated through filthiness, becomes rotten, receives no nutriment, but falls upon the flesh, which is on the contrary refrigerated; and the flesh again falls on the bone, so that by this means diseases more severe than the former are produced. But the extremity of all maladies then happens, when the nature of the marrow becomes diseased through some defect or excess: for then it produces the most vehement and fatal diseases; as the whole nature of the body is in this case necessarily dissipated and dissolved.

But it is requisite after this to understand that the third species of diseases receives a tripartite division. For one of the divisions is produced by spirit, the other by phlegm, and the other by bile. For when the lungs, those distributive guardians of the breath, being obstructed by defluxions, cannot afford a free passage to the breath; then, as there is no emission of the breath in one part, and more is received into another part than is requisite, the parts  
without

without refrigeration become rotten ; but that which is received in too great abundance passing through the veins, distorts them and liquefies the diaphragm situated in the middle of the body : and thus ten thousand grievous diseases arise from hence, together with an abundance of sweat. But often, when the flesh becomes separated within the body, breath is produced ; and this being incapable of departing externally, causes the same torments as the breath when entering from without. It produces, however, the greatest pains, when surrounding the nerves and neighbouring veins it inflates them, and stretches and distorts the ligaments and nerves continued from the back. And these diseases, from the stretching and inflating passion, are denominated tensions and contortions from behind ; and of which it is difficult to find a cure. For, fevers taking place dissolve these diseases in a most eminent degree. But the white phlegm possessing a difficulty of respiring externally, through the spirit of the bubbles, variegates the body indeed in a milder nature, yet sprinkles it with white spots, and generates other diseases of a similar kind. But when this white phlegm is mingled with black bile, and becomes dissipated about the circulations of the head, which are of a most divine nature, then it disturbs these circulations ; and if this happens in sleep, the perturbation is less violent ; but if to those who are awake, it cannot without difficulty be expelled. And as this is a disease of a sacred nature, it is most justly denominated a sacred disease.

A sharp and salt phlegm is the fountain of all such diseases as are produced by a defluxion of humours : and because the places into which this phlegm flows possess an omniform variety, it generates all-various diseases. But whatever parts of the body are said to be inflated are thus affected from the inflammation of bile : which, when it expires, produces externally various tumours from its fervid nature ; but, when inwardly restrained, generates many inflammatory diseases. It is, however, then greatest, when, being mingled with pure blood, it removes the fibres from their natural order, which are scattered into the blood for this purpose, that it may possess tenuity and density in a commensurate degree ; and that it may neither through heat (as it is of a moist nature) flow from the thin body, nor, when becoming more dense, and of consequence more unadapted to motion, may scarcely be able to flow back again through the veins. The fibres, therefore, are very serviceable on this occasion, which if any one should collect together in the

blood when dead, and in a state of frigidity, all the remaining blood would become diffused; and when poured forth they would be swiftly coagulated, together with the cold by which they are surrounded. But as the fibres possess this power in the blood, and the bile naturally becomes antient blood, and is again liquefied from flesh into this, such things as are hot and moist falling gradually the first of all, hence it becomes collected together through the power of the fibres. When the bile is coagulated and violently extinguished, it causes a tempest and tremour within. But when it flows more abundantly, vanquishing the fibres by its own proper heat, and becoming fervid in an inordinate degree, it then preserves the body: and if it retains its conquering power to the end, it penetrates into the marrow; and burning the bonds of the soul, as if they were the cables of a ship, dissolves her union, and dismisses her from thence entirely free. But when it flows with less abundance, and the body becoming liquefied opposes its passage, then finding itself vanquished, it either falls through the whole body, or, being compelled through the veins into the upper or lower belly, like one flying from a seditious city, it escapes from the body and introduces defluxions, dysenteries, or gripings of the intestines, and all diseases of a similar kind. When the body, therefore, is eminently diseased through excess of fire, it then labours under continued burnings and fever; but when through excess of air, under quotidian fevers · under tertian through water, because water is more sluggish than fire and air; under quartan, through excess of earth. For earth, being the most sluggish of all these, is purified in quadruple periods of time; and on this account introduces quartan fevers, which it is scarcely possible to disperse. And in this manner are the diseases of the body produced.

But the diseases of the soul, which subsist through the habit of the body, are as follow:—We must admit that the disease of the soul is folly, or a privation of intellect. But there are two kinds of folly; the one madness, the other ignorance. Whatever passion, therefore, introduces either of these must be called a disease. And we should establish excessive pleasures and pains as the greatest diseases of the soul. For, when a man is too much elevated with joy or depressed with grief, while he hastens immoderately either to retain the one or to fly from the other, he is not able either to perceive or hear any thing properly, but is agitated with fury, and is very little capable.

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of exercising the reasoning power. But he who possesses a great quantity of fluid feed about the marrow, and who, like a tree laden with a superabundance of fruit, riots in the excess,—such a one being influenced by many pains and pleasures in desires, and their attendant offspring, will be agitated with fury for the greatest part of his life through mighty pleasures and pains: and though the soul of such a one will be diseased and unwise, from the body with which it is connected, yet it will be falsely considered not as diseased, but as voluntarily bad. But in reality venereal intemperance for the most part becomes a disease of the soul, through a habit of one kind, from the tenuity of the bones, in a body fluid and moist. And, indeed, it may be nearly asserted, that all intemperance of pleasures of whatever kind, and all disgraceful conduct, is not properly blamed as the consequence of voluntary guilt. For no one is voluntarily bad: but he who is depraved becomes so through a certain ill habit of body, and an unskilful education. But these two circumstances are inimical to all, and productive of a certain ill. And again, the soul, when influenced by pain, suffers much depravity from this through the body. For, when sharp and salt phlegm, and likewise bitter and bilious humours, wandering through the body, are prevented from passing forth externally, but, revolving inwardly, mingle their exhalations with the circulation of the soul; in this case they produce all-various diseases of the soul, in a greater and less degree, and less and more numerous. They are introduced, indeed, to three seats of the soul; and according to the diversity of the place, each generates all-various species of difficulty and sorrow, of boldness and timidity, and, still further, of oblivion and indocility. But, besides this, the vicious manners of cities, and discourses both private and public, often contribute to increase this malady: nor are any disciplines taught in the early part of life, which might serve as remedies for such mighty ills. And thus all such as are vicious are so through two involuntary causes; the existence of which we should always rather ascribe to the planters than to the things planted, and to the educators rather than to the educated. We should, therefore, endeavour to the utmost of our ability, by education, studies, and disciplines, to fly from vice, and acquire its contrary, virtue. But these particulars, indeed, belong to another mode of discourse.

Again, therefore, with respect to the contrary of these, it is now proper

to explain in a becoming manner by what culture, and from what causes, we may preserve both the body and dianoëtic energies of the soul. For it is more just to discourse concerning good things than of such as are evil. But every thing good is beautiful; and that which is beautiful is not destitute of measure. An animal, therefore, which is about to be beautiful and good, must possess commensuration. But, perceiving certain small particulars of things commensurate, we syllogize concerning them; while at the same time we are ignorant of such as are greatest and the chief. For, indeed, no symmetry and immoderation is of greater consequence with respect to health and disease, virtue and vice, than that of the soul towards the body. But we consider no circumstance of these; nor do we perceive that when a more imbecil and inferior form is the vehicle of a robust and every way mighty soul, and when, on the contrary, these two pass into a state of concretion, then the whole animal cannot subsist in a beautiful manner: for it is incommensurate through the want of the greatest symmetry. But the animal whose composition is contrary to this, affords a spectacle to him who is able to behold it, of all spectacles the most beautiful and lovely. When the body, therefore, possesses legs immoderately large, or any other member surpassing its just proportion, and becomes through this incommensurate with itself, it is rendered at the same time base, in the endurance of labour suffers many molestations and many convulsions, and through an aggregation of accidents becomes the cause of innumerable maladies to itself. The same too must be understood concerning that composition of body and soul which we denominate an animal. As, for instance, that when the soul in this composite is more robust than the body, and possesses it raging and transported, then the soul, agitating the whole of it, inwardly fills it with diseases; and, when she vehemently applies herself to certain disciplines, causes it to liquefy and waste away. Lastly, when the soul employs herself in teaching and literary contests, both in public and private, through a certain ambitious strife, then inflaming the body, she dissolves its constitution; and besides this, introducing distillations of humours, she deceives the most part of those who are called physicians, and induces them to consider these effects as proceeding from contrary causes.

But again, when a mighty body and above measure frigid is conjoined with  
a small

a small and imbecil dianoëtic part, since there are naturally twofold desires in man, one of aliment through the body, but the other of prudence through the most divine part of our nature ;—in this case, the motions of that which is more powerful prevail, and increase that which is their own : but render the dianoëtic part of the soul dull, indocile, and oblivious, and thus produce ignorance, which is the greatest of all diseases. But this one thing alone is the health and safety of both—neither to move the soul without the body, nor the body without the soul ; that, being equally balanced in their mutual contentions, the health of the whole composite may be preserved. Hence, he who vehemently applies himself to the mathematics, or to any other dianoëtic exercise, should also employ the motion of the body, and be familiar with gymnastic. And again, he who is careful in forming his body aright should at the same time unite with this the motions of the soul, employing music and all philosophy ; if he is to be rendered such a one as can be justly called beautiful, and at the same time truly good. In the same manner, too, we ought to take care of the parts of the body, imitating the form of the whole. For when the body, through such things as are introduced from without, is inflamed and refrigerated, and is again rendered dry and moist by externals, and suffers every thing consequent to these affections ; then, if any one in a quiet state gives up his body to motions, he will be vanquished by them and dissolved. But if any one imitates that nature which we called the nourisher of the universe, so as never to suffer the body to be in a state of rest, but perpetually moves and agitates it throughout, he will then assist the internal and external motions according to nature ; and, in consequence of a moderate agitation, will reduce into order and adorn the wandering passions and parts of the body, according to their alliance with each other. Such a one, indeed, as we said in our former discourse about the universe, will not, by placing foe against foe, suffer war and disease to be produced in the body ; but, combining friend with friend, will thus render the body healthy and sound. But, of all motions, that is the best in any nature which takes place in itself from itself : for this is particularly allied to the dianoëtic motion of the universe. But that motion is of the worst kind which is produced by another. And that is the worst of all motions, when the body, being in a recumbent and quiet state, is moved by others according to parts. And hence,

hence, of all the purgations and concretions of the body, that is the best which subsists through gymnastic. The next to this is that which takes place through easy carriage, whether in a ship or any other convenient vehicle. But the third species of motion is only to be used when vehemently necessary, and at no other time by any one endued with intellect: and this is that medical motion which is performed by pharmaceutical purgations. For diseases, unless they are extremely dangerous, are not to be irritated by medicines. For every composition of diseases is in a certain respect similar to the nature of animals. And indeed the association of the animal nature is allotted stated periods of life; both the whole genus, and every individual, containing in itself a fatal term of living, separate from the passions which necessity produces. For the triangles, which from the very beginning possessed the power of each animal, are sufficiently able to cohere together for a certain time: but life beyond this period cannot be extended to any one. The same mode of composition likewise subsists about diseases; which if any one destroys by medicine before the fated time, he will only produce great diseases from small ones, and many from a few. On this account it is necessary to discipline all such maladies by proper diet, according as every one's leisure will permit; and to avoid irritating by medicines a most difficult disease. And thus much may suffice concerning the common animal and its corporeal part; and how these may be disciplined and governed in such a manner as to produce a life according to reason in the most eminent degree.

But that which is destined to govern, ought much more and by far the first to be furnished as much as possible with such materials as may render it capable, of disciplinative sway, in a manner the most beautiful and the best. To discuss accurately indeed particulars of this kind would require a treatise solely confined to such a discussion: but if any one slightly considers this affair in a manner consequent to what has been above delivered, such a one by thus proceeding will not unseasonably arrive at the end of his pursuit. We have often then previously asserted that there are three species of soul within us, triply distributed; and that each has its own proper motions. And we shall now, therefore, briefly affirm, that when any one of them is in a torpid state, and rests from its own proper motions, it necessarily becomes

comes most imbecil; but that, when it is employed in convenient exercises, it becomes most vigorous and robust. We should, therefore, be careful that the several species may preserve their motions, so as to be commensurate to each other.

With respect, however, to the most principal and excellent species of the soul, we should conceive as follows: that Divinity assigned this to each of us as a *dæmon*; and that it resides in the very summit of the body, elevating us from earth to an alliance with the heavens; as we are not terrestrial plants, but blossoms of heaven. And this indeed is most truly asserted. For, from whence the first generation of the soul arose, from thence a divine nature being suspended from our head and root, directs and governs the whole of our corporeal frame. In him, therefore, who vehemently labours to satisfy the cravings of desire and ambition, all the conceptions of his soul must be necessarily mortal; and himself as much as possible must become entirely mortal, since he leaves nothing unaccomplished which tends to increase his perishable part. But it is necessary that he who is sedulously employed in the acquisition of knowledge, who is anxious to acquire the wisdom of truth, and who employs his most vigorous exertions in this one pursuit;—it is perfectly necessary that such a one, if he touches on the truth, should be endued with wisdom about immortal and divine concerns; and that he should partake of immortality, as far as human nature permits, without leaving any part of it behind. And besides, as such a one always cultivates that which is divine, and has a *dæmon* most excellently adorned residing in his essence, he must be happy in the most eminent degree. The culture of all the parts is indeed entirely one, and consists in assigning proper nutriment and motion to each. But the motions which are allied to the divine part of our nature are the *dianoëtic* energies and circulations of the universe. These, therefore, each of us ought to pursue; restoring in such a manner those revolutions in our head (which have been corrupted by our wanderings about generation), through diligently considering the harmonies and circulations of the universe, that the intellective power may become assimilated to the object of intelligence, according to its antient nature. For, when thus assimilated, we shall obtain the end of the best life proposed by the Gods to men, both at present and in all the future circulations of time. And now

that disputation which we announced at the beginning concerning the universe, as far as to the generation of man, has almost received its consummation. For we shall briefly run over the generation of other animals, and this no further than necessity requires: for thus any one may appear to himself to preserve a convenient measure in such a disputation. Let us, therefore, speak concerning these as follows:

Those who on becoming men are timid, and pass through life unjustly, will according to assimilative reasoning be changed into women in their second generation. And at the same time through this cause the Gods devised the love of copulation; composing an animal or animated substance, and placing one in us, but another in the female nature. But they produced each in the following manner. That proceſſion of liquid aliment which passes through the lungs under the reins into the bladder, and which being compressed by the breath is emitted externally,—this the Gods receiving, they deduced it after the manner of a pipe into the concrete marrow, through the neck and spine of the back: and this is what we called seed in the former part of our discourse. But this, in consequence of being animated and receiving respiration, produces in the part where it requires a vital desire of effluxion; and thus perfects in us the love of begetting. On this account, that nature which subsists about the privy parts of men, becoming refractory and imperious, and as it were an animal unobedient to reason, endeavours through raging desire to possess absolute sway. In like manner the privities and matrix of women, forming an animal desirous of procreating children, when it remains without fruit beyond the flower of its age, or for a still more extended period, suffers the restraint with difficulty and indignation; and wandering every way through the body, obstructs the passage of the breath, does not permit respiration to take place, introduces other extreme difficulties, and causes all-various diseases; till the desire and love of the parts educe seed like fruit from a tree: but, when educed, they scatter it into the matrix as into a field. Hence women conceive animals invisible at first through their smallness, rude and unformed; when they become large, through dispersion of the seed, nourish them within; and, lastly, leading them into light perfect the generation of animals. In this manner, therefore, is the generation of women and every thing female performed. But the tribe of birds succeeds

succeeds in the next place, fashioned from men, and receiving wings instead of hairs. These are produced from such men as are indeed innocent, but inconstant and light; who are curious about things situated on high; but are so infatuated as to think, from the testimony of the sight, that demonstrations about things of this kind are the most firm and incontrovertible of all. But the pedestrian and savage tribe of animals was generated from men<sup>1</sup>, who being entirely destitute of philosophy, never elevated their eyes to any object in the heavens; and this because they never employed the circulations in the head, but followed the impulse of those parts of the soul which rule in the belly and breast. Hence from studies of this kind drawing the anterior members and head to the ground, they fix them through proximity of nature in the earth. Besides this, they possess long and all-various heads; as the circulations of each are through idleness compressed and broken: and by this means their race becomes quadruped and multiped; the Divinity assigning many feet to such as are more unwise, that they may be more strongly drawn towards the earth. But the most unwise of these, and every way extending all their body on the earth, as if there was no longer any occasion of feet, the Gods generated without feet, and destined them to creep on the earth. The fourth genus is the aquatic, which was produced from such men as were stupid and ignorant in the most remarkable degree; and whom those transformers of our nature did not think deserving of a pure respiration, on account of their possessing a soul in an unpurified state, through extreme transgression. And hence they impelled them into the turbid and profound respiration of water, instead of the attenuated and pure respiration of air: from whence the genus of fish and oysters, and the multitude of all aquatic animals arose; and who are allotted habitations in the last regions of the universe, as the punishment of extreme ignorance. And thus after this manner, both formerly and now, animals migrate into each other; while they are changed by the loss and acquisition of intellect and folly. Our discourse, therefore, concerning the universe has now obtained its conclusion.

<sup>1</sup> Plato here generating mortal animals through the human soul, after its sojourn in the heavens, leads it into the pedestrian genus, that he may completely produce man; and after this has acted erroneously, he again leads it into the winged, and into the pedestrian and savage genus, and afterwards into the aquatic.

For this world, comprehending and receiving its completion from mortal and immortal animals, is thus rendered a visible animal containing visible natures, the image of an intelligible God, sensible, the greatest and best, the most beautiful and perfect ; being no other than this one and only-begotten heaven.

THE END OF THE TIMÆUS.