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*Aristotle*

ON THE SOUL  
论灵魂

(古希腊) 亚里士多德

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(古希腊) 亚里士多德 著  
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# 总序

外研社自创立之日起就一贯秉承“记载人类文明，沟通世界文化”的宗旨。上世纪90年代以来，我们陆续出版了“九十年代英语系列丛书”、“大师经典文库”、“英美文学文库”等系列经典图书，在最大限度满足国内英语学习者阅读需求的同时，也为中华民族引进和吸收海外优秀文化发挥了重要的桥梁纽带作用。

在多年出版实践中我们发现，对原版图书简单地以外语形式呈现，会使一些初级和中级外语学习者望而却步；而纯粹的译著，在翻译过程中又容易失掉原著中的某些精妙之笔，甚至丢失信息，因为每种语言都蕴含着其他语言无法精确对应的情致、智慧和对真善美的洞见。文化交流本身是一个双向互动的过程，因此在大量引入外文作品的同时，我们也不能忽略本民族文化在世界范围内的推广和传播，即把中国文化传播给世界。

基于上述考虑，我们应时推出“外研社双语读库”，立足经典，涵盖中外名家名作，涉及社会科学各个领域，以书系划分，采用双语编排，对文化背景附有注释。旨在积累世界各民族精粹文化的同时，向世界传递中国文化，为国内广大英语学习者提供题材广泛、质量过硬的双语经典读物，也为社科各领域学者了解西方学术经典提供优质的研究素材。

2010年1月，双语读库“文·书系”出版问世，该书系收录了20部西方经典著作，多出自19和20世纪著名作家、学者、思想家和哲学家笔下，作品的题材丰富，包括传记、小说、

游记、杂文、回忆录等。该书系自问世以来，受到了广大英语爱好者的欢迎和好评。

2010年3月，外研社和中国外语教育研究中心联合设立“外汉翻译教学研究基金”项目，选取百余部国外经典学术著作，面向全国高校公开招募翻译项目组，参与投标者遍及全国近百所高校，在国内具有较大影响力。中标的译者多为全国重点高校的翻译专家、学者及中青年翻译人才，经过层层选拔脱颖而出；每个中标项目组还聘请相关领域的专家顾问，为其提供专业领域方面的支持和帮助，以确保译文的准确性和权威性。

此次推出的双语读库“学·书系”拟收录该“基金”项目中的优秀译作分批次进行出版，并细分为哲学辑、经济学辑、历史学辑、地理学辑、语言学辑、社会学辑、教育学辑等。“学·书系”依旧采用英汉对照编排，可作为社科各领域的学术研究读物以及中、高端英汉双语读物使用。

“学·书系”所选原作虽为经典名著，却也无法避免时间和空间上的局限性，希望读者朋友们能“取其精华，去其糟粕”。各篇译作均为译者倾尽全力、呕心沥血之作，不足之处，还请各位读者批评、指正。



# 译者序

《论灵魂》系中国外语教育研究中心与外语教学与研究出版社联合设立的“外汉翻译教学研究基金”项目第二批招标项目之一。我们有幸中标，得以再一次走进哲学，走进亚里士多德的思想世界，再一次享受与伟大的哲学家进行长时间的深度交流与沟通，再一次感受其为了破解灵魂奥秘而作的思维努力，再一次领略其缜密的论证、深邃的洞见，再一次沐浴在其哲学思想的光辉之中……

在古希腊这个哲学王国，一代又一代的思想家、哲学家汇聚成了一条光辉灿烂的星河。在这条星河中，有苏格拉底，有柏拉图，也有被誉为“古代最博学的学者”和“百科全书式的思想家”亚里士多德。亚里士多德是古希腊著名的哲学家、逻辑学家、自然科学家，是古代西方哲学的集大成者。他总结了自泰勒斯以来的古希腊哲学的发展成果，把自然哲学和本体论有机地结合在一起，使其哲学体系达到了“古代哲学的顶峰”；他概括并系统化了到他那时为止的一切知识领域，并对许多经验学科作出了杰出的贡献。他是逻辑学、心理学、生物学、伦理学、政治学、修辞学等多个学科领域的奠基者或重要创始人。

《论灵魂》是亚里士多德的核心哲学著作之一。该书将灵魂视为有生命事物运动的原因，在此意义上，亚里士多德的灵魂研究属于自然哲学；其次，它视灵魂为一种特殊的形式，采用第一哲学中的基本原则分析所有生物，这又使亚里士多德的灵魂说也属于本体论；另外，它还包含大量的认识论内容。可见，亚里士多德将自然哲学、形而上学和认识论都熔铸到了他的灵魂学说之中。

《论灵魂》更是严格意义上的研究心理生理过程的学术著作。作为欧洲历史上“第一本关于心理学的专门著作”，《论灵魂》对感觉、记忆、情感、欲望、需要、营养、运动、意志、心智以及心理分类、身心关系等一系列心理现象和问题都作出了全面而系统的论述。

亚里士多德的《论灵魂》与其《形而上学》、《范畴论》、《物理学》、《动物志》、《自然诸短篇》和《尼各马可伦理学》等著作共同反映了亚里士多德的哲学思想及其逻辑推理的论证方式，对后世具有重要而深远的影响。《论灵魂》中的认识论，曾对文艺复兴时期的认识论的发展产生重要影响。《论灵魂》系统地回顾了先哲们关于灵魂的不同观点，具有相当的哲学史料价值。作为欧洲历史上系统论述生理心理问题的首出之作，《论灵魂》提出了心理功能的生理依据，对当今心理学的研究与发展仍有相当的参考价值。此外，该书也为心理学史研究提供了重要资料。

《论灵魂》还具有重要的应用价值。首先，《论灵魂》所体现的亚里士多德的生理观、思维观等对教育，特别是对根据儿童不同的生理阶段制定相应的教学任务具有借鉴意义。其次，该书对实现人的全面发展具有参考价值。另外，本书对审美欣赏和艺术创作也有较高的价值。以上所述正是我们重译此书的原因和目的之所在。

亚里士多德的《论灵魂》不仅有不同语言的译本，而且同一语言的译本也有多种。本译本所依据的是英国学者约翰·亚历山大·史密斯（John Alexander Smith）1931年的英文译本On the Soul。

《论灵魂》一书共三卷，共计30章，其中第一卷5章，第二卷12章，第三卷13章。在第一卷中，亚里士多德开宗明义地指出了灵魂研究的重要性与困难性；逐一详细分析了先哲们关于灵魂的各种观点。亚里士多德认为，灵魂并非被其自身推动而运动，灵魂不是毕达哥拉斯学派所谓的自身运动的和谐的数，灵魂也不是德谟克利特所说的精细物体，灵魂更不是柏拉图所言的独立于躯体之外的永恒的东西；他强调灵魂无法脱离躯体而独立存在。本卷有关灵魂诸说的概述具有一定的哲学史料价值。

第二卷首先对灵魂进行了重新界定，提出了灵魂是“实体”，是“形式”，而非“质料”或“载体”；灵魂是“是其所是”的本质以及灵魂是“潜在具有生命的自然物体的完全的实现”等。显而易见，亚里士多德是在用其第一哲学的基本原则及有关概念来定义灵魂的，所以灵魂被其界定为“实体”、“形式”、“本质”。其次，第二卷还根据有生命物体的不同的生命表现对灵魂作了分类，并且讨论了它们各自不同的功能及其关系。亚里士多德将灵魂划分为植物灵魂或营养灵魂、动物灵魂或感觉灵魂、人类灵魂或理智灵魂。在这三类灵魂中，植物灵魂或营养灵魂是最低一级的灵魂，其作用是摄取食物和生殖。植物只有营养能力，属最低一级的灵魂形式。较植物灵魂高一层次的是动物灵魂或曰感觉灵魂。除了营养能力之外，所有动物均至少拥有一种感觉——触觉。感觉灵魂主司三种功能：感觉、欲望、位置移动。灵魂的最高形式是人类灵魂或理智灵魂。除了营养灵魂和感觉灵魂的所有能力之外，这种灵魂还有推理和思维的能力，这种能力为人类所独有。继而，第二卷还讨论了感觉问题。在古希腊哲学史上，亚里士多德最早明确地提出了五种感觉。亚里士多德认为，感觉的对象是个别的、外在的，感觉的产生一定要通过某种中介物，他断言每种感官的结构是同它们的对象相适应的；他确信感觉依赖于感官；他在总结五种感觉的共同点时认为，感觉接受的是事物的形式而不是质料，这通常被视为“古希腊唯物主义感觉论的最高成就”。

第三卷详细分析了灵魂的其他能力，介绍了可感知对象同感觉的关系以及想象、感觉、心智、思维和运动与欲望等方面的内容。在这一部分中，亚里士多德主要探讨了理性灵魂及理性认识等问题，论述了理性与感觉的区别以及思维的作用和理性认识的任务等。亚里士多德在这一部分中所阐述的观点对后来的认识论的发展具有一定的积极作用。

在《论灵魂》这一项目的投标立项和项目实施过程中，课题组得到了中国外语教育研究中心和外语教学与研究出版社的有关专家、领导，以及老师的支持和帮助；加利福尼亚大学圣芭芭拉分校哲学系从事古希腊哲学研究的沃拉·楚纳（Voula Tsouna）教授、亚历克斯·莱博维茨（Alex Leibowitz）博士、贾斯廷·克拉克（Justin Clark）博士、山东大学哲学系从事古希腊哲学研究的孔祥润博士以及山东大学的袁聿震、辽宁大学的赵琦、曲家丹、卢益山、潘艳艳、王怀仁、黄智江等分别在哲学、数学、物理学、生物学、心理学以及计算机录入等方面给予了我们极大的帮助。在《论灵魂》一书即将付梓之际，课题组全体同仁谨向他们表示诚挚的谢意！

山东大学文艺美学研究中心主任、博士生导师曾繁仁教授、四川外国语学院中外文化比较研究中心章辉教授皆欣然接受邀请，屈尊加盟《论灵魂》课题组并承担全部的审校工作；山东大学文艺美学研究中心的王月博士很好地完成了她分担的翻译、校对以及附录的编写等工作。在此，我谨以项目主持人的名义，向他们表示特别的谢意！



“译事三难：信、达、雅。”严复先生此语明白无误地表述了其对翻译作品的评价标准，其中一个“难”也清楚地道出了“译事”的艰难。要使译文达到“信、达、雅”这一标准绝非易事；何况亚里士多德《论灵魂》这一著作的翻译难度系数已达4级，可算作是最难翻译的作品之一；加之译者水平有限，我们的《论灵魂》中译本也不免会有缺点和错误，所以恳请专家学者、业界同仁和广大读者不吝赐教，斧正为盼。

译者  
2011年夏

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*Aristotle*

ON THE SOUL



# BOOK I

## CHAPTER 1

Holding as we do that, while knowledge of any kind is a thing to be honoured and prized, one kind of it may, either by reason of its greater exactness or of a higher dignity and greater wonderfulness in its objects, be more honourable and precious than another, on both accounts we should naturally be led to place in the front rank the study of the soul. The knowledge of the soul admittedly contributes greatly to the advance of truth in general, and, above all, to our understanding of Nature, for the soul is in some sense the principle of animal life. Our aim is to grasp and understand, first its essential nature, and secondly its properties; of these some are taught to be affections proper to the soul itself, while others are considered to attach to the animal owing to the presence within it of soul.

To attain any assured knowledge about the soul is one of the most difficult things in the world. As the form of question which here presents itself, viz. the question 'What is it?', recurs in other fields, it might be supposed that there was some single method of inquiry applicable to all objects whose essential nature (as we are endeavouring to ascertain there is for derived properties the single method of demonstration); in that case what we should have to seek for would be this unique method. But if there is no such single and general method for solving the question of essence, our task becomes still more difficult; in the case of each different subject we shall have to determine the appropriate process of investigation. If to this there be a clear answer, e.g. that the process is demonstration or division, or some known method, difficulties and hesitations still beset us—with what facts shall we begin the inquiry? For the facts which form the starting-points in different subjects must be different, as e.g. in the case of numbers and surfaces.

First, no doubt, it is necessary to determine in which of the summa genera soul lies, what it is; is it 'a this-somewhat,' a substance, or is it a quale or a quantum, or some other of the remaining kinds of predicates which we have distinguished? Further, does soul belong to the class of potential existents, or is it not rather an actuality? Our answer to this question is of the greatest importance.

We must consider also whether soul is divisible or is without parts, and whether it is everywhere homogeneous or not; and if not homogeneous, whether its various forms are different specifically or generically: up to the present time those who have discussed and investigated soul seem to have confined themselves to the human soul. We must be careful not to ignore the question whether soul can be defined in a single unambiguous formula, as is the case with animal, or whether we must not give a separate formula for each of it, as we do for horse, dog, man, god (in the latter case the 'universal' animal—and so too every other 'common predicate'—being treated either as nothing at all or as a later product). Further, if what exists is not a plurality of souls, but a plurality of parts of one soul, which ought we to investigate first, the whole soul or its parts? (It is also a difficult problem to decide which of these parts are in nature distinct from one another.) Again, which ought we to investigate first, these parts or their functions, mind or thinking, the faculty or the act of sensation, and so on? If the investigation of the functions precedes that of the parts, the further question suggests itself: ought we not before either to consider the correlative objects, e.g. of sense or thought? It seems not only useful for the discovery of the causes of the derived properties of substances to be acquainted with the essential nature of those substances (as in mathematics it is useful for the understanding of the property of the equality of the interior angles of a triangle to two right angles to know the essential nature of the straight and the curved or of the line and the plane) but also conversely, for the knowledge of the essential nature of a substance is largely promoted by an acquaintance with its properties: for, when we are able to give an account conformable to experience of all or most of the properties of a substance, we shall be in the most favourable position to say something worth saying about the essential nature of that subject; in all demonstration a definition of the essence is required as a starting-point, so that definitions which do not enable us to discover the derived properties, or which fail to facilitate even a conjecture about them, must obviously, one and all, be dialectical and futile.

A further problem presented by the affections of soul is this: are they all affections of the complex of body and soul, or is there any one among them peculiar to the soul by itself? To determine this is indispensable but difficult. If we consider the majority of them, there seems to be no case in which the soul can act or be acted upon without involving the body; e.g. anger, courage, appetite, and sensation generally. Thinking seems the most probable exception; but if this too proves to be a form of imagination or to be impossible without imagination, it too requires a body as a condition of its existence. If there is any way of acting or being acted upon proper to soul, soul will be capable of separate existence; if there is none, its separate existence is impossible. In the latter case, it will be like what is straight, which has many properties arising from the straightness in it, e.g. that of touching a bronze sphere at a point, though straightness divorced from the other constituents of the straight thing cannot touch it in this way; it cannot be so divorced at all, since it is always found in a body. It therefore seems that all the affections of soul involve a body—passion, gentleness, fear, pity, courage, joy, loving, and hating; in all these there is a concurrent affection of the body. In support of this we may point to the fact that, while sometimes on the occasion of violent and striking occurrences there is no excitement or fear felt, on others faint and feeble stimulations produce these emotions, viz. when the body is already in a state of tension resembling its condition when we are angry. Here is a still clearer case: in the absence of any external cause of terror we find ourselves experiencing the feelings of a man in terror. From all this it is obvious that the affections of soul are enmattered formulable essences.

Consequently their definitions ought to correspond, e.g. anger should be defined as a certain mode of movement of such and such a body (or part or faculty of a body) by this or that cause and for this or that end. That is precisely why the study of the soul must fall within the science of Nature, at least so far as in its affections it manifests this double character. Hence a physicist would define an affection of soul differently from a dialectician; the latter would define e.g. anger as the appetite for returning pain for pain, or something like that, while the former would define it as a boiling of the blood or warm substance surrounding the heart. The latter assigns the material conditions, the former the form or formulable essence; for what he states is the formulable essence of the fact, though for its actual existence there must be embodiment of it in a material such as is described by the other. Thus the essence of a house is assigned in such a formula as 'a shelter against destruction by wind, rain, and heat'; the physicist would describe it as 'stones, bricks, and timbers'; but there is a third possible description which would say that it was that form in that material with that purpose or end. Which, then, among these is entitled to be regarded as the genuine physicist? The one who confines himself to the material, or the one who restricts himself to the formulable essence alone? Is it not rather the one who combines both in a single formula? If this is so, how are we to characterize the other two? Must we not say that there is no type of thinker who concerns himself with those qualities or attributes of the material which are in fact inseparable from the material, and without attempting even in thought to separate them? The physicist is he who concerns himself with all the properties active and passive of bodies or materials thus or thus defined; attributes not considered as being of this character he leaves to others, in certain cases it may be to a specialist, e.g. a carpenter or a physician, in others where they are inseparable in fact, but are separable from any particular kind of body by an effort of abstraction, to the mathematician, where they are separate both in fact and in thought from body altogether, to the First Philosopher or metaphysician. But we must return from this digression, and repeat that the affections of soul are inseparable from the material substratum of animal life, to which we have seen that such affections, e.g. passion and fear, attach, and have not the same mode of being as a line or a plane.

## CHAPTER 2

For our study of soul it is necessary, while formulating the problems of which in our further advance we are to find the solutions, to call into council the views of those of our predecessors who have declared any opinion on this subject, in order that we may profit by whatever is sound in their suggestions and avoid their errors.

The starting-point of our inquiry is an exposition of those characteristics which have chiefly been held to belong to soul in its very nature. Two characteristic marks have above all others been recognized as distinguishing that which has soul in it from that which has not—movement and sensation. It may be said that these two are what our predecessors have fixed upon as characteristic of soul.



Some say that what originates movement is both pre-eminently and primarily soul; believing that what is not itself moved cannot originate movement in another, they arrived at the view that soul belongs to the class of things in movement. This is what led Democritus<sup>1</sup> to say that soul is a sort of fire or hot substance; his 'forms' or atoms are infinite in number; those which are spherical he calls fire and soul, and compares them to the motes in the air which we see in shafts of light coming through windows; the mixture of seeds of all sorts he calls the elements of the whole of Nature (Leucippus<sup>2</sup> gives a similar account); the spherical atoms are identified with soul because atoms of that shape are most adapted to permeate everywhere, and to set all the others moving by being themselves in movement. This implies the view that soul is identical with what produces movement in animals. That is why, further, they regard respiration as the characteristic mark of life; as the environment compresses the bodies of animals, and tends to extrude those atoms which impart movement to them, because they themselves are never at rest, there must be a reinforcement of these by similar atoms coming in from without in the act of respiration; for they prevent the extrusion of those which are already within by counteracting the compressing and consolidating force of the environment; and animals continue to live only so long as they are able to maintain this resistance.

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<sup>1</sup> 德谟克利特（Democritus，460—370BC），古希腊唯物主义哲学家、原子论创始人之一，政治上属奴隶制民主派，在伦理学上认为幸福是人生的目的，真正的幸福在于心神宁静。

<sup>2</sup> 留基伯（Leucippus，500?—440?BC），古希腊哲学家，原子论奠基人之一，德谟克利特的老师；他认为，宇宙是无限的，原子在虚空中运动结合，生成宇宙中的万物；世界按其必然性产生、成长并消亡。

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The doctrine of the Pythagoreans<sup>1</sup> seems to rest upon the same ideas; some of them declared the motes in air, others what moved them, to be soul. These motes were referred to because they are seen always in movement, even in a complete calm.

The same tendency is shown by those who define soul as that which moves itself; all seem to hold the view that movement is what is closest to the nature of soul, and that while all else is moved by soul, it alone moves itself. This belief arises from their never seeing anything originating movement which is not first itself moved.

Similarly also Anaxagoras<sup>2</sup> (and whoever agrees with him in saying that mind set the whole in movement) declares the moving cause of things to be soul. His position must, however, be distinguished from that of Democritus. Democritus roundly identifies soul and mind, for he identifies what appears with what is true—that is why he commends Homer for the phrase 'Hector<sup>3</sup> lay with thought distraught'; he does not employ mind as a special faculty dealing with truth, but identifies soul and mind. What Anaxagoras says about them is more obscure; in many places he tells us that the cause of beauty and order is mind, elsewhere that it is soul; it is found, he says, in all animals, great and small, high and low, but mind (in the sense of intelligence) appears not to belong alike to all animals, and indeed not even to all human beings.

All those, then, who had special regard to the fact that what has soul in it is moved, adopted the view that soul is to be identified with what is eminently originative of movement. All, on the other hand, who looked to the fact that what has soul in it knows or perceives what is, identify soul with the principle or principles of Nature, according as they admit several such principles or one only. Thus Empedocles<sup>4</sup> declares that it is formed out of all his elements, each of them also being soul; his words are:

For 'tis by Earth we see Earth, by Water Water,  
  
By Ether Ether divine, by Fire destructive Fire,  
  
By Love Love, and Hate by cruel Hate.

In the same way Plato <sup>5</sup> in the Timaeus <sup>6</sup> fashions soul out of his elements; for like, he holds, is known by like, and things are formed out of the principles or elements, so that soul must be so too. Similarly also in his lectures 'On Philosophy' it was set forth that the Animal-itself is compounded of the Idea itself of the One together with the primary length, breadth, and depth, everything else, the objects of its perception, being similarly constituted. Again he puts his view in yet other terms: Mind is the monad, science or knowledge the dyad (because it goes undeviatingly from one point to another), opinion the number of the plane, sensation the number of the solid; the numbers are by him expressly identified with the Forms themselves or principles, and are formed out of the elements; now things are apprehended either by mind or science or opinion or sensation, and these same numbers are the Forms of things.

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<sup>1</sup> 毕达哥拉斯（Pythagoras，580?—500?BC），古希腊哲学家、数学家、毕达哥拉斯教团创始人，提倡禁欲主义，认为数为万物的本源，促进了数学和西方理性哲学的发展，著作已失传。

<sup>2</sup> 阿那克萨哥拉（Anaxagoras，500?—428?BC），古希腊唯物主义哲学家，创立宇宙论并发现日、月食的真正原因，其著作《论自然》现仅留存少许片段。

<sup>3</sup> 赫克托耳（Hector），[希腊神话]特洛伊王普里阿摩斯（priam）的长子，特洛伊战争中的英雄，后被阿喀琉斯（Achilles）杀死。

<sup>4</sup> 恩培多克勒（Empedocles，493—433BC），古希腊哲学家、诗人、医生、持物活论观点，认为万物皆由火、水、土、气4种元素所形成，动力是爱和憎，爱使元素结合，憎使元素分离。

<sup>5</sup> 柏拉图（Plato，427—347BC），古希腊哲学家，创办学园，提出理念论和灵魂不朽说，其哲学思想对西方唯心主义哲学的发展影响很大，著有30多篇对话和书信等。

<sup>6</sup> 《蒂迈欧篇》（Timaeus），柏拉图《对话集》中的一篇，大约写于公元前360，属柏拉图的晚期著作。

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Some thinkers, accepting both premises, viz. that the soul is both originative of movement and cognitive, have compounded it of both and declared the soul to be a self-moving number.

As to the nature and number of the first principles opinions differ. The difference is greatest between those who regard them as corporeal and those who regard them as incorporeal, and from both dissent those who make a blend and draw their principles from both sources. The number of principles is also in dispute; some admit one only, others assert several. There is a consequent diversity in their several accounts of soul; they assume, naturally enough, that what is in its own nature originative of movement must be among what is primordial. That has led some to regard it as fire, for fire is the subtlest of the elements and nearest to incorporeality; further, in the most primary sense, fire both is moved and originates movement in all the others.

Democritus has expressed himself more ingeniously than the rest on the grounds for ascribing each of these two characters to soul; soul and mind are, he says, one and the same thing, and this thing must be one of the primary and indivisible bodies, and its power of originating movement must be due to its fineness of grain and the shape of its atoms; he says that of all the shapes the spherical is the most mobile, and that this is the shape of the particles of fire and mind.

Anaxagoras, as we said above, seems to distinguish between soul and mind, but in practice he treats them as a single substance, except that it is mind that he specially posits as the principle of all things; at any rate what he says is that mind alone of all that is simple, unmixed, and pure. He assigns both characteristics, knowing and origination of movement, to the same principle, when he says that it was mind that set the whole in movement.

Thales<sup>1</sup>, too, to judge from what is recorded about him, seems to have held soul to be a motive force, since he said that the magnet has a soul in it because it moves the iron.

Diogenes<sup>2</sup> (and others) held the soul to be air because he believed air to be finest in grain and a first principle; therein lay the grounds of the soul's powers of knowing and originating movement. As the primordial principle from which all other things are derived, it is cognitive; as finest in grain, it has the power to originate movement.

Heraclitus<sup>3</sup> too says that the first principle—the 'warm exhalation' of which, according to him, everything else is composed—is soul; further, that this exhalation is most incorporeal and in ceaseless flux; that what is in movement requires that what knows it should be in movement; and that all that is has its being essentially in movement (herein agreeing with the majority).

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<sup>1</sup> 泰勒斯（Thales，624?—545BC），古希腊哲学家、数学家、天文学家，米利都学派创始人，“希腊七贤”之一，认为水为万物的本原，相传曾准确预测过公元前585年的一次日蚀。

<sup>2</sup> 第欧根尼（Diogenes，400?—325?BC），古希腊哲学家，强调自足自然的生活，犬儒派因其得名。

<sup>3</sup> 赫·拉克利特（Heraclitus，540?—407?BC），古希腊唯物主义哲学家，辩证法奠基人之一，认为一切都在流动变化中，“人不能两次走进同一条河流”。

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Alcmaeon<sup>1</sup> also seems to have held a similar view about soul; he says that it is immortal because it resembles 'the immortals,' and that this immortality belongs to it in virtue of its ceaseless movement; for all the 'things divine,' moon, sun, the planets, and the whole heavens, are in perpetual movement.

Of more superficial writers, some, e.g. Hippo<sup>2</sup>, have pronounced it to be water; they seem to have argued from the fact that the seed of all animals is fluid, for Hippo tries to refute those who say that the soul is blood, on the ground that the seed, which is the primordial soul, is not blood.

Another group (Critias<sup>3</sup>, for example) did hold it to be blood; they take perception to be the most characteristic attribute of soul, and hold that perceptiveness is due to the nature of blood.



Each of the elements has thus found its partisan, except earth—earth has found no supporter unless we count as such those who have declared soul to be, or to be compounded of, all the elements. All, then, it may be said, characterize the soul by three marks, Movement, Sensation, Incorporeality, and each of these is traced back to the first principles. That is why (with one exception) all those who define the soul by its power of knowing make it either an element or constructed out of the elements. The language they all use is similar; like, they say, is known by like; as the soul knows everything, they construct it out of all the principles. Hence all those who admit but one cause or element, make the soul also one (e.g. fire or air), while those who admit a multiplicity of principles make the soul also multiple. The exception is Anaxagoras; he alone says that mind is impassible and has nothing in common with anything else. But, if this is so, how or in virtue of what cause can it know? That Anaxagoras has not explained, nor can any answer be inferred from his words. All who acknowledge pairs of opposites among their principles, construct the soul also out of these contraries, while those who admit as principles only one contrary of each pair, e.g. either hot or cold, likewise make the soul some one of these. That is why, also, they allow themselves to be guided by the names; those who identify soul with the hot argue that zen (to live) is derived from zein (to boil), while those who identify it with the cold say that soul (psyche ) is so called from the process of respiration and refrigeration(katapsyxis ). Such are the traditional opinions concerning soul, together with the grounds on which they are maintained.

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[1](#) 阿尔克迈翁（ALCmaeon，510?BC—?），古希腊哲学家、医学理论家、自然科学家，属于或至少倾向于毕达哥拉斯学派，他是最早提倡解剖分析的先驱者，解剖眼球的第一人。

[2](#) 希波（Hippo），生卒年不详，一般认为大约生活在公元前5世纪，古希腊早期自然哲学家，但由于“他的思想毫无价值”，亚里士多德称其为二流思想家。

[3](#) 克里底亚（Critias，460—403BC），Callaeschrus之子，柏拉图的叔父之一，希腊历史上的13僭主之一，因悲剧、哀歌及散文作品而闻名。

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## CHAPTER 3

We must begin our examination with movement; for doubtless, not only is it false that the essence of soul is correctly described by those who say that it is what moves (or is capable of moving) itself, but it is an impossibility that movement should be even an attribute of it.

We have already pointed out that there is no necessity that what originates movement should itself be moved. There are two senses in which anything may be moved—either indirectly, owing to something other than itself, or directly, owing to itself. Things are 'indirectly moved' which are moved as being contained in something which is moved, e.g. sailors in a ship, for they are moved in a different sense from that in which the ship is moved; the ship is 'directly moved', they are 'indirectly moved', because they are in a moving vessel. This is clear if we consider their limbs; the movement proper to the legs (and so to man) is walking, and in this case the sailors are not walking. Recognizing the double sense of 'being moved', what we have to consider now is whether the soul is 'directly moved' and participates in such direct movement.



There are four species of movement—locomotion, alteration, diminution, growth; consequently if the soul is moved, it must be moved with one or several or all of these species of movement. Now if its movement is not incidental, there must be a movement natural to it, and, if so, as all the species enumerated involve place, place must be natural to it. But if the essence of soul be to move itself, its being moved cannot be incidental to it, as it is to what is white or three cubits long; they too can be moved, but only incidentally—what is moved is that of which 'white' and 'three cubits long' are the attributes, the body in which they inhere; hence they have no place: but if the soul naturally partakes in movement, it follows that it must have a place.

Further, if there be a movement natural to the soul, there must be a counter-movement unnatural to it, and conversely. The same applies to rest as well as to movement; for the terminus ad quem of a thing's natural movement is the place of its natural rest, and similarly the terminus ad quem of its enforced movement is the place of its enforced rest. But what meaning can be attached to enforced movements or rests of the soul, it is difficult even to imagine.

Further, if the natural movement of the soul be upward, the soul must be fire; if downward, it must be earth; for upward and downward movements are the definitory characteristics of these bodies. The same reasoning applies to the intermediate movements, termini, and bodies. Further, since the soul is observed to originate movement in the body, it is reasonable to suppose that it transmits to the body the movements by which it itself is moved, and so, reversing the order, we may infer from the movements of the body back to similar movements of the soul. Now the body is moved from place to place with movements of locomotion. Hence it would follow that the soul too must in accordance with the body change either its place as a whole or the relative places of its parts. This carries with it the possibility that the soul might even quit its body and re-enter it, and with this would be involved the possibility of a resurrection of animals from the dead. But, it may be contended, the soul can be moved indirectly by something else; for an animal can be pushed out of its course. Yes, but that to whose essence belongs the power of being moved by itself, cannot be moved by something else except incidentally, just as what is good by or in itself cannot owe its goodness to something external to it or to some end to which it is a means.

If the soul is moved, the most probable view is that what moves it is sensible things.

We must note also that, if the soul moves itself, it must be the mover itself that is moved, so that it follows that if movement is in every case a displacement of that which is in movement, in that respect in which it is said to be moved, the movement of the soul must be a departure from its essential nature, at least if its self-movement is essential to it, not incidental.

Some go so far as to hold that the movements which the soul imparts to the body in which it is are the same in kind as those with which it itself is moved. An example of this is Democritus, who uses language like that of the comic dramatist Philippus<sup>1</sup>, who accounts for the movements that Daedalus<sup>2</sup> imparted to his wooden Aphrodite by saying that he poured quicksilver into it; similarly Democritus says that the spherical atoms which according to him constitute soul, owing to their own ceaseless movements draw the whole body after them and so produce its movements. We must urge the question whether it is these very same atoms which produce rest also—how they could do so, it is difficult and even impossible to say. And, in general, we may object that it is not in this way that the soul appears to originate movement in animals—it is through intention or process of thinking.

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<sup>1</sup> 菲力浦 (Philippus), 生卒年不详, 古希腊喜剧作家, “最伟大的古典讽刺喜剧作家”、“喜剧之父”、诗人阿里斯托芬 (Aristophanes) 之子, 《代达罗斯》是其创作的喜剧作品。

It is in the same fashion that the Timaeus also tries to give a physical account of how the soul moves its body; the soul, it is there said, is in movement, and so owing to their mutual implication moves the body also. After compounding the soul-substance out of the elements and dividing it in accordance with the harmonic numbers, in order that it may possess a connate sensibility for 'harmony' and that the whole may move in movements well attuned, the Demiurge bent the straight line into a circle; this single circle he divided into two circles united at two common points; one of these he subdivided into seven circles. All this implies that the movements of the soul are identified with the local movements of the heavens.

Now, in the first place, it is a mistake to say that the soul is a spatial magnitude. It is evident that Plato means the soul of the whole to be like the sort of soul which is called mind —not like the sensitive or the desiderative soul, for the movements of neither of these are circular. Now mind is one and continuous in the sense in which the process of thinking is so, and thinking is identical with the thoughts which are its parts; these have a serial unity like that of number, not a unity like that of a spatial magnitude. Hence mind cannot have that kind of unity either; mind is either without parts or is continuous in some other way than that which characterizes a spatial magnitude. How, indeed, if it were a spatial magnitude, could mind possibly think? Will it think with any one indifferently of its parts? In this case, the 'part' must be understood either in the sense of a spatial magnitude or in the sense of a point (if a point can be called a part of a spatial magnitude). If we accept the latter alternative, the points being infinite in number, obviously the mind can never exhaustively traverse them; if the former, the mind must think the same thing over and over again, indeed an infinite number of times (whereas it is manifestly possible to think a thing once only). If contact of any part whatsoever of itself with the object is all that is required, why need mind move in a circle, or indeed possess magnitude at all? On the other hand, if contact with the whole circle is necessary, what meaning can be given to the contact of the parts? Further, how could what has no parts think what has parts, or what has parts think what has none? We must identify the circle referred to with mind; for it is mind whose movement is thinking, and it is the circle whose movement is revolution, so that if thinking is a movement of revolution, the circle which has this characteristic movement must be mind.

If the circular movement is eternal, there must be something which mind is always thinking—what can this be? For all practical processes of thinking have limits—they all go on for the sake of something outside the process, and all theoretical processes come to a close in the same way as the phrases in speech which express processes and results of thinking. Every such linguistic phrase is either definitory or demonstrative. Demonstration has both a starting-point and may be said to end in a conclusion or inferred result; even if the process never reaches final completion, at any rate it never returns upon itself again to its starting-point, it goes on assuming a fresh middle term or a fresh extreme, and moves straight forward, but circular movement returns to its starting-point. Definitions, too, are closed groups of terms.

Further, if the same revolution is repeated, mind must repeatedly think the same object.

Further, thinking has more resemblance to a coming to rest or arrest than to a movement; the same may be said of inferring.

It might also be urged that what is difficult and enforced is incompatible with blessedness; if the movement of the soul is not of its essence, movement of the soul must be contrary to its nature. It must also be painful for the soul to be inextricably bound up with the body; nay more, if, as is frequently said and widely accepted, it is better for mind not to be embodied, the union must be for it undesirable.

Further, the cause of the revolution of the heavens is left obscure. It is not the essence of soul which is the cause of this circular movement—that movement is only incidental to soul—nor is, a fortiori, the body its cause. Again, it is not even asserted that it is better that soul should be so moved; and yet the reason for which God caused the soul to move in a circle can only have been that movement was better for it than rest, and movement of this kind better than any other. But since this sort of consideration is more appropriate to another field of speculation, let us dismiss it for the present.

The view we have just been examining, in company with most theories about the soul, involves the following absurdity: they all join the soul to a body, or place it in a body, without adding any specification of the reason of their union, or of the bodily conditions required for it. Yet such explanation can scarcely be omitted; for some community of nature is presupposed by the fact that the one acts and the other is acted upon, the one moves and the other is moved; interaction always implies a special nature in the two interagents. All, however, that these thinkers do is to describe the specific characteristics of the soul; they do not try to determine anything about the body which is to contain it, as if it were possible, as in the Pythagorean myths, that any soul could be clothed upon with any body—an absurd view, for each body seems to have a form and shape of its own. It is as absurd as to say that the art of carpentry could embody itself in flutes; each art must use its tools, each soul its body.

## CHAPTER 4

There is yet another theory about soul, which has commended itself to many as no less probable than any of those we have hitherto mentioned, and has rendered public account of itself in the court of popular discussion. Its supporters say that the soul is a kind of harmony, for harmony is a blend or composition of contraries, and the body is compounded out of contraries. Harmony, however, is a certain proportion or composition of the constituents blended, and soul can be neither the one nor the other of these. Further, the power of originating movement cannot belong to a harmony, while almost all concur in regarding this as a principal attribute of soul. It is more appropriate to call health (or generally one of the good states of the body) a harmony than to predicate it of the soul. The absurdity becomes most apparent when we try to attribute the active and passive affections of the soul to a harmony; the necessary readjustment of their conceptions is difficult. Further, in using the word 'harmony' we have one or other of two cases in our mind; the most proper sense is in relation to spatial magnitudes which have motion and position, where harmony means the disposition and cohesion of their parts in such a manner as to prevent the introduction into the whole of anything homogeneous with it, and the secondary sense, derived from the former, is that in which it means the ratio between the constituents so blended; in neither of these senses is it plausible to predicate it of soul. That soul is a harmony in the sense of the mode of composition of the parts of the body is a view easily refutable; for there are many composite parts and those variously compounded; of what bodily part is mind or the sensitive or the appetitive faculty the mode of composition? And what is the mode of composition which constitutes each of them? It is equally absurd to identify the soul with the ratio of the mixture; for the mixture which makes flesh has a different ratio between the elements from that which makes bone. The consequence of this view will therefore be that distributed throughout the whole body there will be many souls, since every one of the bodily parts is a different mixture of the elements, and the ratio of mixture is in each case a harmony, i.e. a soul.



From Empedocles at any rate we might demand an answer to the following question— for he says that each of the parts of the body is what it is in virtue of a ratio between the elements: is the soul identical with this ratio, or is it not rather something over and above this which is formed in the parts? Is love the cause of any and every mixture, or only of those that are in the right ratio? Is love this ratio itself, or is love something over and above this? Such are the problems raised by this account. But, on the other hand, if the soul is different from the mixture, why does it disappear at one and the same moment with that relation between the elements which constitutes flesh or the other parts of the animal body? Further, if the soul is not identical with the ratio of mixture, and it is consequently not the case that each of the parts has a soul, what is that which perishes when the soul quits the body?

That the soul cannot either be a harmony, or be moved in a circle, is clear from what we have said. Yet that it can be moved incidentally is, as we said above, possible, and even that in a sense it can move itself, i.e. in the sense that the vehicle in which it is can be moved, and moved by it; in no other sense can the soul be moved in space.

More legitimate doubts might remain as to its movement in view of the following facts. We speak of the soul as being pained or pleased, being bold or fearful, being angry, perceiving, thinking. All these are regarded as modes of movement, and hence it might be inferred that the soul is moved. This, however, does not necessarily follow. We may admit to the full that being pained or pleased, or thinking, are movements (each of them a 'being moved'), and that the movement is originated by the soul. For example we may regard anger or fear as such and such movements of the heart, and thinking as such and such another movement of that organ, or of some other; these modifications may arise either from changes of place in certain parts or from qualitative alterations (the special nature of the parts and the special modes of their changes being for our present purpose irrelevant). Yet to say that it is the soul which is angry is as inexact as it would be to say that it is the soul that weaves webs or builds houses. It is doubtless better to avoid saying that the soul pities or learns or thinks and rather to say that it is the man who does this with his soul. What we mean is not that the movement is in the soul, but that sometimes it terminates in the soul and sometimes starts from it, sensation e.g. coming from without inwards, and reminiscence starting from the soul and terminating with the movements, actual or residual, in the sense organs.

The case of mind is different; it seems to be an independent substance implanted within the soul and to be incapable of being destroyed. If it could be destroyed at all, it would be under the blunting influence of old age. What really happens in respect of mind in old age is, however, exactly parallel to what happens in the case of the sense organs; if the old man could recover the proper kind of eye, he would see just as well as the young man. The incapacity of old age is due to an affection not of the soul but of its vehicle, as occurs in drunkenness or disease. Thus it is that in old age the activity of mind or intellectual apprehension declines only through the decay of some other inward part; mind itself is impassible. Thinking, loving, and hating are affections not of mind, but of that which has mind, so far as it has it. That is why, when this vehicle decays, memory and love cease; they were activities not of mind, but of the composite which has perished; mind is, no doubt, something more divine and impassible. That the soul cannot be moved is therefore clear from what we have said, and if it cannot be moved at all, manifestly it cannot be moved by itself.

Of all the opinions we have enumerated, by far the most unreasonable is that which declares the soul to be a self-moving number; it involves in the first place all the impossibilities which follow from regarding the soul as moved, and in the second special absurdities which follow from calling it a number. How we to imagine a unit being moved? By what agency? What sort of movement can be attributed to what is without parts or internal differences? If the unit is both originative of movement and itself capable of being moved, it must contain difference.



Further, since they say a moving line generates a surface and a moving point a line, the movements of the psychic units must be lines (for a point is a unit having position, and the number of the soul is, of course, somewhere and has position).

Again, if from a number a number or a unit is subtracted, the remainder is another number; but plants and many animals when divided continue to live, and each segment is thought to retain the same kind of soul.

It must be all the same whether we speak of units or corpuscles; for if the spherical atoms of Democritus became points, nothing being retained but their being a quantum, there must remain in each a moving and a moved part, just as there is in what is continuous; what happens has nothing to do with the size of the atoms, it depends solely upon their being a quantum. That is why there must be something to originate movement in the units. If in the animal what originates movement is the soul, so also must it be in the case of the number, so that not the mover and the moved together, but the mover only, will be the soul. But how is it possible for one of the units to fulfil this function of originating movement? There must be some difference between such a unit and all the other units, and what difference can there be between one placed unit and another except a difference of position? If then, on the other hand, these psychic units within the body are different from the points of the body, there will be two sets of units both occupying the same place; for each unit will occupy a point. And yet, if there can be two, why cannot there be an infinite number? For if things can occupy an indivisible place, they must themselves be indivisible. If, on the other hand, the points of the body are identical with the units whose number is the soul, or if the number of the points in the body is the soul, why have not all bodies souls? For all bodies contain points or an infinity of points.

Further, how is it possible for these points to be isolated or separated from their bodies, seeing that lines cannot be resolved into points?

## CHAPTER 5

The result is, as we have said, that this view, while on the one side identical with that of those who maintain that soul is a subtle kind of body, is on the other entangled in the absurdity peculiar to Democritus' way of describing the manner in which movement is originated by soul. For if the soul is present throughout the whole percipient body, there must, if the soul be a kind of body, be two bodies in the same place; and for those who call it a number, there must be many points at one point, or every body must have a soul, unless the soul be a different sort of number—other, that is, than the sum of the points existing in a body. Another consequence that follows is that the animal must be moved by its number precisely in the way that Democritus explained its being moved by his spherical psychic atoms. What difference does it make whether we speak of small spheres or of large units, or, quite simply, of units in movement? One way or another, the movements of the animal must be due to their movements. Hence those who combine movement and number in the same subject lay themselves open to these and many other similar absurdities. It is impossible not only that these characters should give the definition of soul—it is impossible that they should even be attributes of it. The point is clear if the attempt be made to start from this as the account of soul and explain from it the affections and actions of the soul, e.g. reasoning, sensation, pleasure, pain, &c. For, to repeat what we have said earlier, movement and number do not facilitate even conjecture about the derivative properties of soul.

Such are the three ways in which soul has traditionally been defined; one group of thinkers declared it to be that which is most originaive of movement because it moves itself, another group to be the subtlest and most nearly incorporeal of all kinds of body. We have now sufficiently set forth the difficulties and inconsistencies to which these theories are exposed. It remains now to examine the doctrine that soul is composed of the elements.

The reason assigned for this doctrine is that thus the soul may perceive or come to know everything that is, but the theory necessarily involves itself in many impossibilities. Its upholders assume that like is known only by like, and imagine that by declaring the soul to be composed of the elements they succeed in identifying the soul with all the things it is capable of apprehending. But the elements are not the only things it knows; there are many others, or, more exactly, an infinite number of others, formed out of the elements. Let us admit that the soul knows or perceives the elements out of which each of these composites is made up; but by what means will it know or perceive the composite whole, e.g. what God, man, flesh, bone (or any other compound) is? For each is, not merely the elements of which it is composed, but those elements combined in a determinate mode or ratio, as Empedocles himself says of bone,

The kindly Earth in its broad-bosomed moulds

Won of clear Water two parts out of eight,

And four of Fire; and so white bones were formed.

Nothing, therefore, will be gained by the presence of the elements in the soul, unless there be also present there the various formulae of proportion and the various compositions in accordance with them. Each element will indeed know its fellow outside, but there will be no knowledge of bone or man, unless they too are present in the constitution of the soul. The impossibility of this needs no pointing out; for who would suggest that stone or man could enter into the constitution of the soul? The same applies to 'the good' and 'the not-good', and so on.

Further, the word 'is' has many meanings: it may be used of a 'this' or substance, or of a quantum, or of a quale, or of any other of the kinds of predicates we have distinguished. Does the soul consist of all of these or not? It does not appear that all have common elements. Is the soul formed out of those elements alone which enter into substances? If so how will it be able to know each of the other kinds of thing? Will it be said that each kind of thing has elements or principles of its own, and that the soul is formed out of the whole of these? In that case, the soul must be a quantum and a quale and a substance. But all that can be made out of the elements of a quantum is a quantum, not a substance. These (and others like them) are the consequences of the view that the soul is composed of all the elements.

It is absurd, also, to say both that like is not capable of being affected by like, and that like is perceived or known by like, for perceiving, and also both thinking and knowing, are, on their own assumption, ways of being affected or moved.

There are many puzzles and difficulties raised by saying, as Empedocles does, that each set of things is known by means of its corporeal elements and by reference to something in soul which is like them, and additional testimony is furnished by this new consideration; for all the parts of the animal body which consist wholly of earth such as bones, sinews, and hair seem to be wholly insensitive and consequently not perceptive even of objects earthy like themselves, as they ought to have been.

Further, each of the principles will have far more ignorance than knowledge, for though each of them will know one thing, there will be many of which it will be ignorant. Empedocles at any rate must conclude that his God is the least intelligent of all beings, for of him alone is it true that there is one thing, Strife, which he does not know, while there is nothing which mortal beings do not know, for there is nothing which does not enter into their composition.

In general, we may ask, Why has not everything a soul, since everything either is an element, or is formed out of one or several or all of the elements? Each must certainly know one or several or all.

The problem might also be raised, What is that which unifies the elements into a soul? The elements correspond, it would appear, to the matter; what unites them, whatever it is, is the supremely important factor. But it is impossible that there should be something superior to, and dominant over, the soul (and a fortiori over the mind); it is reasonable to hold that mind is by nature most primordial and dominant, while their statement that it is the elements which are first of all that is.

All, both those who assert that the soul, because of its knowledge or perception of what is, is out of the elements, and is those who assert that it is of all things the most originate of movement, fail to take into consideration all kinds of soul. In fact not all beings that perceive can originate movement; there appear to be certain animals which stationary, and yet local movement is the only one, so it seems, which the soul originates in animals. And the same objection holds against all those who construct mind and the perceptive faculty out of the elements; for it appears that plants live, and yet are not endowed with locomotion or perception, while a large number of animals are without discourse of reason. Even if these points were waived and mind admitted to be a part of the soul (and so too the perceptive faculty), still, even so, there would be kinds and parts of soul of which they had failed to give any account.

The same objection lies against the view expressed in the 'Orphic <sup>1</sup>' poems: there it is said that the soul comes in from the whole when breathing takes place, being borne in upon the winds. Now this cannot take place in the case of plants, nor indeed in the case of certain classes of animal, for not all classes of animal breathe. This fact has escaped the notice of the holders of this view.

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<sup>1</sup> 奥菲士（Orpheus），[希神].神人和歌手，善弹竖琴，弹奏时猛兽俯首，顽石点头。

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If we must construct the soul out of the elements, there is no necessity to suppose that all the elements enter into its construction; one element in each pair of contraries will suffice to enable it to know both that element itself and its contrary. By means of the straight line we know both itself and the curved—the carpenter's rule enables us to test both—but what is curved does not enable us to distinguish either itself or the straight. Certain thinkers say that soul is intermingled in the whole universe, and it is perhaps for that reason that Thales came to the opinion that all things are full of gods. This presents some difficulties: Why does the soul when it resides in air or fire not form an animal, while it does so when it resides in mixtures of the elements, and that although it is held to be of higher quality when contained in the former? (One might add the question, why the soul in air is maintained to be higher and more immortal than that in animals.) Both possible ways of replying to the former question lead to absurdity or paradox; for it is beyond paradox to say that fire or air is an animal, and it is absurd to refuse the name of animal to what has soul in it. The opinion that the elements have soul in them seems to have arisen from the doctrine that a whole must be homogeneous with its parts. If it is true that animals become animate by drawing into themselves a portion of what surrounds them, the partisans of this view are bound to say that the soul of the Whole too is homogeneous with all its parts. If the air sucked in is homogeneous, but soul heterogeneous, clearly while some part of soul will exist in the inbreathed air, some other part will not. The soul must either be homogeneous, or such that there are some parts of the Whole in which it is not to be found.

From what has been said it is now clear that knowing as an attribute of soul cannot be explained by soul's being composed of the elements, and that it is neither sound nor true to speak of soul as moved. But since knowing, perceiving, opining, and further desiring, wishing, and generally all other modes of appetite, belong to soul, and the local movements of animals, and growth, maturity, and decay are produced by the soul, we must ask whether each of these is an attribute of the soul as a whole, i.e. whether it is with the whole soul we think, perceive, move ourselves, act or are acted upon, or whether each of them requires a different part of the soul? So too with regard to life. Does it depend on one of the parts of soul? Or is it dependent on more than one? Or on all? Or has it some quite other cause?

Some hold that the soul is divisible, and that one part thinks, another desires. If, then, its nature admits of its being divided, what can it be that holds the parts together? Surely not the body; on the contrary it seems rather to be the soul that holds the body together; at any rate when the soul departs the body disintegrates and decays. If, then, there is something else which makes the soul one, this unifying agency would have the best right to the name of soul, and we shall have to repeat for it the question: Is it one or multipartite? If it is one, why not at once admit that 'the soul' is one? If it has parts, once more the question must be put: What holds its parts together, and so ad infinitum ?

The question might also be raised about the parts of the soul: What is the separate role of each in relation to the body? For, if the whole soul holds together the whole body, we should expect each part of the soul to hold together a part of the body. But this seems an impossibility; it is difficult even to imagine what sort of bodily part mind will hold together, or how it will do this.

It is a fact of observation that plants and certain insects go on living when divided into segments; this means that each of the segments has a soul in it identical in species, though not numerically identical in the different segments, for both of the segments for a time possess the power of sensation and local movement. That this does not last is not surprising, for they no longer possess the organs necessary for self-maintenance. But, all the same, in each of the bodily parts there are present all the parts of soul, and the souls so present are homogeneous with one another and with the whole; this means that the several parts of the soul are indis severable from one another, although the whole soul is divisible. It seems also that the principle found in plants is also a kind of soul; for this is the only principle which is common to both animals and plants; and this exists in isolation from the principle of sensation, though there nothing which has the latter without the former.

## BOOK II

### CHAPTER 1

Let the foregoing suffice as our account of the views concerning the soul which have been handed on by our predecessors; let us now dismiss them and make as it were a completely fresh start, endeavouring to give a precise answer to the question, What is soul?i.e. to formulate the most general possible definition of it.

We are in the habit of recognizing, as one determinate kind of what is, substance, and that in several senses, in the sense of matter or that which in itself is not 'a this', and in the sense of form or essence, which is that precisely in virtue of which a thing is called 'a this', and thirdly in the sense of that which is compounded of both and. Now matter is potentiality, form actuality; of the latter there are two grades related to one another as e.g. knowledge to the exercise of knowledge.

Among substances are by general consent reckoned bodies and especially natural bodies; for they are the principles of all other bodies. Of natural bodies some have life in them, others not; by life we mean self-nutrition and growth (with its correlative decay). It follows that every natural body which has life in it is a substance in the sense of a composite.

But since it is also a body of such and such a kind, viz. having life, the body cannot be soul; the body is the subject or matter, not what is attributed to it. Hence the soul must be a substance in the sense of the form of a natural body having life potentially within it. But substance is actuality, and thus soul is the actuality of a body as above characterized. Now the word actuality has two senses corresponding respectively to the possession of knowledge and the actual exercise of knowledge. It is obvious that the soul is actuality in the first sense, viz. that of knowledge as possessed, for both sleeping and waking presuppose the existence of soul, and of these waking corresponds to actual knowing, sleeping to knowledge possessed but not employed, and, in the history of the individual, knowledge comes before its employment or exercise.



That is why the soul is the first grade of actuality of a natural body having life potentially in it. The body so described is a body which is organized. The parts of plants in spite of their extreme simplicity are 'organs'; e.g. the leaf serves to shelter the pericarp, the pericarp to shelter the fruit, while the roots of plants are analogous to the mouth of animals, both serving for the absorption of food. If, then, we have to give a general formula applicable to all kinds of soul, we must describe it as the first grade of actuality of a natural organized body. That is why we can wholly dismiss as unnecessary the question whether the soul and the body are one: it is as meaningless as to ask whether the wax and the shape given to it by the stamp are one, or generally the matter of a thing and that of which it is the matter. Unity has many senses (as many as 'is' has), but the most proper and fundamental sense of both is the relation of an actuality to that of which it is the actuality. We have now given an answer to the question, What is soul?—an answer which applies to it in its full extent. It is substance in the sense which corresponds to the definitive formula of a thing's essence. That means that it is 'the essential whatness' of a body of the character just assigned. Suppose that what is literally an 'organ', like an axe, were a natural body, its 'essential whatness', would have been its essence, and so its soul; if this disappeared from it, it would have ceased to be an axe, except in name. As it is, it is just an axe; it wants the character which is required to make its whatness or formulable essence a soul; for that, it would have had to be a natural body of a particular kind, viz. one having in itself the power of setting itself in movement and arresting itself. Next, apply this doctrine in the case of the 'parts' of the living body. Suppose that the eye were an animal—sight would have been its soul, for sight is the substance or essence of the eye which corresponds to the formula, the eye being merely the matter of seeing; when seeing is removed the eye is no longer an eye, except in name—it is no more a real eye than the eye of a statue or of a painted figure. We must now extend our consideration from the 'parts' to the whole living body; for what the departmental sense is to the bodily part which is its organ, that the whole faculty of sense is to the whole sensitive body as such.

We must not understand by that which is 'potentially capable of living' what has lost the soul it had, but only what still retains it; but seeds and fruits are bodies which possess the qualification. Consequently, while waking is actuality in a sense corresponding to the cutting and the seeing, the soul is actuality in the sense corresponding to the power of sight and the power in the tool; the body corresponds to what exists in potentiality; as the pupil plus the power of sight constitutes the eye, so the soul plus the body constitutes the animal.

From this it indubitably follows that the soul is inseparable from its body, or at any rate that certain parts of it are (if it has parts) for the actuality of some of them is nothing but the actualities of their bodily parts. Yet some may be separable because they are not the actualities of any body at all. Further, we have no light on the problem whether the soul may not be the actuality of its body in the sense in which the sailor is the actuality of the ship.

This must suffice as our sketch or outline determination of the nature of soul.

## CHAPTER 2



Since what is clear or logically more evident emerges from what in itself is confused but more observable by us, we must reconsider our results from this point of view. For it is not enough for a definitive formula to express as most now do the mere fact; it must include and exhibit the ground also. At present definitions are given in a form analogous to the conclusion of a syllogism; e.g. What is squaring? The construction of an equilateral rectangle equal to a given oblong rectangle. Such a definition is in form equivalent to a conclusion. One that tells us that squaring is the discovery of a line which is a mean proportional between the two unequal sides of the given rectangle discloses the ground of what is defined.

We resume our inquiry from a fresh starting-point by calling attention to the fact that what has soul in it differs from what has not, in that the former displays life. Now this word has more than one sense, and provided any one alone of these is found in a thing we say that thing is living. Living, that is, may mean thinking or perception or local movement and rest, or movement in the sense of nutrition, decay and growth. Hence we think of plants also as living, for they are observed to possess in themselves an originative power through which they increase or decrease in all spatial directions; they grow up and down, and everything that grows increases its bulk alike in both directions or indeed in all, and continues to live so long as it can absorb nutriment.

This power of self-nutrition can be isolated from the other powers mentioned, but not they from it—in mortal beings at least. The fact is obvious in plants; for it is the only psychic power they possess.

This is the originative power the possession of which leads us to speak of things as living at all, but it is the possession of sensation that leads us for the first time to speak of living things as animals; for even those beings which possess no power of local movement but do possess the power of sensation we call animals and not merely living things.

The primary form of sense is touch, which belongs to all animals. Just as the power of self-nutrition can be isolated from touch and sensation generally, so touch can be isolated from all other forms of sense. (By the power of self-nutrition we mean that departmental power of the soul which is common to plants and animals: all animals whatsoever are observed to have the sense of touch.) What the explanation of these two facts is, we must discuss later. At present we must confine ourselves to saying that soul is the source of these phenomena and is characterized by them, viz. by the powers of self-nutrition, sensation, thinking, and motivity.

Is each of these a soul or a part of a soul? And if a part, a part in what sense? A part merely distinguishable by definition or a part distinct in local situation as well? In the case of certain of these powers, the answers to these questions are easy, in the case of others we are puzzled what to say. Just as in the case of plants which when divided are observed to continue to live though removed to a distance from one another (thus showing that in their case the soul of each individual plant before division was actually one, potentially many), so we notice a similar result in other varieties of soul, i.e. in insects which have been cut in two; each of the segments possesses both sensation and local movement; and if sensation, necessarily also imagination and appetition; for, where there is sensation, there is also pleasure and pain, and, where these, necessarily also desire.

We have no evidence as yet about mind or the power to think; it seems to be a widely different kind of soul, differing as what is eternal from what is perishable; it alone is capable of existence in isolation from all other psychic powers. All the other parts of soul, it is evident from what we have said, are, in spite of certain statements to the contrary, incapable of separate existence though, of course, distinguishable by definition. If opining is distinct from perceiving, to be capable of opining and to be capable of perceiving must be distinct, and so with all the other forms of living above enumerated. Further, some animals possess all these parts of soul, some certain of them only, others one only (this is what enables us to classify animals); the cause must be considered later. A similar arrangement is found also within the field of the senses; some classes of animals have all the senses, some only certain of them, others only one, the most indispensable, touch.

Since the expression 'that whereby we live and perceive' has two meanings, just like the expression 'that whereby we know'—that may mean either knowledge or the soul, for we can speak of knowing by or with either, and similarly that whereby we are in health may be either health or the body or some part of the body; and since of the two terms thus contrasted knowledge or health is the name of a form, essence, or ratio, or if we so express it an actuality of a recipient matter—knowledge of what is capable of knowing, health of what is capable of being made healthy (for the operation of that which is capable of originating change terminates and has its seat in what is changed or altered); further, since it is the soul by or with which primarily we live, perceive, and think:—it follows that the soul must be a ratio or formulable essence, not a matter or subject. For, as we said, word substance has three meanings— form, matter, and the complex of both— and of these three what is called matter is potentiality, what is called form actuality. Since then the complex here is the living thing, the body cannot be the actuality of the soul; it is the soul which is the actuality of a certain kind of body. Hence the rightness of the view that the soul cannot be without a body, while it cannot be a body; it is not a body but something relative to a body. That is why it is in a body, and a body of a definite kind. It was a mistake, therefore, to do as former thinkers did, merely to fit it into a body without adding a definite specification of the kind or character of that body. Reflection confirms the observed fact; the actuality of any given thing can only be realized in what is already potentially that thing, i.e. in a matter of its own appropriate to it. From all this it follows that soul is an actuality or formulable essence of something that possesses a potentiality of being besouled.

## CHAPTER 3

Of the psychic powers above enumerated some kinds of living things, as we have said, possess all, some less than all, others one only. Those we have mentioned are the nutritive, the appetitive, the sensory, the locomotive, and the power of thinking. Plants have none but the first, the nutritive, while another order of living things has this plus the sensory. If any order of living things has the sensory, it must also have the appetitive; for appetite is the genus of which desire, passion, and wish are the species; now all animals have one sense at least, viz. touch, and whatever has a sense has the capacity for pleasure and pain and therefore has pleasant and painful objects present to it, and wherever these are present, there is desire, for desire is just appetite of what is pleasant. Further, all animals have the sense for food (for touch is the sense for food); the food of all living things consists of what is dry, moist, hot, cold, and these are the qualities apprehended by touch; all other sensible qualities are apprehended by touch only indirectly. Sounds, colours, and odours contribute nothing to nutriment; flavours fall within the field of tangible qualities. Hunger and thirst are forms of desire, hunger a desire for what is dry and hot, thirst a desire for what is cold and moist; flavour is a sort of seasoning added to both. We must later clear up these points, but at present it may be enough to say that all animals that possess the sense of touch have also appetite. The case of imagination is obscure; we must examine it later. Certain kinds of animals possess in addition the power of locomotion, and still another order of animate beings, i.e. man and possibly another order like man or superior to him, the power of thinking, i.e. mind. It is now evident that a single definition can be given of soul only in the same sense as one can be given of figure. For, as in that case there is no figure distinguishable and apart from triangle, &c., so here there is no soul apart from the forms of soul just enumerated. It is true that a highly general definition can be given for figure which will fit all figures without expressing the peculiar nature of any figure. So here in the case of soul and its specific forms. Hence it is absurd in this and similar cases to demand an absolutely general definition which will fail to express the peculiar nature of anything that is, or again, omitting this, to look for separate definitions corresponding to each infima species. The cases of figure and soul are exactly parallel; for the particulars subsumed under the common name in both cases—figures and living beings—constitute a series, each successive term of which potentially contains its predecessor, e.g. the square the triangle, the sensory power the self-nutritive. Hence we must ask in the case of each order of living things, What is its soul, i.e. What is the soul of plant, animal, man? Why the terms are related in this serial way must form the subject of later examination. But the facts are that the power of perception is never found apart from the power of self-nutrition, while—in plants—the latter is found isolated from the former. Again, no sense is found apart from that of touch, while touch is found by itself; many animals have neither sight, hearing, nor smell. Again, among living things that possess sense some have the power of locomotion, some not. Lastly, certain living beings—a small minority—possess calculation and thought, for (among mortal beings) those which possess calculation have all the other powers above mentioned, while the converse does not hold—indeed some live by imagination alone, while others have not even imagination. The mind that knows with immediate intuition presents a different problem.

It is evident that the way to give the most adequate definition of soul is to seek in the case of each of its forms for the most appropriate definition.

## CHAPTER 4

It is necessary for the student of these forms of soul first to find a definition of each, expressive of what it is, and then to investigate its derivative properties, &c. But if we are to express what each is, viz. what the thinking power is, or the perceptive, or the nutritive, we must go farther back and first give an account of thinking or perceiving, for in the order of investigation the question of what an agent does precedes the question, what enables it to do what it does. If this is correct, we must on the same ground go yet another step farther back and have some clear view of the objects of each; thus we must start with these objects, e.g. with food, with what is perceptible, or with what is intelligible.

It follows that first of all we must treat of nutrition and reproduction, for the nutritive soul is found along with all the others and is the most primitive and widely distributed power of soul, being indeed that one in virtue of which all are said to have life. The acts in which it manifests itself are reproduction and the use of food—reproduction, I say, because for any living thing that has reached its normal development and which is unmutated, and whose mode of generation is not spontaneous, the most natural act is the production of another like itself, an animal producing an animal, a plant a plant, in order that, as far as its nature allows, it may partake in the eternal and divine. That is the goal towards which all things strive, that for the sake of which they do whatsoever their nature renders possible. The phrase 'for the sake of which' is ambiguous; it may mean either the end to achieve which, or the being in whose interest, the act is done. Since then no living thing is able to partake in what is eternal and divine by uninterrupted continuance (for nothing perishable can for ever remain one and the same), it tries to achieve that end in the only way possible to it, and success is possible in varying degrees; so it remains not indeed as the self-same individual but continues its existence in something like itself—not numerically but specifically one.

The soul is the cause or source of the living body. The terms cause and source have many senses. But the soul is the cause of its body alike in all three senses which we explicitly recognize. It is the source or origin of movement, it is the end, it is the essence of the whole living body.

That it is the last, is clear; for in everything the essence is identical with the ground of its being, and here, in the case of living things, their being is to live, and of their being and their living the soul in them is the cause or source. Further, the actuality of whatever is potential is identical with its formulable essence.

It is manifest that the soul is also the final cause of its body. For Nature, like mind, always does whatever it does for the sake of something, which something is its end. To that something corresponds in the case of animals the soul and in this it follows the order of nature; all natural bodies are organs of the soul. This is true of those that enter into the constitution of plants as well as of those which enter into that of animals. This shows that that for the sake of which they are is soul. We must here recall the two senses of 'that for the sake of which', viz. the end to achieve which, and the being in whose interest, anything is or is done.

We must maintain, further, that the soul is also the cause of the living body as the original source of local movement. The power of locomotion is not found, however, in all living things. But change of quality and change of quantity are also due to the soul. Sensation is held to be a qualitative alteration, and nothing except what has soul in it is capable of sensation. The same holds of the quantitative changes which constitute growth and decay; nothing grows or decays naturally except what feeds itself, and nothing feeds itself except what has a share of soul in it.

Empedocles is wrong in adding that growth in plants is to be explained, the downward rooting by the natural tendency of earth to travel downwards, and the upward branching by the similar natural tendency of fire to travel upwards. For he misinterprets up and down; up and down are not for all things what they are for the whole Cosmos: if we are to distinguish and identify organs according to their functions, the roots of plants are analogous to the head in animals. Further, we must ask what is the force that holds together the earth and the fire which tend to travel in contrary directions; if there is no counteracting force, they will be torn asunder; if there is, this must be the soul and the cause of nutrition and growth. By some the element of fire is held to be the cause of nutrition and growth, for it alone of the primary bodies or elements is observed to feed and increase itself. Hence the suggestion that in both plants and animals it is it which is the operative force. A concurrent cause in a sense it certainly is, but not the principal cause, that is rather the soul; for while the growth of fire goes on without limit so long as there is a supply of fuel, in the case of all complex wholes formed in the course of nature there is a limit or ratio which determines their size and increase, and limit and ratio are marks of soul but not of fire, and belong to the side of formulable essence rather than that of matter.

Nutrition and reproduction are due to one and the same psychic power. It is necessary first to give precision to our account of food, for it is by this function of absorbing food that this psychic power is distinguished from all the others. The current view is that what serves as food to a living thing is what is contrary to it—not that in every pair of contraries each is food to the other: to be food a contrary must not only be transformable into the other and vice versa, it must also in so doing increase the bulk of the other. Many a contrary is transformed into its other and vice versa, where neither is even a quantum and so cannot increase in bulk, e.g. an invalid into a healthy subject. It is clear that not even those contraries which satisfy both the conditions mentioned above are food to one another in precisely the same sense; water may be said to feed fire, but not fire water. Where the members of the pair are elementary bodies only one of the contraries, it would appear, can be said to feed the other. But there is a difficulty here. One set of thinkers assert that like fed, as well as increased in amount, by like. Another set, as we have said, maintain the very reverse, viz. that what feeds and what is fed are contrary to one another; like, they argue, is incapable of being affected by like; but food is changed in the process of digestion, and change is always to what is opposite or to what is intermediate. Further, food is acted upon by what is nourished by it, not the other way round, as timber is worked by a carpenter and not conversely; there is a change in the carpenter but it is merely a change from not-working to working. In answering this problem it makes all the difference whether we mean by 'the food' the 'finished' or the 'raw' product. If we use the word food of both, viz. of the completely undigested and the completely digested matter, we can justify both the rival accounts of it; taking food in the sense of undigested matter, it is the contrary of what is fed by it, taking it as digested it is like what is fed by it. Consequently it is clear that in a certain sense we may say that both parties are right, both wrong.

Since nothing except what is alive can be fed, what is fed is the besouled body and just because it has soul in it. Hence food is essentially related to what has soul in it. Food has a power which is other than the power to increase the bulk of what is fed by it; so far forth as what has soul in it is a quantum, food may increase its quantity, but it is only so far as what has soul in it is a 'this-somewhat' or substance that food acts as food; in that case it maintains the being of what is fed, and that continues to be what it is so long as the process of nutrition continues. Further, it is the agent in generation, i.e. not the generation of the individual fed but the reproduction of another like it; the substance of the individual fed is already in existence; the existence of no substance is a self-generation but only a self-maintenance.

Hence the psychic power which we are now studying may be described as that which tends to maintain whatever has this power in it of continuing such as it was, and food helps it to do its work. That is why, if deprived of food, it must cease to be.



The process of nutrition involves three factors, what is fed, that wherewith it is fed, what does the feeding; of these is the first soul, the body which has that soul in it, the food. But since it is right to call things after the ends they realize, and the end of this soul is to generate another being like that in which it is, the first soul ought to be named the reproductive soul. The expression 'wherewith it is fed' is ambiguous just as is the expression 'wherewith the ship is steered'; that may mean either the hand or the rudder, i.e. either what is moved and sets in movement, or what is merely moved. We can apply this analogy here if we recall that all food must be capable of being digested, and that what produces digestion is warmth; that is why everything that has soul in it possesses warmth.

We have now given an outline account of the nature of food; further details must be given in the appropriate place.

## CHAPTER 5

Having made these distinctions let us now speak of sensation in the widest sense. Sensation depends, as we have said, on a process of movement or affection from without, for it is held to be some sort of change of quality. Now some thinkers assert that like is affected only by like; in what sense this is possible and in what sense impossible, we have explained in our general discussion of acting and being acted upon.

Here arises a problem: why do we not perceive the senses themselves as well as the external objects of sense, or why without the stimulation of external objects do they not produce sensation, seeing that they contain in themselves fire, earth, and all the other elements, which are the direct or indirect objects of sense? It is clear that what is sensitive is only potentially, not actually. The power of sense is parallel to what is combustible, for that never ignites itself spontaneously, but requires an agent which has the power of starting ignition; otherwise it could have set itself on fire, and would not have needed actual fire to set it ablaze.

In reply we must recall that we use the word 'perceive' in two ways, for we say that what has the power to hear or see, 'sees' or 'hears', even though it is at the moment asleep, and also that what is actually seeing or hearing, 'sees' or 'hears'. Hence 'sense' too must have two meanings, sense potential, and sense actual. Similarly 'to be a sentient' means either to have a certain power or to manifest a certain activity. To begin with, for a time, let us speak as if there were no difference between being moved or affected, and being active, for movement is a kind of activity—an imperfect kind, as has elsewhere been explained. Everything that is acted upon or moved is acted upon by an agent which is actually at work. Hence it is that in one sense, as has already been stated, what acts and what is acted upon are like, in another unlike, i.e. prior to and during the change the two factors are unlike, after it like.



But we must now distinguish not only between what is potential and what is actual but also different senses in which things can be said to be potential or actual; up to now we have been speaking as if each of these phrases had only one sense. We can speak of something as 'a knower' either as when we say that man is a knower, meaning that man falls within the class of beings that know or have knowledge, or as when we are speaking of a man who possesses a knowledge of grammar; each of these is so called as having in him a certain potentiality, but there is a difference between their respective potentialities, the one being a potential knower, because his kind or matter is such and such, the other, because he can in the absence of any external counteracting cause realize his knowledge in actual knowing at will. This implies a third meaning of 'a knower', one who is already realizing his knowledge—he is a knower in actuality and in the most proper sense is knowing, e.g. this A. Both the former are potential knowers, who realize their respective potentialities, the one by change of quality, i.e. repeated transitions from one state to its opposite under instruction, the other by the transition from the inactive possession of sense or grammar to their active exercise. The two kinds of transition are distinct.

Also the expression 'to be acted upon' has more than one meaning; it may mean either the extinction of one of two contraries by the other, or the maintenance of what is potential by the agency of what is actual and already like what is acted upon, with such likeness as is compatible with one's being actual and the other potential. For what possesses knowledge becomes an actual knower by a transition which is either not an alteration of it at all (being in reality a development into its true self or actuality) or at least an alteration in a quite different sense from the usual meaning.

Hence it is wrong to speak of a wise man as being 'altered' when he uses his wisdom, just as it would be absurd to speak of a builder as being altered when he is using his skill in building a house.

What in the case of knowing or understanding leads from potentiality to actuality ought not to be called teaching but something else. That which starting with the power to know learns or acquires knowledge through the agency of one who actually knows and has the power of teaching either ought not to be said 'to be acted upon' at all or we must recognize two senses of alteration, viz. the substitution of one quality for another, the first being the contrary of the second, or the development of an existent quality from potentiality in the direction of fixity or nature.

In the case of what is to possess sense, the first transition is due to the action of the male parent and takes place before birth so that at birth the living thing is, in respect of sensation, at the stage which corresponds to the possession of knowledge. Actual sensation corresponds to the stage of the exercise of knowledge. But between the two cases compared there is a difference; the objects that excite the sensory powers to activity, the seen, the heard, &c., are outside. The ground of this difference is that what actual sensation apprehends is individuals, while what knowledge apprehends is universals, and these are in a sense within the soul. That is why a man can exercise his knowledge when he wishes, but his sensation does not depend upon himself— a sensible object must be there. A similar statement must be made about our knowledge of what is sensible—on the same ground, viz. that the sensible objects are individual and external.

A later more appropriate occasion may be found thoroughly to clear up all this. At present it must be enough to recognize the distinctions already drawn; a thing may be said to be potential in either of two senses, in the sense in which we might say of a boy that he may become a general or in the sense in which we might say the same of an adult, and there are two corresponding senses of the term 'a potential sentient'. There are no separate names for the two stages of potentiality; we have pointed out that they are different and how they are different. We cannot help using the incorrect terms 'being acted upon or altered' of the two transitions involved. As we have said, has the power of sensation is potentially like what the perceived object is actually; that is, while at the beginning of the process of its being acted upon the two interacting factors are dissimilar, at the end the one acted upon is assimilated to the other and is identical in quality with it.

## CHAPTER 6

In dealing with each of the senses we shall have first to speak of the objects which are perceptible by each. The term 'object of sense' covers three kinds of objects, two kinds of which are, in our language, directly perceptible, while the remaining one is only incidentally perceptible. Of the first two kinds one consists of what is perceptible by a single sense, the other of what is perceptible by any and all of the senses. I call by the name of special object of this or that sense that which cannot be perceived by any other sense than that one and in respect of which no error is possible; in this sense colour is the special object of sight, sound of hearing, flavour of taste. Touch, indeed, discriminates more than one set of different qualities. Each sense has one kind of object which it discerns, and never errs in reporting that what is before it is colour or sound (though it may err as to what it is that is coloured or where that is, or what it is that is sounding or where that is.) Such objects are what we propose to call the special objects of this or that sense.

'Common sensibles' are movement, rest, number, figure, magnitude; these are not peculiar to any one sense, but are common to all. There are at any rate certain kinds of movement which are perceptible both by touch and by sight.

We speak of an incidental object of sense where e.g. the white object which we see is the son of Diares<sup>1</sup>; here because 'being the son of Diares' is incidental to the directly visible white patch we speak of the son of Diares as being (incidentally) perceived or seen by us. Because this is only incidentally an object of sense, it in no way as such affects the senses. Of the two former kinds, both of which are in their own nature perceptible by sense, the first kind—that of special objects of the several senses—constitute the objects of sense in the strictest sense of the term and it is to them that in the nature of things the structure of each several sense is adapted.

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<sup>1</sup> 狄亚里（Diares），据克里斯托弗·希尔斯（Christoper Shields），狄亚雷系古代雕刻家；其子“白色、身高6英尺，体重200磅”。

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## CHAPTER 7

The object of sight is the visible, and what is visible is colour and a certain kind of object which can be described in words but which has no single name; what we mean by will be abundantly clear as we proceed. Whatever is visible is colour and colour is what lies upon what is in its own nature visible; 'in its own nature' here means not that visibility is involved in the definition of what thus underlies colour, but that that substratum contains in itself the cause of visibility. Every colour has in it the power to set in movement what is actually transparent; that power constitutes its very nature. That is why it is not visible except with the help of light; it is only in light that the colour of a thing is seen. Hence our first task is to explain what light is.

Now there clearly is something which is transparent, and by 'transparent' I mean what is visible, and yet not visible in itself, but rather owing its visibility to the colour of something else; of this character are air, water, and many solid bodies. Neither air nor water is transparent because it is air or water; they are transparent because each of them has contained in it a certain substance which is the same in both and is also found in the eternal body which constitutes the uppermost shell of the physical Cosmos. Of this substance light is the activity—the activity of what is transparent so far forth as it has in it the determinate power of becoming transparent; where this power is present, there is also the potentiality of the contrary, viz. darkness. Light is as it were the proper colour of what is transparent, and exists whenever the potentially transparent is excited to actuality by the influence of fire or something resembling 'the uppermost body'; for fire too contains something which is one and the same with the substance in question.

We have now explained what the transparent is and what light is; light is neither fire nor any kind whatsoever of body nor an efflux from any kind of body (if it were, it would again itself be a kind of body)—it is the presence of fire or something resembling fire in what is transparent. It is certainly not a body, for two bodies cannot be present in the same place. The opposite of light is darkness; darkness is the absence from what is transparent of the corresponding positive state above characterized; clearly therefore, light is just the presence of that.

Empedocles (and with him all others who used the same forms of expression) was wrong in speaking of light as 'travelling' or being at a given moment between the earth and its envelope, its movement being unobservable by us; that view is contrary both to the clear evidence of argument and to the observed facts; if the distance traversed were short, the movement might have been unobservable, but where the distance is from extreme East to extreme West, the draught upon our powers of belief is too great.

What is capable of taking on colour is what in itself is colourless, as what can take on sound is what is soundless; what is colourless includes what is transparent and what is invisible or scarcely visible, i.e. what is 'dark'. The latter is the same as what is transparent, when it is potentially, not of course when it is actually transparent; it is the same substance which is now darkness, now light.

Not everything that is visible depends upon light for its visibility. This is only true of the 'proper' colour of things. Some objects of sight which in light are invisible, in darkness stimulate the sense; that is, things that appear fiery or shining. This class of objects has no simple common name, but instances of it are fungi, flesh, heads, scales, and eyes of fish. In none of these is what is seen their own 'proper' colour. Why we see these at all is another question. At present what is obvious is that what is seen in light is always colour. That is why without the help of light colour remains invisible. Its being colour at all means precisely its having in it the power to set in movement what is already actually transparent, and, as we have seen, the actuality of what is transparent is just light.

The following experiment makes the necessity of a medium clear. If what has colour is placed in immediate contact with the eye, it cannot be seen. Colour sets in movement not the sense organ but what is transparent, e.g. the air, and that, extending continuously from the object to the organ, sets the latter in movement. Democritus misrepresents the facts when he expresses the opinion that if the interspace were empty one could distinctly see an ant on the vault of the sky; that is an impossibility. Seeing is due to an affection or change of what has the perceptive faculty, and it cannot be affected by the seen colour itself; it remains that it must be affected by what comes between. Hence it is indispensable that there be something in between—if there were nothing, so far from seeing with greater distinctness, we should see nothing at all.

We have now explained the cause why colour cannot be seen otherwise than in light. Fire on the other hand is seen both in darkness and in light; this double possibility follows necessarily from our theory, for it is just fire that makes what is potentially transparent actually transparent.

The same account holds also of sound and smell; if the object of either of these senses is in immediate contact with the organ no sensation is produced. In both cases the object sets in movement only what lies between, and this in turn sets the organ in movement: if what sounds or smells is brought into immediate contact with the organ, no sensation will be produced. The same, in spite of all appearances, applies also to touch and taste; why there is this apparent difference will be clear later. What comes between in the case of sounds is air; the corresponding medium in the case of smell has no name. But, corresponding to what is transparent in the case of colour, there is a quality found both in air and water, which serves as a medium for what has smell—I say 'in water' because animals that live in water as well as those that live on land seem to possess the sense of smell, and 'in air' because man and all other land animals that breathe, perceive smells only when they breathe air in. The explanation of this too will be given later.

## CHAPTER 8

Now let us, to begin with, make certain distinctions about sound and hearing.

Sound may mean either of two things — actual, and potential, sound. There are certain things which, as we say, 'have no sound', e.g. sponges or wool, others which have, e.g. bronze and in general all things which are smooth and solid—the latter are said to have a sound because they can make a sound, i.e. can generate actual sound between themselves and the organ of hearing.

Actual sound requires for its occurrence two such bodies and a space between them; for it is generated by an impact. Hence it is impossible for one body only to generate a sound—there must be a body impinging and a body impinged upon; what sounds does so by striking against something else, and this is impossible without a movement from place to place.

As we have said, not all bodies can by impact on one another produce sound; impact on wool makes no sound, while the impact on bronze or any body which is smooth and hollow does. Bronze gives out a sound when struck because it is smooth; bodies which are hollow owing to reflection repeat the original impact over and over again, the body originally set in movement being unable to escape from the concavity.



Further, we must remark that sound is heard both in air and in water, though less distinctly in the latter. Yet neither air nor water is the principal cause of sound. What is required for the production of sound is an impact of two solids against one another and against the air. The latter condition is satisfied when the air impinged upon does not retreat before the blow, i.e. is not dissipated by it.

That is why it must be struck with a sudden sharp blow, if it is to sound—the movement of the whip must outrun the dispersion of the air, just as one might get in a stroke at a heap or whirl of sand as it was traveling rapidly past.

An echo occurs, when, a mass of air having been unified, bounded, and prevented from dissipation by the containing walls of a vessel, the air originally struck by the impinging body and set in movement by it rebounds from this mass of air like a ball from a wall. It is probable that in all generation of sound echo takes place, though it is frequently only indistinctly heard. What happens here must be analogous to what happens in the case of light; light is always reflected—otherwise it would not be diffused and outside what was directly illuminated by the sun there would be blank darkness; but this reflected light is not always strong enough, as it is when it is reflected from water, bronze, and other smooth bodies, to cast a shadow, which is the distinguishing mark by which we recognize light.

It is rightly said that an empty space plays the chief part in the production of hearing, for what people mean by 'the vacuum' is the air, which is what causes hearing, when that air is set in movement as one continuous mass; but owing to its friability it emits no sound, being dissipated by impinging upon any surface which is not smooth. When the surface on which it impinges is quite smooth, what is produced by the original impact is a united mass, a result due to the smoothness of the surface with which the air is in contact at the other end.

What has the power of producing sound is what has the power of setting in movement a single mass of air which is continuous from the impinging body up to the organ of hearing. The organ of hearing is physically united with air, and because it is in air, the air inside is moved concurrently with the air outside. Hence animals do not hear with all parts of their bodies, nor do all parts admit of the entrance of air; for even the part which can be moved and can sound has not air everywhere in it. Air in itself is, owing to its friability, quite soundless; only when its dissipation is prevented is its movement sound. The air in the ear is built into a chamber just to prevent this dissipating movement, in order that the animal may accurately apprehend all varieties of the movements of the air outside. That is why we hear also in water, viz. because the water cannot get into the air chamber or even, owing to the spirals, into the outer ear. If this does happen, hearing ceases, as it also does if the tympanic membrane is damaged, just as sight ceases if the membrane covering the pupil is damaged. It is also a test of deafness whether the ear does or does not reverberate like a horn; the air inside the ear has always a movement of its own, but the sound we hear is always the sounding of something else, not of the organ itself. That is why we say that we hear with what is empty and echoes, viz. because what we hear with is a chamber which contains a bounded mass of air.

Which is it that 'sounds', the striking body or the struck? Is not the answer 'it is both, but each in a different way'? Sound is a movement of what can rebound from a smooth surface when struck against it. As we have explained, not everything sounds when it strikes or is struck, e.g. if one needle is struck against another, neither emits any sound. In order, therefore, that sound may be generated, what is struck must be smooth, to enable the air to rebound and be shaken off from it in one piece.

The distinctions between different sounding bodies show themselves only in actual sound; as without the help of light colours remain invisible, so without the help of actual sound the distinctions between acute and grave sounds remain inaudible. Acute and grave are here metaphors, transferred from their proper sphere, viz. that of touch, where they mean respectively what moves the sense much in a short time, what moves the sense little in a long time. Not that what is sharp really moves fast, and what is grave, slowly, but that the difference in the qualities of the one and the other movement is due to their respective speeds. There seems to be a sort of parallelism between what is acute or grave to hearing and what is sharp or blunt to touch; what is sharp as it were stabs, while what is blunt pushes, the one producing its effect in a short, the other in a long time, so that the one is quick, the other slow.

Let the foregoing suffice as an analysis of sound. Voice is a kind of sound characteristic of what has soul in it; nothing that is without soul utters voice, it being only by a metaphor that we speak of the voice of the flute or the lyre or generally of what (being without soul) possesses the power of producing a succession of notes which differ in length and pitch and timbre. The metaphor is based on the fact that all these differences are found also in voice. Many animals are voiceless, e.g. all non-sanguineous animals and among sanguineous animals fish. This is just what we should expect, since voice is a certain movement of air. The fish, like those in the Achelous<sup>1</sup>, which are said to have voice, really make the sounds with their gills or some similar organ. Voice is the sound made by an animal, and that with a special organ. As we saw, everything that makes a sound does so by the impact of something against something else, across a space, filled with air; hence it is only to be expected that no animals utter voice except those which take in air. Once air is inbreathed, Nature uses it for two different purposes, as the tongue is used both for tasting and for articulating; in that case of the two functions tasting is necessary for the animal's existence (hence it is found more widely distributed), while articulate speech is a luxury subserving its possessor's well-being; similarly in the former case Nature employs the breath both as an indispensable means to the regulation of the inner temperature of the living body and also as the matter of articulate voice, in the interests of its possessor's well-being. Why its former use is indispensable must be discussed elsewhere.

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<sup>1</sup> 阿克罗俄斯河（the Achelous），希腊西部河流，全长220千米，向南流入爱奥尼亚海。

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The organ of respiration is the windpipe, and the organ to which this is related as means to end is the lungs. The latter is the part of the body by which the temperature of land animals is raised above that of all others. But what primarily requires the air drawn in by respiration is not only this but the region surrounding the heart. That is why when animals breathe the air must penetrate inwards.

Voice then is the impact of the inbreathed air against the 'windpipe', and the agent that produces the impact is the soul resident in these parts of the body. Not every sound, as we said, made by an animal is voice (even with the tongue we may merely make a sound which is not voice, or without the tongue as in coughing); what produces the impact must have soul in it and must be accompanied by an act of imagination, for voice is a sound with a meaning, and is not merely the result of any impact of the breath as in coughing; in voice the breath in the windpipe is used as an instrument to knock with against the walls of the windpipe. This is confirmed by our inability to speak when we are breathing either out or in—we can only do so by holding our breath; we make the movements with the breath so checked. It is clear also why fish are voiceless; they have no windpipe. And they have no windpipe because they do not breathe or take in air. Why they do not is a question belonging to another inquiry.

## CHAPTER 9

Smell and its object are much less easy to determine than what we have hitherto discussed; the distinguishing characteristic of the object of smell is less obvious than those of sound or colour. The ground of this is that our power of smell is less discriminating and in general inferior to that of many species of animals; men have a poor sense of smell and our apprehension of its proper objects is inseparably bound up with and so confused by pleasure and pain, which shows that in us the organ is inaccurate. It is probable that there is a parallel failure in the perception of colour by animals that have hard eyes: probably they discriminate differences of colour only by the presence or absence of what excites fear, and that it is thus that human beings distinguish smells. It seems that there is an analogy between smell and taste, and that the species of tastes run parallel to those of smells—the only difference being that our sense of taste is more discriminating than our sense of smell, because the former is a modification of touch, which reaches in man the maximum of discriminative accuracy. While in respect of all the other senses we fall below many species of animals, in respect of touch we far excel all other species in exactness of discrimination. That is why man is the most intelligent of all animals. This is confirmed by the fact that it is to differences in the organ of touch and to nothing else that the differences between man and man in respect of natural endowment are due; men whose flesh is hard are ill-endowed by nature, men whose flesh is soft, well-endowed.

As flavours may be divided into sweet, bitter, so with smells. In some things the flavor and the smell have the same quality, i.e. both are sweet or both bitter, in others they diverge. Similarly a smell, like a flavour, may be pungent, astringent, acid, or succulent. But, as we said, because smells are much less easy to discriminate than flavours, the names of these varieties are applied to smells only metaphorically; for example 'sweet' is extended from the taste to the smell of saffron or honey, 'pungent' to that of thyme, and so on.

In the same sense in which hearing has for its object both the audible and the inaudible, sight both the visible and the invisible, smell has for its object both the odorous and the inodorous. 'Inodorous' may be either what has no smell at all, or what has a small or feeble smell. The same ambiguity lurks in the word 'tasteless'.

Smelling, like the operation of the senses previously examined, takes place through a medium, i.e. through air or water—I add water, because water-animals too (both sanguineous and non-sanguineous) seem to smell just as much as land-animals; at any rate some of them make directly for their food from a distance if it has any scent. That is why the following facts constitute a problem for us. All animals smell in the same way, but man smells only when he inhales; if he exhales or holds his breath, he ceases to smell, no difference being made whether the odorous object is distant or near, or even placed inside the nose and actually on the wall of the nostril; it is a disability common to all the senses not to perceive what is in immediate contact with the organ of sense, but our failure to apprehend what is odorous without the help of inhalation is peculiar (the fact is obvious on making the experiment). Now since bloodless animals do not breathe, they must, it might be argued, have some novel sense not reckoned among the usual five. Our reply must be that this is impossible, since it is scent that is perceived; a sense that apprehends what is odorous and what has a good or bad odour cannot be anything but smell. Further, they are observed to be deleteriously effected by the same strong odours as man is, e.g. bitumen, sulphur, and the like. These animals must be able to smell without being able to breathe. The probable explanation is that in man the organ of smell has a certain superiority over that in all other animals just as his eyes have over those of hard-eyed animals. Man's eyes have in the eyelids a kind of shelter or envelope, which must be shifted or drawn back in order that we may see, while hard-eyed animals have nothing of the kind, but at once see whatever presents itself in the transparent medium. Similarly in certain species of animals the organ of smell is like the eye of hard-eyed animals, uncurtained, while in others which take in air it probably has a curtain over it, which is drawn back in inhalation, owing to the dilating of the veins or pores. That explains also why such animals cannot smell under water; to smell they must first inhale, and that they cannot do under water.

Smells come from what is dry as flavours from what is moist. Consequently the organ of smell is potentially dry.

## CHAPTER 10

What can be tasted is always something that can be touched, and just for that reason it cannot be perceived through an interposed foreign body, for touch means the absence of any intervening body. Further, the flavoured and tasteable body is suspended in a liquid matter, and this is tangible. Hence, if we lived in water, we should perceive a sweet object introduced into the water, but the water would not be the medium through which we perceived; our perception would be due to the solution of the sweet substance in what we imbibed, just as if it were mixed with some drink. There is no parallel here to the perception of colour, which is due neither to any blending of anything with anything, nor to any efflux of anything from anything. In the case of taste, there is nothing corresponding to the medium in the case of the senses previously discussed; but as the object of sight is colour, so the object of taste is flavour. But nothing excites a perception of flavour without the help of liquid; what acts upon the sense of taste must be either actually or potentially liquid like what is saline; it must be both itself easily dissolved, and capable of dissolving along with itself the tongue. Taste apprehends both what has taste and what has no taste, if we mean by what has only a slight or feeble flavour or what tends to destroy the sense of taste. In this it is exactly parallel to sight, which apprehends both what is visible and what is invisible (for darkness is invisible and yet is discriminated by sight; so is, in a different way, what is over brilliant), and to hearing, which apprehends both sound and silence, of which the one is audible and the other inaudible, and also over-loud sound. This corresponds in the case of hearing to over-bright light in the case of sight. As a faint sound is 'inaudible', so in a sense is a loud or violent sound. The word 'invisible' and similar privative terms cover not only what is simply without some power, but also what is adapted by nature to have it but has not it or has it only in a very low degree, as when we say that a species of swallow is 'footless' or that a variety of fruit is 'stoneless'. So too taste has as its object both what can be tasted and the tasteless—the latter in the sense of what has little flavour or a bad flavour or one destructive of taste. The difference between what is tasteless and what is not seems to rest ultimately on that between what is drinkable and what is undrinkable—both are tasteable, but the latter is bad and tends to destroy taste, while the former is the normal stimulus of taste. What is drinkable is the common object of both touch and taste.

Since what can be tasted is liquid, the organ for its perception cannot be either actually liquid or incapable of becoming liquid. Tasting means a being affected by what can be tasted as such; hence the organ of taste must be liquefied, and so to start with must be non-liquid but capable of liquefaction without loss of its distinctive nature. This is confirmed by the fact that the tongue cannot taste either when it is too dry or when it is too moist; in the latter case what occurs is due to a contact with the pre-existent moisture in the tongue itself, when after a foretaste of some strong flavour we try to taste another flavour; it is in this way that sick persons find everything they taste bitter, viz. because, when they taste, their tongues are overflowing with bitter moisture.

The species of flavour are, as in the case of colour, simple, i.e. the two contraries, the sweet and the bitter, secondary, viz. on the side of the sweet, the succulent, on the side of the bitter, the saline, between these come the pungent, the harsh, the astringent, and the acid; these pretty well exhaust the varieties of flavour. It follows that what has the power of tasting is what is potentially of that kind, and that what is tasteable is what has the power of making it actually what it itself already is.

## CHAPTER 11



Whatever can be said of what is tangible, can be said of touch, and vice versa; if touch is not a single sense but a group of senses, there must be several kinds of what is tangible. It is a problem whether touch is a single sense or a group of senses. It is also a problem, what is the organ of touch; is it or is it not the flesh (including what in certain animals is homologous with flesh)? On the second view, flesh is 'the medium' of touch, the real organ being situated farther inward. The problem arises because the field of each sense is according to the accepted view determined as the range between a single pair of contraries, white and black for sight, acute and grave for hearing, bitter and sweet for taste; but in the field of what is tangible we find several such pairs, hot cold, dry moist, hard soft, &c. This problem finds a partial solution, when it is recalled that in the case of the other senses more than one pair of contraries are to be met with, e.g. in sound not only acute and grave but loud and soft, smooth and rough, &c.; there are similar contrasts in the field of colour. Nevertheless we are unable clearly to detect in the case of touch what the single subject is which underlies the contrasted qualities and corresponds to sound in the case of hearing.

To the question whether the organ of touch lies inward or not (i.e. whether we need look any farther than the flesh), no indication in favour of the second answer can be drawn from the fact that if the object comes into contact with the flesh it is at once perceived. For even under present conditions if the experiment is made of making a web and stretching it tight over the flesh, as soon as this web is touched the sensation is reported in the same manner as before, yet it is clear that the organ is not in this membrane. If the membrane could be grown on to the flesh, the report would travel still quicker. The flesh plays in touch very much the same part as would be played in the other senses by an air-envelope growing round our body; had we such an envelope attached to us we should have supposed that it was by a single organ that we perceived sounds, colours, and smells, and we should have taken sight, hearing, and smell to be a single sense. But as it is, because that through which the different movements are transmitted is not naturally attached to our bodies, the difference of the various sense-organs is too plain to miss. But in the case of touch the obscurity remains.

There must be such a naturally attached 'medium' as flesh, for no living body could be constructed of air or water; it must be something solid. Consequently it must be composed of earth along with these, which is just what flesh and its analogue in animals which have no true flesh tend to be. Hence of necessity the medium through which are transmitted the manifoldly contrasted tactual qualities must be a body naturally attached to the organism. That they are manifold is clear when we consider touching with the tongue; we apprehend at the tongue all tangible qualities as well as flavour. Suppose all the rest of our flesh was, like the tongue, sensitive to flavour, we should have identified the sense of taste and the sense of touch; what saves us from this identification is the fact that touch and taste are not always found together in the same part of the body. The following problem might be raised. Let us assume that every body has depth, i.e. has three dimensions, and that if two bodies have a third body between them they cannot be in contact with one another; let us remember that what is liquid is a body and must be or contain water, and that if two bodies touch one another under water, their touching surfaces cannot be dry, but must have water between, viz. the water which wets their bounding surfaces; from all this it follows that in water two bodies cannot be in contact with one another. The same holds of two bodies in air—air being to bodies in air precisely what water is to bodies in water—but the facts are not so evident to our observation, because we live in air, just as animals that live in water would not notice that the things which touch one another in water have wet surfaces. The problem, then, is: does the perception of all objects of sense take place in the same way, or does it not, e.g. taste and touch requiring contact (as they are commonly thought to do), while all other senses perceive over a distance? The distinction is unsound; we perceive what is hard or soft, as well as the objects of hearing, sight, and smell, through a 'medium', only that the latter are perceived over a greater distance than the former; that is why the facts escape our notice. For we do perceive everything through a medium; but in these cases the fact escapes us. Yet, to repeat what we said before, if the medium for touch were a membrane separating us from the object without our observing its existence, we should be relatively to it in the same condition as we are now to air or water in which we are immersed; in their case we fancy we can touch objects, nothing coming in between us and them. But there remains this difference between what can be touched and what can be seen or can sound; in the latter two cases we perceive because the medium produces a certain effect upon us, whereas in the perception of objects of touch we are affected not by but along with the medium; it is as if a man were struck through his shield, where the shock is not first given to the shield and passed on to the man, but the concussion of both is simultaneous.

In general, flesh and the tongue are related to the real organs of touch and taste, as air and water are to those of sight, hearing, and smell. Hence in neither the one case nor the other can there be any perception of an object if it is placed immediately upon the organ, e.g. if a white object is placed on the surface of the eye. This again shows that what has the power of perceiving the tangible is seated inside. Only so would there be a complete analogy with all the other senses. In their case if you place the object on the organ it is not perceived, here if you place it on the flesh it is perceived; therefore flesh is not the organ but the medium of touch.

What can be touched are distinctive qualities of body as body; by such differences I mean those which characterize the elements, viz, hot cold, dry moist, of which we have spoken earlier in our treatise on the elements. The organ for the perception of these is that of touch—that part of the body in which primarily the sense of touch resides. This is that part which is potentially such as its object is actually: for all sense-perception is a process of being so affected; so that that which makes something such as it itself actually is makes the other such because the other is already potentially such. That is why when an object of touch is equally hot and cold or hard and soft we cannot perceive; what we perceive must have a degree of the sensible quality lying beyond the neutral point. This implies that the sense itself is a 'mean' between any two opposite qualities which determine the field of that sense. It is to this that it owes its power of discerning the objects in that field. What is 'in the middle' is fitted to discern; relatively to either extreme it can put itself in the place of the other. As what is to perceive both white and black must, to begin with, be actually neither but potentially either (and so with all the other sense-organs), so the organ of touch must be neither hot nor cold.

Further, as in a sense sight had for its object both what was visible and what was invisible (and there was a parallel truth about all the other senses discussed), so touch has for its object both what is tangible and what is intangible. Here by 'intangible' is meant what like air possesses some quality of tangible things in a very slight degree and what possesses it in an excessive degree, as destructive things do.

We have now given an outline account of each of the several senses.

## CHAPTER 12

The following results applying to any and every sense may now be formulated.

(A) By a 'sense' is meant what has the power of receiving into itself the sensible forms of things without the matter. This must be conceived of as taking place in the way in which a piece of wax takes on the impress of a signet-ring without the iron or gold; we say that what produces the impression is a signet of bronze or gold, but its particular metallic constitution makes no difference: in a similar way the sense is affected by what is coloured or flavoured or sounding, but it is indifferent what in each case the substance is; what alone matters is what quality it has, i.e. in what ratio its constituents are combined.

(B) By 'an organ of sense' is meant that in which ultimately such a power is seated.

The sense and its organ are the same in fact, but their essence is not the same. What perceives is, of course, a spatial magnitude, but we must not admit that either the having the power to perceive or the sense itself is a magnitude; what they are is a certain ratio or power in a magnitude. This enables us to explain why objects of sense which possess one of two opposite sensible qualities in a degree largely in excess of the other opposite destroy the organs of sense; if the movement set up by an object is too strong for the organ, the equipoise of contrary qualities in the organ, which just is its sensory power, is disturbed; it is precisely as concord and tone are destroyed by too violently twanging the strings of a lyre. This explains also why plants cannot perceive, in spite of their having a portion of soul in them and obviously being affected by tangible objects themselves; for undoubtedly their temperature can be lowered or raised. The explanation is that they have no mean of contrary qualities, and so no principle in them capable of taking on the forms of sensible objects without their matter; in the case of plants the affection is an affection by form-and-matter together. The problem might be raised: Can what cannot smell be said to be affected by smells or what cannot see by colours, and so on? It might be said that a smell is just what can be smelt, and if it produces any effect it can only be so as to make something smell it, and it might be argued that what cannot smell cannot be affected by smells and further that what can smell can be affected by it only in so far as it has in it the power to smell (similarly with the proper objects of all the other senses). Indeed that this is so is made quite evident as follows. Light or darkness, sounds and smells leave bodies quite unaffected; what does affect bodies is not these but the bodies which are their vehicles, e.g. what splits the trunk of a tree is not the sound of the thunder but the air which accompanies thunder. Yes, but, it may be objected, bodies are affected by what is tangible and by flavours. If not, by what are things that are without soul affected, i.e. altered in quality? Must we not, then, admit that the objects of the other senses also may affect them? Is not the true account this, that all bodies are capable of being affected by smells and sounds, but that some on being acted upon, having no boundaries of their own, disintegrate, as in the instance of air, which does become odorous, showing that some effect is produced on it by what is odorous? But smelling is more than such an affection by what is odorous—what more? Is not the answer that, while the air owing to the momentary duration of the action upon it of what is odorous does itself become perceptible to the sense of smell, smelling is an observing of the result produced?

## BOOK III

### CHAPTER 1

That there is no sixth sense in addition to the five enumerated—sight, hearing, smell, taste, touch—may be established by the following considerations:

If we have actually sensation of everything of which touch can give us sensation (for all the qualities of the tangible qua tangible are perceived by us through touch); and if absence of a sense necessarily involves absence of a sense-organ; and if all objects that we perceive by immediate contact with them are perceptible by touch, which sense we actually possess, and all objects that we perceive through media, i.e. without immediate contact, are perceptible by or through the simple elements, e.g. air and water (and this is so arranged that if more than one kind of sensible object is perceivable through a single medium, the possessor of a sense-organ homogeneous with that medium has the power of perceiving both kinds of objects; for example, if the sense-organ is made of air, and air is a medium both for sound and for colour; and that if more than one medium can transmit the same kind of sensible objects, as e.g. water as well as air can transmit colour, both being transparent, then the possessor of either alone will be able to perceive the kind of objects transmissible through both); and if of the simple elements two only, air and water, go to form sense-organs (for the pupil is made of water, the organ of hearing is made of air, and the organ of smell of one or other of these two, while fire is found either in none or in all—warmth being an essential condition of all sensibility—and earth either in none or, if anywhere, specially mingled with the components of the organ of touch; wherefore it would remain that there can be no sense-organ formed of anything except water and air); and if these sense-organs are actually found in certain animals;—then all the possible senses are possessed by those animals that are not imperfect or mutilated (for even the mole is observed to have eyes beneath its skin); so that, if there is no fifth element and no property other than those which belong to the four elements of our world, no sense can be wanting to such animals.

Further, there cannot be a special sense-organ for the common sensibles either, i.e. the objects which we perceive incidentally through this or that special sense, e.g. movement, rest, figure, magnitude, number, unity; for all these we perceive by movement, e.g. magnitude by movement, and therefore also figure (for figure is a species of magnitude), what is at rest by the absence of movement: number is perceived by the negation of continuity, and by the special sensibles; for each sense perceives one class of sensible objects. So that it is clearly impossible that there should be a special sense for any one of the common sensibles, e.g. movement; for, if that were so, our perception of it would be exactly parallel to our present perception of what is sweet by vision. That is so because we have a sense for each of the two qualities, in virtue of which when they happen to meet in one sensible object we are aware of both contemporaneously. If it were not like this our perception of the common qualities would always be incidental, i.e. as is the perception of Cleon<sup>1</sup>'s son, where we perceive him not as Cleon's son but as white, and the white thing which we really perceive happens to be Cleon's son.

But in the case of the common sensibles there is already in us a general sensibility which enables us to perceive them directly; there is therefore no special sense required for their perception: if there were, our perception of them would have been exactly like what has been above described.

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<sup>1</sup> 克里昂 (Cleon, ?—422BC) , 雅典政治领袖、统帅, Pericles死后成为雅典民主派首领, 伯罗奔尼撒战争中极力主战, 曾大败斯巴达军于Sphacteria岛, 后战败身亡。

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The senses perceive each other's special objects incidentally; not because the percipient sense is this or that special sense, but because all form a unity: this incidental perception takes place whenever sense is directed at one and the same moment to two disparate qualities in one and the same object, e.g. to the bitterness and the yellowness of bile, the assertion of the identity of both cannot be the act of either of the senses; hence the illusion of sense, e.g. the belief that if a thing is yellow it is bile.



It might be asked why we have more senses than one. Is it to prevent a failure to apprehend the common sensibles, e.g. movement, magnitude, and number, which go along with the special sensibles? Had we no sense but sight, and that sense no object but white, they would have tended to escape our notice and everything would have merged for us into an indistinguishable identity because of the concomitance of colour and magnitude. As it is, the fact that the common sensibles are given in the objects of more than one sense reveals their distinction from each and all of the special sensibles.

## CHAPTER 2

Since it is through sense that we are aware that we are seeing or hearing, it must be either by sight that we are aware of seeing, or by some sense other than sight. But the sense that gives us this new sensation must perceive both sight and its object, viz. colour: so that either there will be two senses both percipient of the same sensible object, or the sense must be percipient of itself. Further, even if the sense which perceives sight were different from sight, we must either fall into an infinite regress, or we must somewhere assume a sense which is aware of itself. If so, we ought to do this in the first case.

This presents a difficulty: if to perceive by sight is just to see, and what is seen is colour (or the coloured), then if we are to see that which sees, that which sees originally must be coloured. It is clear therefore that 'to perceive by sight' has more than one meaning; for even when we are not seeing, it is by sight that we discriminate darkness from light, though not in the same way as we distinguish one colour from another. Further, in a sense even that which sees is coloured; for in each case the sense-organ is capable of receiving the sensible object without its matter. That is why even when the sensible objects are gone the sensings and imaginings continue to exist in the sense-organs.

The activity of the sensible object and that of the percipient sense is one and the same activity, and yet the distinction between their being remains. Take as illustration actual sound and actual hearing: a man may have hearing and yet not be hearing, and that which has a sound is not always sounding. But when that which can hear is actively hearing and which can sound is sounding, then the actual hearing and the actual sound are merged in one (these one might call respectively hearkening and sounding).



If it is true that the movement, both the acting and the being acted upon, is to be found in that which is acted upon, both the sound and the hearing so far as it is actual must be found in that which has the faculty of hearing; for it is in the passive factor that the actuality of the active or motive factor is realized; that is why that which causes movement may be at rest. Now the actuality of that which can sound is just sound or sounding, and the actuality of that which can hear is hearing or hearkening; 'sound' and 'hearing' are both ambiguous. The same account applies to the other senses and their objects. For as the-acting-and-being-acted-upon is to be found in the passive, not in the active factor, so also the actuality of the sensible object and that of the sensitive subject are both realized in the latter. But while in some cases each aspect of the total actuality has a distinct name, e.g. sounding and hearkening, in some one or other is nameless, e.g. the actuality of sight is called seeing, but the actuality of colour has no name: the actuality of the faculty of taste is called tasting, but the actuality of flavour has no name. Since the actualities of the sensible object and of the sensitive faculty are one actuality in spite of the difference between their modes of being, actual hearing and actual sounding appear and disappear from existence at one and the same moment, and so actual savour and actual tasting, &c., while as potentialities one of them may exist without the other. The earlier students of nature were mistaken in their view that without sight there was no white or black, without taste no savour. This statement of theirs is partly true, partly false: 'sense' and 'the sensible object' are ambiguous terms, i.e. may denote either potentialities or actualities: the statement is true of the latter, false of the former. This ambiguity they wholly failed to notice.

If voice always implies a concord, and if the voice and the hearing of it are in one sense one and the same, and if concord always implies a ratio, hearing as well as what is heard must be a ratio. That is why the excess of either the sharp or the flat destroys the hearing. (So also in the case of savours excess destroys the sense of taste, and in the case of colours excessive brightness or darkness destroys the sight, and in the case of smell excess of strength whether in the direction of sweetness or bitterness is destructive.) This shows that the sense is a ratio.

That is also why the objects of sense are pleasant when the sensible extremes such as acid or sweet or salt being pure and unmixed are brought into the proper ratio; then they are pleasant: and in general what is blended is more pleasant than the sharp or the flat alone; or, to touch, that which is capable of being either warmed or chilled: the sense and the ratio are identical: while in excess the sensible extremes are painful or destructive.

Each sense then is relative to its particular group of sensible qualities: it is found in a sense-organ as such and discriminates the differences which exist within that group; e.g. sight discriminates white and black, taste sweet and bitter, and so in all cases. Since we also discriminate white from sweet, and indeed each sensible quality from every other, with what do we perceive that they are different? It must be by sense; for what is before us is sensible objects. (Hence it is also obvious that the flesh cannot be the ultimate sense-organ: if it were, the discriminating power could not do its work without immediate contact with the object.)

Therefore discrimination between white and sweet cannot be effected by two agencies which remain separate; both the qualities discriminated must be present to something that is one and single. On any other supposition even if I perceived sweet and you perceived white, the difference between them would be apparent. What says that two things are different must be one; for sweet is different from white. Therefore what asserts this difference must be self-identical, and as what asserts, so also what thinks or perceives. That it is not possible by means of two agencies which remain separate to discriminate two objects which are separate, is therefore obvious; and that it is not possible to do this in separate movements of time may be seen if we look at it as follows. For as what asserts the difference between the good and the bad is one and the same, so also the time at which it asserts the one to be different and the other to be different is not accidental to the assertion (as it is for instance when I now assert a difference but do not assert that there is now a difference); it asserts thus—both now and that the objects are different now; the objects therefore must be present at one and the same moment. Both the discriminating power and the time of its exercise must be one and undivided.

But, it may be objected, it is impossible that what is self-identical should be moved at one and the same time with contrary movements in so far as it is undivided, and in an undivided moment of time. For if what is sweet be the quality perceived, it moves the sense or thought in this determinate way, while what is bitter moves it in a contrary way, and what is white in a different way. Is it the case then that what discriminates, though both numerically one and indivisible, is at the same time divided in its being? In one sense, it is what is divided that perceives two separate objects at once, but in another sense it does so qua undivided; for it is divisible in its being, but spatially and numerically undivided. But is not this impossible? For while it is true that what is self-identical and undivided may be both contraries at once potentially, it cannot be self-identical in its being—it must lose its unity by being put into activity. It is not possible to be at once white and black, and therefore it must also be impossible for a thing to be affected at one and the same moment by the forms of both, assuming it to be the case that sensation and thinking are properly so described.

The answer is that just as what is called a 'point' is, as being at once one and two, properly said to be divisible, so here, that which discriminates is qua undivided one, and active in a single moment of time, while so far forth as it is divisible it twice over uses the same dot at one and the same time. So far forth then as it takes the limit as two, it discriminates two separate objects with what in a sense is divided: while so far as it takes it as one, it does so with what is one and occupies in its activity a single moment of time.

About the principle in virtue of which we say that animals are percipient, let this discussion suffice.

## CHAPTER 3

There are two distinctive peculiarities by reference to which we characterize the soul — local movement and thinking, discriminating, and perceiving. Thinking both speculative and practical is regarded as akin to a form of perceiving; for in the one as well as the other the soul discriminates and is cognizant of something which is. Indeed the ancients go so far as to identify thinking and perceiving; e.g. Empedocles says 'For 'tis in respect of what is present that man's wit is increased', and again 'Whence it befalls them from time to time to think diverse thoughts', and Homer's phrase 'For suchlike is man's mind' means the same. They all look upon thinking as a bodily process like perceiving, and hold that like is known as well as perceived by like, as I explained at the beginning of our discussion. Yet they ought at the same time to have accounted for error also; for it is more intimately connected with animal existence and the soul continues longer in the state of error than in that of truth. They cannot escape the dilemma: either whatever seems is true (and there are some who accept this) or error is contact with the unlike; for that is the opposite of the knowing of like by like.

But it is a received principle that error as well as knowledge in respect to contraries is one and the same.

That perceiving and practical thinking are not identical is therefore obvious; for the former is universal in the animal world, the latter is found in only a small division of it. Further, speculative thinking is also distinct from perceiving—I mean that in which we find rightness and wrongness—rightness in prudence, knowledge, true opinion, wrongness in their opposites; for perception of the special objects of sense is always free from error, and is found in all animals, while it is possible to think falsely as well as truly, and thought is found only where there is discourse of reason as well as sensibility. For imagination is different from either perceiving or discursive thinking, though it is not found without sensation, or judgement without it. That this activity is not the same kind of thinking as judgement is obvious. For imagining lies within our own power whenever we wish (e.g. we can call up a picture, as in the practice of mnemonics by the use of mental images), but in forming opinions we are not free: we cannot escape the alternative of falsehood or truth. Further, when we think something to be fearful or threatening, emotion is immediately produced, and so too with what is encouraging; but when we merely imagine we remain as unaffected as persons who are looking at a painting of some dreadful or encouraging scene. Again within the field of judgement itself we find varieties—knowledge, opinion, prudence, and their opposites; of the differences between these I must speak elsewhere.

Thinking is different from perceiving and is held to be in part imagination, in part judgement: we must therefore first mark off the sphere of imagination and then speak of judgement. If then imagination is that in virtue of which an image arises for us, excluding metaphorical uses of the term, is it a single faculty or disposition relative to images, in virtue of which we discriminate and are either in error or not? The faculties in virtue of which we do this are sense, opinion, science, intelligence.

That imagination is not sense is clear from the following considerations: Sense is either a faculty or an activity, e.g. sight or seeing: imagination takes place in the absence of both, as e.g. in dreams. Again, sense is always present, imagination not. If actual imagination and actual sensation were the same, imagination would be found in all the brutes: this is held not to be the case; e.g. it is not found in ants or bees or grubs. Again, sensations are always true, imaginations are for the most part false. Once more, even in ordinary speech, we do not, when sense functions precisely with regard to its object, say that we imagine it to be a man, but rather when there is some failure of accuracy in its exercise. And, as we were saying before, visions appear to us even when our eyes are shut. Neither is imagination any of the things that are never in error: e.g. knowledge or intelligence; for imagination may be false.

It remains therefore to see if it is opinion, for opinion may be either true or false.

But opinion involves belief (for without belief in what we opine we cannot have an opinion), and in the brutes though we often find imagination we never find belief. Further, every opinion is accompanied by belief, belief by conviction, and conviction by discourse of reason: while there are some of the brutes in which we find imagination, without discourse of reason. It is clear then that imagination cannot, again, be opinion plus sensation, or opinion mediated by sensation, or a blend of opinion and sensation; this is impossible both for these reasons and because the content of the supposed opinion cannot be different from that of the sensation (I mean that imagination must be the blending of the perception of white with the opinion that it is white: it could scarcely be a blend of the opinion that it is good with the perception that it is white): to imagine is therefore (on this view) identical with the thinking of exactly the same as what one in the strictest sense perceives. But what we imagine is sometimes false though our contemporaneous judgement about it is true; e.g. we imagine the sun to be a foot in diameter though we are convinced that it is larger than the inhabited part of the earth, and the following dilemma presents itself. Either while the fact has not changed and the observer has neither forgotten nor lost belief in the true opinion which he had, that opinion has disappeared, or if he retains it then his opinion is at once true and false. A true opinion, however, becomes false only when the fact alters without being noticed.

Imagination is therefore neither any one of the states enumerated, nor compounded out of them.

But since when one thing has been set in motion another thing may be moved by it, and imagination is held to be a movement and to be impossible without sensation, i.e. to occur in beings that are percipient and to have for its content what can be perceived, and since movement may be produced by actual sensation and that movement is necessarily similar in character to the sensation itself, this movement must be necessarily incapable of existing apart from sensation, incapable of existing except when we perceive, such that in virtue of its possession that in which it is found may present various phenomena both active and passive, and such that it may be either true or false.

The reason of the last characteristic is as follows. Perception of the special objects of sense is never in error or admits the least possible amount of falsehood. That of the concomitance of the objects concomitant with the sensible qualities comes next: in this case certainly we may be deceived; for while the perception that there is white before us cannot be false, the perception that what is white is this or that may be false. Third comes the perception of the universal attributes which accompany the concomitant objects to which the special sensibles attach (I mean e.g. of movement and magnitude); it is in respect of these that the greatest amount of sense-illusion is possible.

The motion which is due to the activity of sense in these three modes of its exercise will differ from the activity of sense; the first kind of derived motion is free from error while the sensation is present; the others may be erroneous whether it is present or absent, especially when the object of perception is far off. If then imagination presents no other features than those enumerated and is what we have described, then imagination must be a movement resulting from an actual exercise of a power of sense.

As sight is the most highly developed sense, the name phantasia (imagination) has been formed from phaos (light) because it is not possible to see without light.

And because imaginations remain in the organs of sense and resemble sensations, animals in their actions are largely guided by them, some (i.e. the brutes) because of the non-existence in them of mind, others (i.e. men) because of the temporary eclipse in them of mind by feeling or disease or sleep.

About imagination, what it is and why it exists, let so much suffice.

## CHAPTER 4

Turning now to the part of the soul with which the soul knows and thinks (whether this is separable from the others in definition only, or spatially as well) we have to inquire what differentiates this part, and how thinking can take place.

If thinking is like perceiving, it must be either a process in which the soul is acted upon by what is capable of being thought, or a process different from but analogous to that. The thinking part of the soul must therefore be, while impassible, capable of receiving the form of an object; that is, must be potentially identical in character with its object without being the object. Mind must be related to what is thinkable, as sense is to what is sensible.

Therefore, since everything is a possible object of thought, mind in order, as Anaxagoras says, to dominate, that is, to know, must be pure from all admixture; for the co-presence of what is alien to its nature is a hindrance and a block: it follows that it too, like the sensitive part, can have no nature of its own, other than that of having a certain capacity. Thus that in the soul which is called mind (by mind I mean that whereby the soul thinks and judges) is, before it thinks, not actually any real thing. For this reason it cannot reasonably be regarded as blended with the body: if so, it would acquire some quality, e.g. warmth or cold, or even have an organ like the sensitive faculty: as it is, it has none. It was a good idea to call the soul 'the place of forms', though this description holds only of the intellective soul, and even this is the forms only potentially, not actually.

Observation of the sense-organs and their employment reveals a distinction between the impassibility of the sensitive and that of the intellective faculty. After strong stimulation of a sense we are less able to exercise it than before, as e.g. in the case of a loud sound we cannot hear easily immediately after, or in the case of a bright colour or a powerful odour we cannot see or smell, but in the case of mind thought about an object that is highly intelligible renders it more and not less able afterwards to think objects that are less intelligible: the reason is that while the faculty of sensation is dependent upon the body, mind is separable from it.

Once the mind has become each set of its possible objects, as a man of science has, when this phrase is used of one who is actually a man of science (this happens when he is now able to exercise the power on his own initiative), its condition is still one of potentiality, but in a different sense from the potentiality which preceded the acquisition of knowledge by learning or discovery: the mind too is then able to think itself.

Since we can distinguish between a spatial magnitude and what it is to be such, and between water and what it is to be water, and so in many other cases (though not in all; for in certain cases the thing and its form are identical), flesh and what it is to be flesh are discriminated either by different faculties, or by the same faculty in two different states: for flesh necessarily involves matter and is like what is snub-nosed, a this in a this. Now it is by means of the sensitive faculty that we discriminate the hot and the cold, i.e. the factors which combined in a certain ratio constitute flesh: the essential character of flesh is apprehended by something different either wholly separate from the sensitive faculty or related to it as a bent line to the same line when it has been straightened out.



Again in the case of abstract objects what is straight is analogous to what is snub-nosed; for it necessarily implies a continuum as its matter: its constitutive essence is different, if we may distinguish between straightness and what is straight: let us take it to be two-ness. It must be apprehended, therefore, by a different power or by the same power in a different state. To sum up, in so far as the realities it knows are capable of being separated from their matter, so it is also with the powers of mind.

The problem might be suggested: if thinking is a passive affection, then if mind is simple and impassible and has nothing in common with anything else, as Anaxagoras says, how can it come to think at all? For interaction between two factors is held to require a precedent community of nature between the factors. Again it might be asked, is mind a possible object of thought to itself? For if mind is thinkable per se and what is thinkable is in kind one and the same, then either mind will belong to everything, or mind will contain some element common to it with all other realities which makes them all thinkable.

Have not we already disposed of the difficulty about interaction involving a common element, when we said that mind is in a sense potentially whatever is thinkable, though actually it is nothing until it has thought? What it thinks must be in it just as characters may be said to be on a writing tablet on which as yet nothing actually stands written: this is exactly what happens with mind.

Mind is itself thinkable in exactly the same way as its objects are. For in the case of objects which involve no matter, what thinks and what is thought are identical; for speculative knowledge and its object are identical. (Why mind is not always thinking we must consider later.) In the case of those which contain matter each of the objects of thought is only potentially present. It follows that while they will not have mind in them (for mind is a potentiality of them only in so far as they are capable of being disengaged from matter) mind may yet be thinkable.

## CHAPTER 5

Since in every class of things, as in nature as a whole, we find two factors involved, a matter which is potentially all the particulars included in the class, a cause which is productive in the sense that it makes them all (the latter standing to the former, as e.g. an art to its material), these distinct elements must likewise be found within the soul.

And in fact mind as we have described it is what it is by virtue of becoming all things, while there is another which is what it is by virtue of making all things: this is a sort of positive state like light; for in a sense light makes potential colours into actual colours.

Mind in this sense of it is separable, impassible, unmixed, since it is in its essential nature activity (for always the active is superior to the passive factor, the originating force to the matter which it forms).

Actual knowledge is identical with its object: in the individual, potential knowledge is in time prior to actual knowledge, but in the universe as a whole it is not prior even in time. Mind is not at one time knowing and at another not. When mind is set free from its present conditions it appears as just what it is and nothing more: this alone is immortal and eternal (we do not, however, remember its former activity because, while mind in this sense is impassible, mind as passive is destructible), and without it nothing thinks.

## CHAPTER 6

The thinking then of the simple objects of thought is found in those cases where falsehood is impossible: where the alternative of true or false applies, there we always find a putting together of objects of thought in a quasi-unity. As Empedocles said that 'where heads of many a creature sprouted without necks' they afterwards by Love's power were combined, so here too objects of thought which were given separate are combined, e.g. 'incommensurate' and 'diagonal': if the combination be of objects past or future the combination of thought includes in its content the date. For falsehood always involves a synthesis; for even if you assert that what is white is not white you have included not white in a synthesis. It is possible also to call all these cases division as well as combination. However that may be, there is not only the true or false assertion that Cleon is white but also the true or false assertion that he was or will be white. In each and every case that which unifies is mind.

Since the word 'simple' has two senses, i.e. may mean either 'not capable of being divided' or 'not actually divided', there is nothing to prevent mind from knowing what is undivided, e.g. when it apprehends a length (which is actually undivided) and that in an undivided time; for the time is divided or undivided in the same manner as the line. It is not possible, then, to tell what part of the line it was apprehending in each half of the time: the object has no actual parts until it has been divided: if in thought you think each half separately, then by the same act you divide the time also, the half-lines becoming as it were new wholes of length. But if you think it as a whole consisting of these two possible parts, then also you think it in a time which corresponds to both parts together. (But what is not quantitatively but qualitatively simple is thought in a simple time and by a simple act of the soul.)

But that which mind thinks and the time in which it thinks are in this case divisible only incidentally and not as such. For in them too there is something indivisible (though, it may be, not isolable) which gives unity to the time and the whole of length; and this is found equally in every continuum whether temporal or spatial.

Points and similar instances of things that divide, themselves being indivisible, are realized in consciousness in the same manner as privations.

A similar account may be given of all other cases, e.g. how evil or black is cognized; they are cognized, in a sense, by means of their contraries. That which cognizes must have an element of potentiality in its being, and one of the contraries must be in it. But if there is anything that has no contrary, then it knows itself and is actually and possesses independent existence.

Assertion is the saying of something concerning something, e.g. affirmation, and is in every case either true or false: this is not always the case with mind: the thinking of the definition in the sense of the constitutive essence is never in error nor is it the assertion of something concerning something, but, just as while the seeing of the special object of sight can never be in error, the belief that the white object seen is a man may be mistaken, so too in the case of objects which are without matter.

## CHAPTER 7

Actual knowledge is identical with its object: potential knowledge in the individual is in time prior to actual knowledge but in the universe it has no priority even in time; for all things that come into being arise from what actually is. In the case of sense clearly the sensitive faculty already was potentially what the object makes it to be actually; the faculty is not affected or altered. This must therefore be a different kind from movement; for movement is, as we saw, an activity of what is imperfect, activity in the unqualified sense, i.e. that of what has been perfected, is different from movement.

To perceive then is like bare asserting or knowing; but when the object is pleasant or painful, the soul makes a quasi-affirmation or negation, and pursues or avoids the object. To feel pleasure or pain is to act with the sensitive mean towards what is good or bad as such. Both avoidance and appetite when actual are identical with this: the faculty of appetite and avoidance are not different, either from one another or from the faculty of sense-perception; but their being is different.

To the thinking soul images serve as if they were contents of perception (and when it asserts or denies them to be good or bad it avoids or pursues them). That is why the soul never thinks without an image. The process is like that in which the air modifies the pupil in this or that way and the pupil transmits the modification to some third thing (and similarly in hearing), while the ultimate point of arrival is one, a single mean, with different manners of being.

With what part of itself the soul discriminates sweet from hot I have explained before and must now describe again as follows: That with which it does so is a sort of unity, but in the way just mentioned, i.e. as a connecting term. And the two faculties it connects, being one by analogy and numerically, are each to each as the qualities discerned are to one another (for what difference does it make whether we raise the problem of discrimination between disparates or between contraries, e.g. white and black?). Let then C be to D as A is to B : it follows alternando that  $C : A = D : B$  . If then C and D belong to one subject, the case will be the same with them as with A and B ; A and B form a single identity with different modes of being; so too will the former pair. The same reasoning holds if A be sweet and B white.

The faculty of thinking then thinks the forms in the images, and as in the former case what is to be pursued or avoided is marked out for it, so where there is no sensation and it is engaged upon the images it is moved to pursuit or avoidance. E.g. perceiving by sense that the beacon is fire, it recognizes in virtue of the general faculty of sense that it signifies an enemy, because it sees it moving; but sometimes by means of the images or thoughts which are within the soul, just as if it were seeing, it calculates and deliberates what is to come by reference to what is present; and when it makes a pronouncement, as in the case of sensation it pronounces the object to be pleasant or painful, in this case it avoids or pursues and so generally in cases of action.

That too which involves no action, i.e. that which is true or false, is in the same province with what is good or bad: yet they differ in this, that the one set imply and the other do not a reference to a particular person.

The so-called abstract objects the mind thinks just as, if one had thought of the snubnosed not as snub-nosed but as hollow, one would have thought of an actuality without the flesh in which it is embodied: it is thus that the mind when it is thinking the objects of Mathematics thinks as separate elements which do not exist separate. In every case the mind which is actively thinking is the objects which it thinks. Whether it is possible for it while not existing separate from spatial conditions to think anything that is separate, or not, we must consider later.

## CHAPTER 8

Let us now summarize our results about soul, and repeat that the soul is in a way all existing things; for existing things are either sensible or thinkable, and knowledge is in a way what is knowable, and sensation is in a way what is sensible: in what way we must inquire.

Knowledge and sensation are divided to correspond with the realities, potential knowledge and sensation answering to potentialities, actual knowledge and sensation to actualities. Within the soul the faculties of knowledge and sensation are potentially these objects, the one what is knowable, the other what is sensible. They must be either the things themselves or their forms. The former alternative is of course impossible: it is not the stone which is present in the soul but its form.

It follows that the soul is analogous to the hand; for as the hand is a tool of tools, so the mind is the form of forms and sense the form of sensible things.

Since according to common agreement there is nothing outside and separate in existence from sensible spatial magnitudes, the objects of thought are in the sensible forms, viz. both the abstract objects and all the states and affections of sensible things. Hence no one can learn or understand anything in the absence of sense, and when the mind is actively aware of anything it is necessarily aware of it along with an image; for images are like sensuous contents except in that they contain no matter.

Imagination is different from assertion and denial; for what is true or false involves a synthesis of concepts. In what will the primary concepts differ from images? Must we not say that neither these nor even our other concepts are images, though they necessarily involve them?

## CHAPTER 9

The soul of animals is characterized by two faculties, the faculty of discrimination which is the work of thought and sense, and the faculty of originating local movement. Sense and mind we have now sufficiently examined. Let us next consider what it is in the soul which originates movement. Is it a single part of the soul separate either spatially or in definition? Or is it the soul as a whole? If it is a part, is that part different from those usually distinguished or already mentioned by us, or is it one of them? The problem at once presents itself, in what sense we are to speak of parts of the soul, or how many we should distinguish. For in a sense there is an infinity of parts: it is not enough to distinguish, with some thinkers, the calculative, the passionate, and the desiderative, or with others the rational and the irrational; for if we take the dividing lines followed by these thinkers we shall find parts far more distinctly separated from one another than these, namely those we have just mentioned: the nutritive, which belongs both to plants and to all animals, and the sensitive, which cannot easily be classed as either irrational or rational; further the imaginative, which is, in its being, different from all, while it is very hard to say with which of the others it is the same or not the same, supposing we determine to posit separate parts in the soul; and lastly the appetitive, which would seem to be distinct both in definition and in power from all hitherto enumerated.

It is absurd to break up the last-mentioned faculty: as these thinkers do, for wish is found in the calculative part and desire and passion in the irrational; and if the soul is tripartite appetite will be found in all three parts. Turning our attention to the present object of discussion, let us ask what that is which originates local movement of the animal.

The movement of growth and decay, being found in all living things, must be attributed to the faculty of reproduction and nutrition, which is common to all: inspiration and expiration, sleep and waking, we must consider later: these too present much difficulty: at present we must consider local movement, asking what it is that originates forward movement in the animal.

That it is not the nutritive faculty is obvious; for this kind of movement is always for an end and is accompanied either by imagination or by appetite; for no animal moves except by compulsion unless it has an impulse towards or away from an object. Further, if it were the nutritive faculty, even plants would have been capable of originating such movement and would have possessed the organs necessary to carry it out. Similarly it cannot be the sensitive faculty either; for there are many animals which have sensibility but remain fast and immovable throughout their lives.

If then Nature never makes anything without a purpose and never leaves out what is necessary (except in the case of mutilated or imperfect growths; and that here we have neither mutilation nor imperfection may be argued from the facts that such animals can reproduce their species and rise to completeness of nature and decay to an end), it follows that, had they been capable of originating forward movement, they would have possessed the organs necessary for that purpose. Further, neither can the calculative faculty or what is called 'mind' be the cause of such movement; for mind as speculative never thinks what is practicable, it never says anything about an object to be avoided or pursued, while this movement is always in something which is avoiding or pursuing an object. No, not even when it is aware of such an object does it at once enjoin pursuit or avoidance of it; e.g. the mind often thinks of something terrifying or pleasant without enjoining the emotion of fear. It is the heart that is moved (or in the case of a pleasant object some other part). Further, even when the mind does command and thought bids us pursue or avoid something, sometimes no movement is produced; we act in accordance with desire, as in the case of moral weakness. And, generally, we observe that the possessor of medical knowledge is not necessarily healing, which shows that something else is required to produce action in accordance with knowledge; the knowledge alone is not the cause. Lastly, appetite too is incompetent to account fully for movement; for those who successfully resist temptation have appetite and desire and yet follow mind and refuse to enact that for which they have appetite.

## CHAPTER 10

These two at all events appear to be sources of movement: appetite and mind (if one may venture to regard imagination as a kind of thinking; for many men follow their imaginations contrary to knowledge, and in all animals other than man there is no thinking or calculation but only imagination).



Both of these then are capable of originating local movement, mind and appetite: mind, that is, which calculates means to an end, i.e. mind practical (it differs from mind speculative in the character of its end); while appetite is in every form of it relative to an end: for that which is the object of appetite is the stimulant of mind practical; and that which is last in the process of thinking is the beginning of the action. It follows that there is a justification for regarding these two as the sources of movement, i.e. appetite and practical thought; for the object of appetite starts a movement and as a result of that thought gives rise to movement, the object of appetite being it a source of stimulation. So too when imagination originates movement, it necessarily involves appetite.

That which moves therefore is a single faculty and the faculty of appetite; for if there had been two sources of movement—mind and appetite—they would have produced movement in virtue of some common character. As it is, mind is never found producing movement without appetite (for wish is a form of appetite; and when movement is produced according to calculation it is also according to wish), but appetite can originate movement contrary to calculation, for desire is a form of appetite. Now mind is always right, but appetite and imagination may be either right or wrong. That is why, though in any case it is the object of appetite which originates movement, this object may be either the real or the apparent good. To produce movement the object must be more than this: it must be good that can be brought into being by action; and only what can be otherwise than as it is can thus be brought into being. That then such a power in the soul as has been described, i.e. that called appetite, originates movement is clear. Those who distinguish parts in the soul, if they distinguish and divide in accordance with differences of power, find themselves with a very large number of parts, a nutritive, a sensitive, an intellective, a deliberative, and now an appetitive part; for these are more different from one another than the faculties of desire and passion.

Since appetites run counter to one another, which happens when a principle of reason and a desire are contrary and is possible only in beings with a sense of time (for while mind bids us hold back because of what is future, desire is influenced by what is just at hand: a pleasant object which is just at hand presents itself as both pleasant and good, without condition in either case, because of want of foresight into what is farther away in time), it follows that while that which originates movement must be specifically one, viz. the faculty of appetite as such (or rather farthest back of all the object of that faculty; for it is it that itself remaining unmoved originates the movement by being apprehended in thought or imagination), the things that originate movement are numerically many.

All movement involves three factors, that which originates the movement, that by means of which it originates it, and that which is moved. The expression 'that which originates the movement' is ambiguous: it may mean either something which itself is unmoved or that which at once moves and is moved. Here that which moves without itself being moved is the realizable good, that which at once moves and is moved is the faculty of appetite (for that which is influenced by appetite so far as it is actually so influenced is set in movement, and appetite in the sense of actual appetite is a kind of movement), while that which is in motion is the animal. The instrument which appetite employs to produce movement is no longer psychical but bodily: hence the examination of it falls within the province of the functions common to body and soul. To state the matter summarily at present, that which is the instrument in the production of movement is to be found where a beginning and an end coincide as e.g. in a ball and socket joint; for there the convex and the concave sides are respectively an end and a beginning (that is why while the one remains at rest, the other is moved): they are separate in definition but not separable spatially. For everything is moved by pushing and pulling. Hence just as in the case of a wheel, so here there must be a point which remains at rest, and from that point the movement must originate.

To sum up, then, and repeat what I have said, inasmuch as an animal is capable of appetite it is capable of self-movement; it is not capable of appetite without possessing imagination; and all imagination is either calculative or sensitive. In the latter all animals, and not only man, partake.

## CHAPTER 11

We must consider also in the case of imperfect animals, sc. those which have no sense but touch, what it is that in them originates movement. Can they have imagination or not? Or desire? Clearly they have feelings of pleasure and pain, and if they have these they must have desire. But how can they have imagination? Must not we say that, as their movements are indefinite, they have imagination and desire, but indefinitely?

Sensitive imagination, as we have said, is found in all animals, deliberative imagination only in those that are calculative: for whether this or that shall be enacted is already a task requiring calculation; and there must be a single standard to measure by, for that is pursued which is greater. It follows that what acts in this way must be able to make a unity out of several images.

This is the reason why imagination is held not to involve opinion, in that it does not involve opinion based on inference, though opinion involves imagination. Hence appetite contains no deliberative element. Sometimes it overpowers wish and sets it in movement: at times wish acts thus upon appetite, like one sphere imparting its movement to another, or appetite acts thus upon appetite, i.e. in the condition of moral weakness (though by nature the higher faculty is always more authoritative and gives rise to movement). Thus three modes of movement are possible.

The faculty of knowing is never moved but remains at rest. Since the one premiss or judgement is universal and the other deals with the particular (for the first tells us that such and such a kind of man should do such and such a kind of act, and the second that this is an act of the kind meant, and I a person of the type intended), it is the latter opinion that really originates movement, not the universal; or rather it is both, but the one does so while it remains in a state more like rest, while the other partakes in movement.

## CHAPTER 12

The nutritive soul then must be possessed by everything that is alive, and every such thing is endowed with soul from its birth to its death. For what has been born must grow, reach maturity, and decay—all of which are impossible without nutrition. Therefore the nutritive faculty must be found in everything that grows and decays.

But sensation need not be found in all things that live. For it is impossible for touch to belong either to those whose body is uncompounded or to those which are incapable of taking in the forms without their matter.

But animals must be endowed with sensation, since Nature does nothing in vain. For all things that exist by Nature are means to an end, or will be concomitants of means to an end. Every body capable of forward movement would, if unendowed with sensation, perish and fail to reach its end, which is the aim of Nature; for how could it obtain nutriment? Stationary living things, it is true, have as their nutriment that from which they have arisen; but it is not possible that a body which is not stationary but produced by generation should have a soul and a discerning mind without also having sensation. (Nor yet even if it were not produced by generation. Why should it not have sensation? Because it were better so either for the body or for the soul? But clearly it would not be better for either: the absence of sensation will not enable the one to think better or the other to exist better.) Therefore no body which is not stationary has soul without sensation.

But if a body has sensation, it must be either simple or compound. And simple it cannot be; for then it could not have touch, which is indispensable. This is clear from what follows. An animal is a body with soul in it: every body is tangible, i.e. perceptible by touch; hence necessarily, if an animal is to survive, its body must have tactual sensation. All the other senses, e.g. smell, sight, hearing, apprehend through media; but where there is immediate contact the animal, if it has no sensation, will be unable to avoid some things and take others, and so will find it impossible to survive. That is why taste also is a sort of touch; it is relative to nutriment, which is just tangible body; whereas sound, colour, and odour are innutritious, and further neither grow nor decay. Hence it is that taste also must be a sort of touch, because it is the sense for what is tangible and nutritious.

Both these senses, then, are indispensable to the animal, and it is clear that without touch it is impossible for an animal to be. All the other senses subserve well-being and for that very reason belong not to any and every kind of animal, but only to some, e.g. those capable of forward movement must have them; for, if they are to survive, they must perceive not only by immediate contact but also at a distance from the object. This will be possible if they can perceive through a medium, the medium being affected and moved by the perceptible object, and the animal by the medium. Just as that which produces local movement causes a change extending to a certain point, and that which gave an impulse causes another to produce a new impulse so that the movement traverses a medium — the first mover impelling without being impelled, the last moved being impelled without impelling, while the medium (or media, for there are many) is both—so is it also in the case of alteration, except that the agent produces it without the patient's changing its place. Thus if an object is dipped into wax, the movement goes on until submersion has taken place, and in stone it goes no distance at all, while in water the disturbance goes far beyond the object dipped: in air the disturbance is propagated farthest of all, the air acting and being acted upon, so long as it maintains an unbroken unity. That is why in the case of reflection it is better, instead of saying that the sight issues from the eye and is reflected, to say that the air, so long as it remains one, is affected by the shape and colour. On a smooth surface the air possesses unity; hence it is that it in turn sets the sight in motion, just as if the impression on the wax were transmitted as far as the wax extends.

## CHAPTER 13

It is clear that the body of an animal cannot be simple, i.e. consist of one element such as fire or air. For without touch it is impossible to have any other sense; for every body that has soul in it must, as we have said, be capable of touch. All the other elements with the exception of earth can constitute organs of sense, but all of them bring about perception only through something else, viz. through the media. Touch takes place by direct contact with its objects, whence also its name. All the other organs of sense, no doubt, perceive by contact, only the contact is mediate: touch alone perceives by immediate contact. Consequently no animal body can consist of these other elements.

Nor can it consist solely of earth. For touch is as it were a mean between all tangible qualities, and its organ is capable of receiving not only all the specific qualities which characterize earth, but also the hot and the cold and all other tangible qualities whatsoever. That is why we have no sensation by means of bones, hair, &c., because they consist of earth. So too plants, because they consist of earth, have no sensation. Without touch there can be no other sense, and the organ of touch cannot consist of earth or of any other single element.

It is evident, therefore, that the loss of this one sense alone must bring about the death of an animal. For as on the one hand nothing which is not an animal can have this sense, so on the other it is the only one which is indispensably necessary to what is an animal. This explains, further, the following difference between the other senses and touch. In the case of all the others excess of intensity in the qualities which they apprehend, i.e. excess of intensity in colour, sound, and smell, destroys not the but only the organs of the sense (except incidentally, as when the sound is accompanied by an impact or shock, or where through the objects of sight or of smell certain other things are set in motion, which destroy by contact); flavour also destroys only in so far as it is at the same time tangible. But excess of intensity in tangible qualities, e.g. heat, cold, or hardness, destroys the animal itself. As in the case of every sensible quality excess destroys the organ, so here what is tangible destroys touch, which is the essential mark of life; for it has been shown that without touch it is impossible for an animal to be. That is why excess in intensity of tangible qualities destroys not merely the organ, but the animal itself, because this is the only sense which it must have.

All the other senses are necessary to animals, as we have said, not for their being, but for their well-being. Such, e.g. is sight, which, since it lives in air or water, or generally in what is pellucid, it must have in order to see, and taste because of what is pleasant or painful to it, in order that it may perceive these qualities in its nutriment and so may desire to be set in motion, and hearing that it may have communication made to it, and a tongue that it may communicate with its fellows.

# 第一卷

## 第一章

我们认为，尽管任何一种知识都应受到尊重与珍视，但是，其中一种知识由于其精确程度较高，抑或由于其客体更显尊贵和奇妙，则可能比另外一种知识更加令人尊崇，更显弥足珍贵；由于上述两种原因，我们自然不得不将对灵魂的研究置于首位。无可否认，关于灵魂的知识对真理的发展具有普遍的促进意义，尤其是对我们理解自然具有极大的促进意义，因为从某种意义上说，灵魂是动物生命的本原。我们的目的是要把握并理解以下两点：一是灵魂的本质，二是灵魂的属性；在这些属性中，一些被认为是灵魂自身所独有的属性，而另一些则因灵魂寓于动物体内而被视为附属于动物的属性。

获得关于灵魂的任何确切可靠的知识是世界上最困难的事情之一。由于问题自身呈现的形式，即“它是什么？”这一问题，也反复出现在其他研究领域，人们可假设存在某种唯一的研究方法，它适用于研究所有我们试图确定其实质的所有客体（正如单一的论证法便适用于研究衍生属性）；果真如此的话，我们必须寻找的一定是这种独一无二的方法。但是如果根本不存在这样一种唯一的、通用的研究本质问题的方法，我们的任务就更加艰难；我们将不得不针对每一个不同的主体确定适当的研究方法。即使对此有明确的答案，譬如研究方法是论证法或划分法，抑或其他某种已知的方法，仍然有诸多困难和疑虑困扰我们——我们以什么事实开始研究？因为在不同的研究领域中，例如算术和平面几何，构成出发点的事实肯定不同。

首先，毋庸置疑，确定灵魂的终极类属是必要的，它是什么；它是“某一个体”、某种实体，或者它是某一可感受的特质，抑或数量，还是我们业已区分的其他的某种范畴？进而言之，灵魂是属于潜在的存在，抑或只是某种现实的存在？我们对此问题的回答具有极其重要的意义。

此外，我们还必须考虑灵魂是可分的还是不可分的，它是完全同质的还是不同质的；如若不同质，其多种形式上的差异是属差还是种差：迄今为止，讨论和研究灵魂的研究者们似乎只将其研究局限于人类的灵魂。我们必须小心谨慎以免忽略下面这一问题：就像动物的定义一样，灵魂是否也可以用一个单一明确的方式来定义，或者我们是否绝不可以给每一种动物分别下一个不同的定义，譬如我们对马、狗、人、神的定义（后一种情况中的“普遍存在的”动物——其他所有的“共同范畴”也是一样——要么被视为不存在，要么被看作是晚期的产物）。而且，如果存在的不是多种灵魂，而是一个灵魂的多个组成部分，那么我们应该首先研究哪一个，是整体的灵魂还是其组成部分？（确定哪些组成部分在本质上是相互区别的也是一个非常困难的问题。）另外，我们应该首先研究什么，是灵魂的组成部分还是其功能，是心智还是思维，是感觉的官能还是感觉的行为，抑或其他类似的东西？如果对灵魂的功能研究先于对其组成部分的研究，那么问题本身就会进一步提出：我们不应该在考虑上述两者之前考虑相关的客体，譬如感觉或思想的相关客体吗？看来认识本体的实质不仅对发现本体衍生属性的成因大有裨益（正如在数学中，了解直与曲或线与面的实质有助于理解三角形的内角和等于其两个直角度数之和一样），而且，反之亦然，因为对某一本体衍生属性的认识也会极大地促进人们对本体实质的认识：这是因为，当我们能够给出的描述与我们对某一本体的全部或大部分属性的体验相一致时，我们才最有可能说出关于该主体实质的有价值的内容；一切论证均要求以本质的定义为出发点，因此，那些不能使我们发现衍生属性的定义，或者那些甚至是无助于我们对其进行推断的定义，显然都只是空口辩论，没有实际意义的。



灵魂的诸属性所显现的另外一个问题是：它们是躯体和灵魂综合体的全部属性，抑或在它们之中存在某种只属于灵魂自身的属性？明确这一点是必须的，但也是困难的。仔细考察其大多数属性，我们就会发现，脱离了躯体，灵魂似乎根本无法主动作用或被动反应；例如愤怒、勇气、欲望和感觉等通常大多如此。思维看似是最有可能的例外，但如果思维也被证明是想象的一种形式或者不可能离开想象，那么它也需要以躯体作为其存在的条件。如果有某种主动作用或被动反应方式专属于灵魂，灵魂则能够独立存在；如果没有，灵魂就没有独立存在的可能。在后一种情形中，灵魂与直的物体相类似，直的物体具有许多属性，这些属性均源于其自身直的性质，例如一直线与一青铜球在某一点相切，尽管直的性质是从直的物体的其他组成部分中分离出来的，但是直的性质却不能以这种方式与青铜球相切；因为直的性质总是寓于某一物体之中，所以它根本不能被分离出来。因此，灵魂的所有属性似乎都与某种躯体相联结：狂热、温柔、恐惧、怜悯、勇气、喜悦、友爱和憎恨；在所有这些情感中均有躯体的某一属性与之同时存在。我们似可举下面这一事实作为这一观点的佐证：有时当充满暴力和令人惊骇的事件发生时，人们却没有感觉到激动或恐惧，而在另一些时候，微弱和轻微的刺激便会令人产生这些情绪，那就是当躯体已经处于一种紧张状态的时候，这种紧张状态与我们愤怒时的状态相似。这里还有一更明显的例子：在没有任何引起恐怖的外在因素的情况下，我们会发现自己体验着身陷恐惧之中的人所承受的那种感觉。根据上述事实，显而易见，灵魂的诸属性依附于质料的、可形式化的本质。

因此，它们的定义应该与之相符，譬如愤怒应被定义为由于这种或那种原因，为了这样或那样的目的，某一躯体（或者躯体的一部分，或躯体的能力）的某种运动方式。正因为如此，灵魂研究必定属于自然科学领域，至少就其诸属性而言，灵魂呈现这一双重特点。因此，自然哲学家和逻辑学家对灵魂属性的定义完全不同；例如后者会将愤怒定义为以牙还牙的欲望，抑或与此类似的事物，而前者则会把愤怒定义为血液的沸腾或心脏周围的热物质。后者阐释的是物质条件，前者界说的是形式或形式化的本质；因为他所论述的是事实的形式化本质，尽管其现实存在必须寓于逻辑学家所述的某一相应物质之中。因此，房子的本质可以用这样一种方式界定为“抵御风、雨和炎热破坏的掩蔽所”；自然哲学家则会将房子描述为“石头、砖和木料”；但是也可有第三种表述，该表述可将其假定为为了那种用途或目的使用那种物质的那个形式。那么，这其中哪一位堪称真正的自然哲学家？是那位将自己限定于质料的学者，还是那位把自己限定于形式化本质的学者？难道就不能是那位将两种定义合二为一的学者吗？果真是这位学者的话，我们又该如何概括另外两位学者的特点呢？有一类思想家专注于物质的性质或属性，事实上这些性质和属性与物质是不可分离的，这类思想家甚至根本无意将其分开。我们一定不能说不存在这类思想家吗？自然哲学家就是这样的研究专家，他致力于研究这样或那样界定的躯体或质料的所有积极或消极属性；其他不具有此类性质的特征均留给他人研究，在一些情况下，可将其留给专业人员，譬如木匠或医师；在另一些情况下，当实际上它们不可分离，但通过抽象的努力却可以从某种特殊躯体中分离出来时，可将其留给数学家；当它们在现实中和在想象中均可以从躯体中分离出来时，将其留给第一哲学家或形而上学家。现在我们必须回归正题，并重申灵魂的属性与动物生命的物质基质是不可分离的，我们业已看到的狂热和恐惧等诸属性都依附于动物生命的物质基质，而且灵魂的属性与线或面不属于同一存在类型。

## 第二章

在关于灵魂的研究中，我们应明确必须研究的诸问题，通过我们的进一步研究找出问题的答案。与此同时，我们有必要甄别所有对此问题发表过见解的先哲们的一切观点，以便我们能够从中借鉴其任何有益的成果，摒弃其谬误。

探索灵魂问题，我们阐述的切入点是那些在本性上通常被视为属于灵魂的特征。其中两个最显著的标志性特征被公认为可用以区分有灵魂的和无灵魂的事物——运动和感觉。可以说这两个特征是我们的先哲们在灵魂特征研究方面已经取得的成果。

有些先哲认为，灵魂是显著的、首要的运动肇始者；因为他们确信凡其自身不能运动的事物均不能引起其他事物运动，他们得出的结论是灵魂属于处于运动中的那类事物。据此，德谟克利特认为，灵魂是某种火或热的物质；他所说的“形式”或原子在数量上是无限的；他将那些球状的原子称为火和灵魂，并将其比作悬浮在空气中的微粒，我们可以在透过窗户照射进来的光束中看见这些微粒；他将一切种子的混合体称为整个自然的元素（留基伯也有类似的阐述）；球形原子与灵魂是同一的，因为这种形状的原子最适于渗入所有物体，并且因其自身处于运动状态而引起所有其他事物的运动。这其中隐含着这样一个观点：灵魂等同于动物体内肇始运动者。而且，正是由于这一原因，他们认为呼吸是生命的标志性特征；由于外界环境挤压动物躯体，并倾向于将动物体内引起运动的原子挤压出来，因为它们本身从不处于静止状态，所以必须通过呼吸活动吸进但却未参与呼吸运动的类似的原子对其进行加固；因为通过抵消外界环境的压力及其凝结力，它们可阻止动物体内已有的原子被挤压到体外；只要动物能够保持这种抵抗力，它们便可继续生存。

毕达哥拉斯学派的灵魂学说似乎也是基于同样的观点；该学派中有些人断言灵魂是空气中的微粒，另一些人则认为引起这些微粒运动的是灵魂。他们论及这些微粒是因为他们看到，即使是在绝对平静的空气中，这些微粒也总是处于运动之中。

这与那些将灵魂定义为自我运动事物的人所表现出来的倾向是相同的；他们似乎都认为，运动是最接近灵魂本质的显著特征，并且既然其他所有的一切都因灵魂而运动，灵魂便可独自地自我运动。这种看法源于他们从未见到过任何自身首先不运动但却肇始运动的事物。

与此相仿，阿那克萨哥拉（以及所有与其一样认为心智肇始万物运动的人）也断言肇始万物运动的动因是灵魂。然而，他的观点有别于德谟克利特的观点。德谟克利特大抵是把灵魂等同于心智，因为他将看似真实的事物等同于真实的事物——这就是为什么他赞赏荷马的诗句“赫克托耳躺着作别样的思维”；他不用心智一词指某种辨别真理的专门能力，而是将灵魂等同于心智。阿那克萨哥拉关于灵魂与心智的论述更是模糊不清；[在其论述中]他在多处向我们指出，美与秩序源于心智，而在别处[他又认为]这是源于灵魂；他指出，灵魂见诸于所有动物，不论其是大还是小，也不论其是高级还是低级，但是心智（智力意义上的心灵）似乎并非在同等程度上属于一切动物，而且甚至也并非属于所有的人。

而且，有些先哲特别注重考察有灵魂的生物可以被运动这一事实，所有这些人都认为，灵魂与具有非常强的肇始运动能力的事物是同一的。另一方面，另一些先哲所关注的是有灵魂的生物认识或感知其认识或感知的是什么，这些人无不认为灵魂等同于自然的[唯一]法则或诸本原，这取决于他们是承认诸多这样的本原还是只接受唯一本原。譬如恩培多克勒就断言灵魂是由他所谓的全部元素构成的；每一种元素亦均为某一灵魂；他的表述是：

唯有凭土我们才了解土，凭水才了解水，

唯有借气才认识具有神性的气，借火才认识毁灭性的火，

唯有靠友爱才感受友爱，并靠仇恨感受仇恨。

柏拉图在其所著的《蒂迈欧篇》中也用他自己的诸元素构建了灵魂；他认为，物以类识，而且事物是由这些本原或元素构成的，所以灵魂也必定如此。与此相似，柏拉图在其‘论哲学’讲稿中还提出动物本身是由“一”这一理念本身与[由此演化而来的]基本的长、宽和深复合构成的，其他所有事物，灵魂感知的[所有]客体，也都是以类似的方式构成的。此外，他还用另一种方式对其观点进行了阐释：心智是“一”，科学或知识是“二”（因为两点间只能有一条直线），意见是平面的数（“三”），感觉是立体的数（“四”）；他认为，这些数与诸形式本身或本原显然是同一的，并且是由诸元素构成的；如此说来，认识事物要么是凭借心智，要么是凭借科学，要么是凭借意见，要么是凭借感觉，而且这些数恰恰就是事物的形式。

有些思想家接受上述两种假说，即灵魂既肇始运动，又具有认识能力，因此他们兼收并蓄，合二为一，提出了灵魂是一个能够自身运动的数这一主张。

[但是]在有关灵魂的第一本原的性质及数的问题上，各人所见不同。最主要的分歧是视灵魂第一本原的性质与数为物质的思想家与视其为非物质的思想家之间的纷争，以及综合两种观点分歧，认为其既是物质的，又是非物质的，并且从上述两个源头出发推断其本原的思想家之间的争论。关于本原的数也存在争议；一些人确认只有唯一本原，另一些人则坚持认为有数个本原。诸家的观点分歧必然导致他们对灵魂的诸多论述也是众说纷纭，莫衷一是；他们，非常自然地，主观认为凡自身在本性上就能够肇始运动的事物必然存在于原生的事物之中。这就使得有些人认为灵魂是火，因为火是最微妙的，也最接近非物质性的元素；而且，从最主要的意义上说，火既可以被运动，又可以肇始所有其他事物运动。

关于为何将运动和肇始运动二者均视为灵魂所具有的特征，德谟克利特发表了自己的观点，较之其他先哲，他的阐述更加精确明了；他明确地指出，灵魂与心智是同一的，而且这一同一的事物必须是一种原始的、不可分割的物体，另外，其肇始运动的能力一定是源于其微粒的精细度及其原子的形状；他断言在所有的形状中球形是最易于运动的，而且这正是火和心智的粒子的形状。

阿那克萨哥拉，正如我们业已提及的那样，似乎欲区分灵魂与心智，但是实际上他却是将两者视为一种实体，只是他尤其断定心智为一切事物的本原；不管怎样，他所阐述的不外乎在所有事物中心智是唯一简单的、不混杂的和纯净的。当论及使所有事物处于运动状态的是心智时，他就把认识和肇始运动这两种特征都归于同一本原。

据相关记载，泰勒斯也似乎持灵魂是一种引起运动的原动力的观点，因为他曾说过由于磁石可以使铁运动，所以磁石有灵魂。

第欧根尼（以及其他一些人）将灵魂视为气，因为他认为气是微粒中最细微的，而且是第一本原；故此灵魂具有认知和肇始运动的能力。作为衍生万物的最初的本原，灵魂具有认识能力；作为极其精细的微粒，它具有肇始运动的能力。

赫拉克利特也认为，第一本原——“发散的热气”，他认为，其他一切事物均由此构成——就是灵魂；而且，这种散发的热气不具有任何物质性并且处于不停的流动状态；处于运动状态的事物要求能够认识它的事物也必须处于运动状态；并且所有存在的事物均必须处于运动状态（在这一点上[其观点]与大多数人的观点是一致的）。

阿尔克迈翁关于灵魂似乎也持相似的观点；他认为灵魂是永恒的，因为它与“永恒的事物”相类似，而且这种永恒性归因于其不断的运动；因为一切“神圣的事物”，月、日、星辰以及整个天体都处在永恒的运动之中。

在较为浅薄的作者当中，有些人，譬如希波，称灵魂为水；所有动物的精液都是流体的，他们提出这一主张似乎就是以这一事实为依据，因为精液不是血液，而是初始灵魂，据此希波试图反驳那些主张灵魂是血液的人。

另一些人（比如克里底亚）的确认为灵魂是血液；他们将感知当作灵魂最具特色的属性，并且坚持认为这种感知性源于血液的本性。

至此,四种元素中的每一元素都有其支持者，只有土是个例外——没有人持土是灵魂的观点，除非我们将认为灵魂就是所有元素或是由所有元素混合构成的人视为持这一主张的人。既然如此，我们大概可以说，所有先哲都认同灵魂具有三个显著特征：运动、感觉、非物质性，而且每一特征都可追述到第一本原。这就是所有用灵魂的认识能力来界定灵魂的先哲们（只有一个例外）要么将其视作某一元素，要么将其看成是由诸元素组合而成的原因。他们所使用的论述方式是相似的；同类事物，他们说，只能通过同类事物来认识；既然灵魂可以认识所有的事物，他们便用所有的本原来构建灵魂。因此所有那些只承认一种原因或一个元素的先哲们就构建一个灵魂（例如火或气），而那些承认多个本原的先哲们则用多个元素构建多个灵魂。阿那克萨哥拉是个例外；唯独他认为心智是不为外物所动的并且与其他任何事物均无共同之处。但是，果真如此的话，心智怎么认识[事物]或凭借什么缘由认识[事物]？对此阿那克萨哥拉没有作出解释，我们从其论述中也无法推断出任何答案。凡承认在它们的本原之中存在相互对立双方的先哲们，均用这些相互对立的双方构建灵魂，而另一些先哲则承认作为本原的是对立对中的某一个，例如热或冷，他们同样也是从中择一构建灵魂。也是源于此故，他们任由名称误导；那些把灵魂等同于热的人认为，生活（zen）源自沸腾（zein），而那些视灵魂为冷的人说灵魂（psyche）之所以被称为灵魂是源于呼吸和冷却（katapsyxis）过程。这些便是关于灵魂的传统诸家之说及其主张的根据。



## 第三章

我们必须从运动入手开始我们的研究；因为毫无疑问，有些人称灵魂是自身运动(或自身能运动)的事物，不仅他们对灵魂本质的所谓正确论述是错误的，而且甚至就连运动应该是灵魂的属性也是没有任何可能性的。

我们早已指出，凡肇始运动的事物其自身不必被运动。任何事物均可被运动包含两种意义——或间接地[被运动]，由于他物而非自身的原因[所进行的运动]；抑或直接地[被运动]，由于自身的原因[而进行的运动]。当被置于某一被运动物体之中而被运动时，事物就是“被间接地运动”，譬如轮船上的水手，因为水手们被运动较之轮船被运动其意义是不同的；该轮船属“被直接地运动”，水手们则是“被间接地运动”，因为他们处于一运动的船中。如果我们[再]考虑一下他们的四肢，情况就会十分明了；双下肢（对于人类也是如此）所作的专门运动是行走，而且在该例中水手们并没有在行走。认识了“被运动”的双重意义，现在我们必须探讨的是，灵魂是否是“被直接地运动”及其是否参与这类的直接运动。

运动分四种——位置移动、形态变化、衰亡和生长；因此，假如灵魂被运动，那么其运动必定是上述诸运动中的一种或几种抑或全部。如此说来，假若灵魂的运动不是偶然的，那么必定存在某种其自然本性所致的运动，果真如此的话，因为上述列举的四种运动中均包含空间位置，所以空间位置就一定是其自然本性。但是，假如灵魂的本质是自我运动，那么其被运动则不能是偶然的，如同白色或三肘长一样；它们也都可以被运动，但却只能是偶然地被运动——真正被运动的是具有“白色”和“三肘长”属性的事物，是它们寓于其中赖以存在的躯体；因此它们不占有空间位置：但是，如果灵魂出于其自然本性参与运动，那么它就必然占有空间位置。

其次，假如存在由某种灵魂的自然本质所致的运动，则必然存在某种由外力所肇始的反向运动，反之亦然。这一同样的解释既适用于运动，也适用于静止；因为出于自然本性而运动的事物所运行的终点就是其因自然本性而静止的空间位置，而且与此相似，其被迫运动的终点恰恰就是其被迫静止的空间位置。但是灵魂的被迫运动或被迫静止究竟其义为何，却是令人费解，甚至难以想象。

再次，假如灵魂因其自然本性所作的运动是向上的，那么灵魂一定是火；如若是向下的，那么它必定是土；因为向上和向下两种运动是这两种相关物体的明显特征。同样的推论也适用于“上”“下”之间的运动、终端运动以及躯体运动。此外，据观察，灵魂在躯体内部肇始运动；既然如此，我们有理由假定是灵魂将运动传递给躯体并以此使其自身被运动，而且，如果是这样的话，反向推之，我们似乎可从躯体的运动倒推出灵魂的相似的运动。由于躯体被运动而作从一处向另一处的位置移动，所以灵魂也必然要与躯体的位置变化保持一致，或是作为整体变换其位置，或是其部分变换其相对的位置。这其中包含着一种可能：灵魂有可能离开其躯体并再进入其躯体，而且该可能又将包含动物死而复生的可能。但是，我们可认为，灵魂可以被其他事物间接地运动；因为动物可以受外力推动而运动。是的，但凡其本质属于有自我运动能力的事物均不能被其他事物运动，除非它是偶然地被运动，正如由己为善或求己为善的事物一样，它们既不能由于外在事物，也不能因为它们是为了达到某种目的的手段而具有善性。



如果灵魂是可被运动的，那么最有可能成立的观点是，肇始其运动的是可感觉事物。

我们还必须指出的是，如果灵魂自我运动，那么它本身必须是被运动的运动肇始者，这样，如果在任何情况下运动都是处于运动中的事物的位移，那么就此而言我们称该事物被运动，无论如何，如果灵魂的运动是源于其自身本性的，而不是偶然的，那么灵魂的运动必定是对其本性的背离。

有人甚至认为，灵魂寓寄于躯体之中，它使躯体进行的运动与其自身的被运动是同一种类的运动。例如德谟克利特就持这种观点，他所采用的论述方式与喜剧作家菲力浦的很相似，菲力浦说道，代达罗斯使其木雕阿佛罗狄特活动起来，原因是他向木雕中加注了水银；以类似的方式德谟克利特阐释道，在他看来球形的原子构成灵魂，由于原子本身不停地运动，所以它们拖拉整个躯体并因此使其运动。我们必须强调的问题是，这些相同的原子是否也能引起静止——它们怎样才能引起静止，很难这样说，甚至是根本不可能这样说。有鉴于此，概而言之，我们似可提出反对的观点，灵魂在动物体内肇始运动所凭借的不是这种方式——而是通过意愿或思维过程。

以同样的方式，《蒂迈欧篇》也试图对灵魂如何使其躯体运动给出一个符合自然规律的解释；灵魂，该篇论述道，是处于运动之中的，而且又因其双方的相互关系，它也能使躯体运动。在利用所有元素合成灵魂并且依据和谐数将其划分之后，为了使其具有对和谐的内在感觉并使宇宙万物均能在非常和谐的运动中运动，造物主便将一直线弯作了一个圆圈；他又将这一圆圈分成两个在两个共同点上相交的圆圈；他将其中的一个圆圈再分成七个圆圈。所有这一切均意味着灵魂的运动与宇宙天体的空间位置变动是同一的。

那么，首先，称灵魂为一空间量度是一个误解。显然，柏拉图的意思是指宇宙灵魂与被称之为心智的这类灵魂相类似，但却不与感觉或欲望灵魂相类似，因为这两者的运动都不是圆形的。但是，心智是单一的和连续的，在此意义上的思维过程就是如此，而且思维与作为其组成部分的思想是同一的；那些具有连续整体的与数类似，而那些没有连续整体的则与空间量度类似。因此，心智也不可能具有那种连续整体；心智要么是没有组成部分的，要么是连续的，但其方式却是有别于空间量度特征的其他某种方式。假如它确实是一空间量度，那么心智怎么思维呢？它会用其组成部分中的任何一个不偏不倚地去思维吗？在这种情况下，“部分”必定有如下两种理解：要么是空间量度这一意义上的[“部分”]，要么是点这一意义上的[“部分”]（如果点可以被作为空间量度的一个部分的话）。如果我们接受后一种理解，因为在数量上点是无限的，那么显而易见心智将永远都无法到达其终点；如果是前者，心智则必须周而复始地思维同一事物，而且其次数[也]是无穷的（然而显然一次只可能思维一个事物）。倘若只要其自身的任意一部分与其思维客体相接触就满足要求的话，那么为什么心智还需要作圆周运动，抑或必须具有量度？另一方面，如果与整个圆周的接触是必须的，那么部分的接触还有什么意义？其次，没有组成部分的事物怎么能思维有组成部分的事物，或者有组成部分的事物怎么能思维没有组成部分的事物？我们必须把这里所提及的圆等同于心智；因为心智的运动是思维，圆的运动是循环，所以如果思维是一种循环运动，具有此种运动特征的圆则必然就是心智。

如果该循环运动是永恒的，那么一定存在某种心智总在思维的事物——这种事物会是什么？因为所有的实用思维过程均有极限——它们均有外在于思维过程的事物作为其思维目标，而且所有的理论思维过程也都要走向终结，其终结的方式就如同用以表述过程和思维结果的词语。每一个这样的词语均或为定义性的或为论证性的。论证既要有起点，也要有结果，可以是结论或是推论的结果；即便论证的过程永远也无法完成，不管怎样，它也绝不会再返回到其起点，而是继续采用一新的中间项或一新的极端物，并一直向前推进，但是循环运动却是返回到其起点。定义同样也是有限的几组术语。

再次，如果同一循环不断重复，那么心智必须不断地重复思维同一客体。

再其次，思维与其说与运动相似，倒不如说更像静止或暂时停顿的状态，可以说，推理也是如此。

还应该强调的是，凡自身难以运动但却被迫运动的事物是没有幸福可言的；如果灵魂的运动不是出于其本质，那么其运动就必然是有悖与其自然本性的。灵魂与躯体关系密切，无法摆脱，对于灵魂而言这是痛苦的；不仅如此，如果，诚如人们经常所说并普遍接受的那样，心智最好是独立于躯体之外，那么对心智而言，这种结合一定是不理想的。

最后，遗留下的关于诸天体循环运动的原因问题让人费解。这种循环运动的原因决非灵魂的本质——对于灵魂这种运动只是偶然的——更不容置疑的是，其原因也不是躯体。而且，应该使灵魂作这种圆周运动，因为这种运动更好，这种观点是毫无根据的；并且神之所以使灵魂作圆周运动就是因为这样的圆周运动比静止更好，这种运动也比其他任何一种运动都更好，这种观点也是不足为凭的。但是因为这类的考虑更适于另一研究领域，我们暂且不予讨论。

我们刚刚仔细研究的观点，还有大多数有关灵魂的理论，包含以下荒谬之处：它们无不将灵魂与躯体结合在一起或将灵魂置于躯体中，但却既不追加有关两者结合原因的具体阐述，也不详细说明该结合要求的躯体条件。可是这样的解释却是不可省略的；因为某种自然结合是以事实为先决条件的，这一事实是一方作用而另一方被作用，一方运动而另一方被运动；两者之间的相互作用总是暗示着其组成部分的特殊性质。可是，这些思想家们所做的一切只是描述灵魂的具体特征；关于灵魂所寓寄的躯体，他们却未作任何明确的论证，仿佛真的有可能，就像毕达哥拉斯学派虚构的故事那样，任一灵魂均可进入任一躯体之中——[多么]荒唐的观点，因为每一躯体似都有其独特的形式和形状。这样的说法与称木工技术可以寓于长笛之中同样荒唐；每一门技艺都必有其专门的工具，每一个灵魂均必有其躯体。

## 第四章

关于灵魂还有另一种理论，该理论已经颇受很多人的欢迎，其可信度丝毫不逊于到目前为止我们所提及的任何理论，而且在舆论上，它已经引起了普遍的关注。其支持者们认为，灵魂是某种和谐，因为和谐是相反事物的混合物或合成物，而且躯体是由相反事物合成的。可是，和谐是一种确定的比例或混杂成分的混合，而灵魂却既不可能是有比例的混合物，也不可能是合成物。其次，和谐不可能具有肇始运动的能力，而恰恰在这一点上几乎所有人都认为这是灵魂的基本属性。与其把和谐谓为灵魂，不如将健康（或一般意义上的一种好的躯体状况）称作和谐更为合适。如果我们尝试把灵魂的主动和被动属性归到某种和谐上，那么这种荒唐就会更加显而易见；其概念的必要的重新调整是非常困难的。再次，使用“和谐”一词时，我们的头脑中显现的是该词两种意义中的此义或彼义；该词最基本的意义所关涉的是具有运动及位置的空间量度，这里和谐意指各组成部分以这样的方式配置并结合，以防止任何与其同种类的事物进入其整体，而该词由上述本义引申而来的第二义则指如此混合的组成部分之间的比例；在上述两种意义中，无论从哪种意义上说，称和谐为灵魂都是没有道理的。躯体的诸部分是以某种方式组合在一起的，从该组合方式的意义上说，灵魂是某种和谐，这种观点很容易被驳倒；因为躯体的组成部分有许多，而且这些组成部分又是以多种不同方式组合在一起；躯体哪一部分的组合方式是心智或感觉能力抑或欲望能力？而且其中的每一种的构成方式[又]是什么？将灵魂等同于混合物的比例的观点同样是荒谬的；因为组成肌肉的混合物的比例有别于组成骨骼各元素之间的比例。因此，依此观点，我们所能得出的结论必然是，整个躯体内将会分布着许多灵魂，其原因在于躯体的每一个组成部分都是由相关元素组成的混合物，并且混合物的比例在每一种情况下均是一种和谐，即灵魂。

恩培多克勒认为，躯体的每一部分之所以是其所是，原因在于其诸元素间的比例。既然如此，我们或许要请他对下面这一问题作出回答：灵魂与该比例是同一的，或者它不可能是除此之外的、诸躯体的部分中所形成的其他别的东西吗？友爱是任意一种混合物的成因，或者只是那些比例标准适当的混合物的成因？友爱就是这一比例本身，或者是其他有别于这一比例的什么东西？这些就是该观点招致的疑难问题。但是，另一方面，如果灵魂有别于这种混合物，为什么当组成肌肉的元素或动物躯体的其他部分消亡时，它也同时消亡？此外，如果灵魂与混合物的比例不同一，则躯体的每一部分均有一灵魂这一观点必然不复成立，那么一旦灵魂脱离了躯体，随之消亡的[又]是躯体的哪一部分？

根据我们的上述分析，很明显，灵魂既不可能是一种和谐，也不可能作圆周运动。然而，如上所述，灵魂偶然地被运动是可能的，并且甚至在某种意义上它可以自我运动，即当其所寄寓的事物可被运动，并且是被其所运动；在任何其他意义上灵魂都不可能在空间位置上被运动。

鉴于以下事实，[我们]关于灵魂的运动之质疑便可显得愈加合理。我们说灵魂有悲叹、愉悦、勇敢、畏惧、愤怒，也能感知、思维。所有这些均可被视为运动的方式，因此似可推断灵魂是被运动的。但是，情况未必如此。我们似可完全承认，悲叹，或愉悦，或思维都是运动（并且每一个为一种被运动），并且该运动是由灵魂肇始的。例如，我们可视愤怒或恐惧为心脏的如此这般的运动，并把思维视为那个器官，抑或其他某一器官的这样那样的运动；这些改变有的是源于某些[躯体]部分的位置改变，有些则是由于品质的变化（躯体部分的特殊性质及其变化的特殊方式与我们目前的讨论目的无关，[暂不讨论]）。然而，说灵魂在发怒就如同说灵魂在织网或建造房屋一样有失精当。毫无疑问，最好避免说灵魂怜悯，或学习，抑或思维，而说是人凭借灵魂作此行为。我们所要阐明的是，运动并非发生在灵魂中，但有时它止于灵魂，有时始于灵魂，譬如感觉始于外在的可感觉事物并抵达灵魂，而回忆却是始于灵魂并通过或现实的或残留的运动止于相应的感官。

心智的情况却不同；它似乎是植于灵魂之中的某一独立的实体而且是不能被毁灭的。如果它是可以完全被毁灭的，那一定是由年老体衰所致。然而，就心智而言，在老年阶段实际出现的情况与感官的情况是完全可以相提并论的；如果一位老人能够恢复其正常视力，那么他就能像年轻人一样看得清清楚楚。老年阶段的无能不在于灵魂的影响，而在于灵魂所寄寓的躯体，当人们处于醉酒或生病状态时所出现的情况正是如此。因此在老年阶段，心智活动或思辨能力的衰退只是由于心智所寄寓的躯体内某一部分的衰退所致，心智本身是不受影响的。思维、友爱以及憎恨均为属性，但不是心智的属性，而是拥有心智的躯体的属性，只要躯体拥有心智。这正是为什么一旦其所寄寓的躯体自然衰亡，记忆和友爱便不复存在的原因；记忆与友爱本不属于心智的活动，而是属于那个业已消亡的合成物；毫无疑问，心智是更具神性的东西，并且不受外物影响。因此，根据我们以上所述，灵魂不能被运动是显而易见的，并且如果它根本不能被运动，那么显然它也不能被其自身所运动。

在所有我们业已枚举的观点中，最荒谬的当数称灵魂为一自我运动的数；首先，该观点认为灵魂是可以被运动的，这就必然导致其包含所有的不可能性；第二，它将灵魂称为某一数，这就必然使其具有诸多特殊的荒唐性。我们如何想象一计数单位被运动？[其被运动]凭借的是什么呢？哪种运动可以归属于没有任何组成部分或没有内在区别的事物？如果该计数单位既能肇始运动，自身又可被运动，那么它必须具有内部差异性。

其次，既然他们认为一条运动着的直线可形成一平面，一个运动着的点可形成一直线，那么这些心灵单位的运动就一定是线（因为点是一占据空间位置的单位，并且灵魂的数，当然，就会在某处并具有其空间位置）。

再次，如果从某一数中减去一个数或一个单位，其剩余部分则为另一个数；但是植物和许多动物被分割后可继续存活，而且，每一分割后的部分被认为均保留有与原来相同的灵魂。

无论我们说计数单位或是微粒都必定是完全一样的；如果德谟克利特的球形原子变成了点，除其作为某一量而被保留下来以外其他任何东西均无保留，那么每一量中必定存在一主动和一被动部分，正如在一连续的事物中的情况一样；事情与原子的的大小毫无无关，它只取决于它们是某一量。这就是为什么这些单位中必须蕴涵某一能够肇始运动的事物。如果动物体内肇始运动的是灵魂，就数而言情况也必然如此，那么灵魂便不可能既是运动的肇始者又是被运动者，而只可能是运动的肇始者。可是，对于一个单位，它怎么可能具有肇始运动这一功能呢？在这一[主动]单位与其他单位之间一定存在某种差别，然而在一个占据了空间位置的单位与另一单位之间，除了位置上的不同之外，还可能存在什么差别呢？另一方面，如果这些躯体内的心灵单位有别于躯体的诸点，那将会有两组单位，共同占据同一位置；因为每一个单位都会占据一个点。可是，如果同一位置可以存在两个，那么为什么不能存在无数个？因为如果事物可占据一不可分割的空间位置，那么它们自身必定是不可分割的。另一方面，如果躯体的点与其数就是灵魂的单位是同一的，或者如果这些躯体内的点的数是灵魂，那么为什么不是所有的躯体都有灵魂？因为一切躯体内均含有点或无数的点。

另外，如果线不能被分割成点，那么怎么可能使这些点从其躯体中独立或分离出来呢？

## 第五章



其结果是，正如我们所述，该观点一方面与那些认为灵魂是某种敏感物体的人所持的主张如出一辙，而另一方面却又陷入德谟克利特式的论述方式所特有的荒谬，荒诞不经地认为运动是由灵魂引起的。因为如果灵魂普遍存在于所有具有感知能力的躯体之中，如果灵魂也是某种类型的躯体的话，那么必定在同一空间位置存在两种躯体；而对于那些将其称为数的人而言，则必然是在同一空间点上存在许多的点，或每一躯体中都必定有一灵魂，除非灵魂是另外某种不同的数——即某种与存在于躯体中所有的点的总数不同的数。另一个必然的结果是，动物一定是被其数所运动，其被运动的方式与德谟克利特所阐释的方式毫无二致：他认为动物被运动所凭借的是其所谓的球形灵魂原子。无论我们称其为小球或大单位，抑或将其简单地叫做运动单位，这有什么区别呢？不论将其称为什么，动物都必定是因其运动而运动。因此，那些在同一主体中将运动与数结合在一起的人很容易陷入这些甚至其他更多类似的荒谬之中。这些特征不仅不可能用于定义灵魂——甚至也不可能是灵魂的属性。如果试图以此为出发点论述灵魂并依此解释灵魂的性质和活动，譬如推理、感觉、喜悦和痛苦等，这一点便会十分明了。因为，重复我们业已论述的观点，运动和数甚至不会对推测灵魂的衍生性质有所帮助。

这就是传统上界定灵魂的三种方法。一些思想家称其为极具肇始运动能力的事物，因为它可自我运动；另一些则视其为最微妙的和几乎不具任何物质性的躯体。至此我们已经充分地阐述了这两种理论所暴露出来的疑难和矛盾。现在还有灵魂是由诸元素构成的这一学说尚待仔细考证。

该学说旨在阐明，这样灵魂便可感知或认识所存在的一切事物，可是这一理论本身却必然包含着许多的不可能性。其支持者主张物以类识，并且试图通过宣称灵魂是由诸元素所构成的，他们便可成功地将灵魂与其能够感知的一切事物等同起来。但是灵魂所认识的事物并非只有这些元素，还有许多其他事物，抑或，更确切地说，是还有其他无数的事物，均是由这些元素构成的。我们姑且承认灵魂可认识或感知每一个构成这些综合体的元素；可是它是通过什么方法来认识或感知这个综合整体，譬如神、人、肌肉、骨骼（或任何其他合成物）是什么呢？因为每一个综合整体都不仅仅是由这些元素所组成的，而是由这些元素按确定的方式或比例所组成的，正如恩培多克勒在谈及骨时所说的那样：

仁慈的大地，在你胸膛般宽阔而柔软的泥土里

八分之二清澈的水融入其中，

加之四分的火；才有白色的骨生成。

因此，认为诸元素存在于灵魂中也是无用的，除非与诸元素一致的各种比例标准和合成物也存在于灵魂之中。[灵魂内的]每一元素确实均可认识其外部的同类事物，但是其中却没有任何能够认识骨或人的元素，除非骨和人也存在于灵魂的构成成分之中。其不可能性一目了然，确无必要赘述；因为谁会提议把石块或人纳入灵魂的组成部分之中呢？这一道理同样也适用“善”与“非善”以及其他类似的事物。



其次，“存在”一词有多种意义：它可用以指“这个”或实体，或指量，或指质，抑或指任何其他一种我们业已区分的范畴。灵魂是不是由所有这些范畴构成的呢？这些范畴似乎并不具有共同的元素。灵魂是仅仅由组成实体的那些元素构成的吗？如果是，那么它怎么能够认识其他每一种事物呢？可以说每一种事物均有其特有的元素或本原，并且灵魂是由所有这些构成的吗？在此情况下，灵魂则必定既是量，又是质，又是实体。但是由量元素所构成的一切事物必定只能是量，而不能是实体。这些（以及与此类似的其他）难题就是灵魂是由所有诸元素构成的这一观点所导致的必然结果。

同类事物不可能被其同类所影响以及同类事物能被其同类所感知或被其同类所认识，这两种说法也是荒唐的。因为根据他们的假设、感知以及思维和认识，也都是被作用或被运动的方式。

如恩培多克勒所述，每一种事物都只能通过其物质元素并凭借其与灵魂中相似物的关系才能被认识，而且这一新的认识提供了额外的证据，此说存在许多令人困惑之处和疑难；因为所有完全由土构成的动物躯体的各组成部分，如骨骼、筋腱以及毛发，似乎完全不具有任何感觉，因而也就没有任何感知能力，甚至是感知与其类似的土质物体的能力，但据此观点，这些动物躯体的组成部分应该具有感觉和感知能力而可验证外在事物。

此外，对每一本原而言，其所不知都将远远多于其所知，因为尽管每一本原都认识一事物，但其所不知的事物将会有许多。无论如何，恩培多克勒不得不得出这样一个结论：在所有的存在中，他的“友爱”之神是最无知的，因为有一种他不知道的元素——斗争，只有他对此一无所知，这是真的，而凡世间的人却是无所不知，因为其灵魂是无所不包的。

总的来说，我们似可提出这样一个问题，既然每一事物要么是某一元素，要么是由某一元素或几种元素抑或全部元素构成的，为什么不是每一事物都有灵魂呢？每一元素必须毫无疑问地认识一种或几种或全部的事物。

我们还应再提出一个问题，使诸元素与灵魂成为一体的是什么？诸元素，看起来，似与相应的质料相符；将其结合在一起的，无论是什么，都是一极其重要的因素。但是不可能存在某种高于灵魂并支配灵魂（更不必说是心智）的事物；根据其自然本质，认为心智很可能先于并支配灵魂的主张是有道理的，可他们的说法却是诸元素是先于一切的存在。

有些人主张灵魂是由诸元素组成的，因为灵魂能够认识或感知由诸元素所构成的事物，有些人则主张灵魂是由最具肇始运动能力的所有事物组成的，持这两种观点的所有的人均未考虑到全部种类的灵魂。实际上，并非一切具有感知能力的事物都能肇始运动；有些动物看起来在空间位置上是静止的，然而空间位置运动又似乎是灵魂在动物体内所肇始的唯一运动。而且这一同样的异议也可用来质疑所有那些认为心智和感知能力是由诸元素构成的人；因为似乎植物能够生存，但却无须具有空间位置移动或感知能力，而为数众多的动物也不具有推理能力。这些关键问题姑置勿论，故且承认心智为灵魂的一部分（感知能力也是如此），即便如此，仍然还有灵魂的其他种类和部分他们未给予任何论述。

这一同样的异议与“奥菲士”诗歌所表述的[有关灵魂的]观点[也]是相悖的：诗歌中写道，[灵魂]由风而生，当[动物]呼吸时，灵魂便从宇宙进入[它们的体内]。可是对于植物来说这种情况是不能发生的，甚至是对某些种类 的动物，也不能发生，因为并非所有种类 的动物都呼吸。持该观点的人疏忽了这一事实。

如果我们一定要用这些元素构造灵魂，那也不必认为所有的元素都要成为其组成部分；每一对相互对立的元素中的一种元素便足以使其既能认识其自身，又能认识与其对立的元素。依直线我们便既可认识直线自身，也可认识曲线——木工的直尺使我们可以对两者进行检验——但是曲线却既不能使我们分辨它自身，也不能分辨直线。一些思想家认为灵魂弥漫于整个宇宙，或许正是缘于此故，泰勒斯才认为万物皆充满了神。这一观点引发了一些争议：为什么当灵魂处于气或火中时不变成动物，而当其处于诸元素混合物中时才变成动物，尽管当灵魂处于前一种情况下被认为品质更高级？（人们似可再提出一个问题，为什么处于气中的灵魂要比处于动物中的灵魂更高级而且更能长生不老？）回答前一问题有两种可能的方法，采用这两种方法都只能得出荒谬或自相矛盾的答案；如果说火或气是动物，这是极其自相矛盾的，而拒不把有灵魂的事物叫做动物又是荒谬的。灵魂寓于诸元素之中这一观点似乎源于整体必须与其组成部分是同类的这一观点。动物是因为把围绕在周围的气的一部分吸入其体内而变得有生命，如果此说是合理的，那么持该观点的人必定说宇宙的灵魂也是与其所有的组成部分都属于同类的。如果被吸入体内的气是同类的，而灵魂是异类的，那么显然灵魂的某一部分将会存在于被吸入的气之中，而其他某一部分则不然。灵魂必定要么[其各部分]是同类的，要么这样的灵魂在宇宙的某些部分中是无法找到的。

至此，通过以上所述，显然，认识作为灵魂的属性是不能用灵魂由元素组成来加以解释，而且说灵魂被运动既不妥当，也不正确。但是既然认识、感知、意见，而且还有渴望、愿望以及所有其他种类的欲望均属于灵魂，并且动物的空间位置运动，加之生长、成熟和衰亡也都是由灵魂产生的，我们必须追问清楚，是否这些中的每一个都是作为整体灵魂的某一属性，即我们思维、感知、自我运动、作用与被作用所凭借的是否是整体灵魂，抑或它们中每一个都依赖于灵魂的不同部分？对于生命而言，情况也是如此。它所依赖的是灵魂的一个部分吗？或者它所依赖的不只一个部分？抑或所有部分？或者它还有某种其他不同的原因？

有些人认为灵魂是可分割的，而且一部分用以思维，另一部分产生欲望。既然如此，如果其自然本性容许其被分割，那么将其组成部分聚在一起的是什么？当然不会是躯体；相反似乎应是灵魂把躯体结合在了一起；无论如何一旦灵魂脱离了躯体，躯体便会解体并腐败。而且，如果另有某物使灵魂成为一整体，那么该结合物则将最有资格堪称灵魂，为此我们还必须重复这一问题：它是单一的还是由多个部分组成的？如果它是单一的，那么为什么不马上承认“灵魂”是单一的？如果它有组成部分，这一问题必须再次被提出来：使其部分结合在一起的是什么？这样一来我们的讨论必将循环往复，永无休止。

关于灵魂的组成部分也可提出这样一个问题：就其与躯体的关系而言灵魂的每一组成部分各自的功能是什么？因为，如果整个灵魂把整个躯体结合在一起，我们应该认为灵魂的每一个组成部分会把躯体的某一部分结合在一起。然而，这似乎是不可能的事情；心智将结合的会是躯体的哪个部分，或其结合方式是怎样的，这甚至是令人难以想象的。

植物和某些昆虫当被分割成数段时仍可继续存活，这是人们观察到的一个事实；这意味着每一段中均有一类属相同的灵魂，尽管在不同段上数量不同，因为[当其被分为两段时]两段均在一定时间内具有感觉和空间位置运动的能力。这种情况不能持续很久，这不足为奇，因为它们已不再拥有维持其自身存活所必需的感官。但是，灵魂的所有部分仍然存在于每一躯体部分之中，存在的这些灵魂相互之间以及和整体之间都是同类的；这意味着，虽然整体的灵魂是可分割的，但其几个组成部分却是彼此不可分割的。见诸植物之中的本原似乎也是某种灵魂，因为这是动物和植物两者所具有的唯一共同本原；这种灵魂可脱离感觉本原而独立存在，尽管不存在任何具有感觉却不具有灵魂的事物。

# 第二卷

## 第一章

作为我们对从先贤那里传承下来的有关灵魂诸说的综述分析，上文所述足矣；现在我们[只能]摈弃这些观点并且可以说完全从头开始，力求对“什么是灵魂？”这一问题给出一个准确的答案，即为其拟定一个最具普遍意义的定义。

我们习惯于把实体看作现实存在物中的某一确定的种类，并且从以下几种[不同的]意义上来分辨实体：一，在质料的意义上或其自身并非“这个”；二，在形式或本质意义上，正是凭借此意义某物才被称为“这个”；三则是前两种意义的结合。质料是潜能，形式是现实；现实包含两层相互联系的意义，譬如知识与知识的应用。

人们普遍认为物身，尤其是自然物身，属实体；因为它们是所有其他一切物身的本原。在自然物身中，有些有生命，有些无生命；所谓生命，我们是指自己摄取营养与生长（及其与之相伴的衰亡）。如此看来，从复合物这一意义上说，每一寓生命于其中的自然物身都是一实体。

但是，由于它又是这种或那种物身，即[它是]有生命的，所以物身不可能是灵魂；物身是主体或质料，而不是其附属物。因此，灵魂，作为潜在地寓生命于其中的自然物身的形式，在此意义上，必定是实体。可是实体是现实存在，所以灵魂是具有上述特征的物身的现实存在。这样一来，现实存在一词有两种意义，分别对应知识的拥有与知识的实际应用。显然，灵魂是第一种意义上的现实存在，即作为被拥有的知识，因为眠与醒两者均以灵魂的存在为先决条件，而且在这两者中，醒相当于[应用知识的]现实认知，而眠则相当于被拥有的却未被利用的知识，而且，在个体的历史上，知识[的拥有也]是先于其利用或应用。

这就是灵魂是潜在地寓生命于其中的自然物身的第一现实存在的原因。以上所述的这种物身是一个由相关部分组成的有机体。植物的诸组成部分虽然极其简单，但却是“器官”。例如，叶子的作用是保护果皮，果皮的作用是保护果实，而植物的根则类似于动物的嘴，两者的功能都是摄取食物。因此，假如我们必须给出一个适用于各种灵魂的具有普遍意义的定义，我们只能将其表述为由相关部分有机组成的自然物身的第一现实存在。灵魂与物身是否是一体这一问题根本无需讨论，我们可以完全不予探讨的原因就在于：这就如同是问融蜡与图章在其上所留下的图形是否是一体，或从普遍意义说某一事物的质料与以其为质料的某一事物是否是一体一样毫无意义。统一体有多种含义（其含义与“存在”的含义一样多），但两者的最准确和最基本的意义是某一现实存在与该现实存在所代表的事物之间的关系。什么是灵魂？至此我们已经对这一问题作出了回答——一个适用于灵魂的最具普遍意义的回答。从灵魂相当于事物本质的终极形式的意义上说，灵魂是实体。这意味着，灵魂是具有我们刚谈及的品格的物身的“本质上的其所是”。假如按照字面意义被称为“器官”的事物，譬如一把斧头，如果其是一自然物身，那么其“本质上的其所是”便一定是其本质，并且其灵魂也是如此；一旦这从其中消失，它也变得不再是斧头，而只是徒有其名罢了。实际上，它只是斧头；它缺乏那种能够使其为其所是的品格或使其拥有灵魂的形式化本质的品格；想要具有上述品格，它应该是某一特殊种类的自然物身，即那种自身有能力使其自身处于运动和静止状态的自然物身。下面，[我们]将此原则应用于活的物身的躯体“部分”。假如眼睛是一动物——那么视觉则应是其灵魂，因为视觉是眼睛的实体或本质，其相当于[眼睛的]形式，眼睛只是视觉的质料；倘若失去了视觉，眼睛便不再是眼睛，而只能空有其名了——它充其量不过是雕像或画像上的眼睛。现在我们必须把我们的思考从活的物身的“部分”扩展到整个活的物身；因为[物身的]部分感觉与作为其器官的物身的部分之间的关系，同[物身的]整体感觉官能与有感觉的整个物身之间的关系一样。

我们必须明白，具有潜在生命力的一定不能是已丧失灵魂的物身，而只能是依然具有灵魂的物身；不过种子和果实却是符合这一条件的物身。因此，醒作为现实存在，从某种意义说与[斧头的]砍削和[眼睛的]观看相类似，而灵魂作为现实存在，从某种意义上说与视觉能力和工具的能力相类似；物身相当于潜在的存在；犹如瞳孔与视觉能力一起构成眼睛一样，灵魂与躯体一道构成有生命的动物。

由此可见，勿庸置疑，灵魂与躯体是不可分离的，或者至少与其某些部分（如果它有组成部分的话）是不可分离的，因为其中有些组成部分的现实存在不过是其躯体组成部分的现实存在。然而，有些部分却似乎可以分离，因为它们根本不是任何躯体的现实存在。此外，我们尚不清楚，灵魂是否是物身的现实存在，是否和水手作为船只的现实存在是同一种意义上的现实存在。

作为我们对界定灵魂的本质所作的勾勒或概述，以上所述足矣。

## 第二章



清楚明了的或逻辑上较为清晰的观点通常出自于本身混乱不清但却比较易于我们观察的现象，既然如此，我们必须从这一角度重新思考我们[关于灵魂]的研究结论。因为现在多数的定义所表述的只是事实，对终极形式而言，仅有事实是不够的；它还必须包括并且阐明其依据。目前人们所给出的定义在形式上类似演绎推理的结论，譬如什么是正方形？正方形是四条边相等的矩形。这样的定义在形式上等同于一个结论。但如若有人向我们解释说，正方形是已知矩形的两不等边之间的比例中项的发现，那么他便揭示了被定义物的依据。

我们以通过专注有灵魂之物和无灵魂之物的区别在于有灵魂之物能够彰显生命这一事实作为新的出发点，重新开始我们的研究。可是生命一词有不只一种意义，如果这些意义中的任何一种见诸某一事物，我们便说该事物是有生命的。有生命的，换言之，意指思维或感知，抑或空间位置上的运动和静止，或者指营养、衰亡和生长意义上的运动。因此我们认为植物也是有生命的，因为，据观察，它们体内具有一种本能，凭借这一本能它们可以向所有空间方向生长或衰亡；它们既向上，又向下[生长]，而且随着每一植物的生长，其躯干也向上下两个方向或所有方向均等地生长，并且只要其能够摄取营养，它便可继续存活下去。

这种自我摄取营养能力可独立于业已提及的其他能力而存在，但其他能力却不能脱离该能力而存在——至少对于有生有死的事物而言是这样的。对于植物而言，这一事实是显而易见的；因为这是它们所具有的唯一的灵魂的能力。

这种自我摄取营养能力是生物的本能，正是由于事物具有了这种本能才使我们将其称为生物，但是正是由于生物拥有感觉才使我们首次将其称为动物；因为即使有些生物并不具备空间位置运动的能力，但却具有感觉能力，我们仍然称其为动物而不仅仅称其为生物。

感觉的首要形式是触觉，它属于所有动物。正如自我摄取营养能力通常可独立于触觉和感觉一样，触觉也可以独立于所有其他形式的感觉。（我们所说的自我摄取营养能力指的是灵魂的部分能力，该能力为植物与动物共同拥有：据观察，所有的任何动物都有触觉。）对于这两个事实的解释，我们应留待以后讨论。目前，我们只能说灵魂既是上述各种现象的根源，又以它们为其基本特征，上述各种现象是指自我摄取营养能力、感觉能力、思维能力以及运动能力。

这每一种能力均是一个[独立的]灵魂抑或是灵魂的一部分？如果是一部分的话，那么它又是哪种意义上的一部分呢？这一部分仅在定义上是可分离的还是在空间位置上也同样是可分离的呢？就这些能力中的某些而言，给出这些问题的答案是容易的；就另一些而言，我们却难以作答。正如就植物而言，据观察，当它们被分割开之后，尽管其被分割的部分彼此相距很远，其被分割的部分也能够[各自]继续生存（这表明，就植物而言，在其被分割之前每株植物的灵魂从现实意义上说是一个，而从潜在的意义上看却是许多个），与此相仿我们还在其他各种灵魂中发现了类似的结果，譬如在被分割成两段的昆虫中；每一段都具有感觉和空间位置运动两种能力；而且如果有感觉，也就必然会有想象和欲望；因为只要有感觉存在，必然也就会有愉悦和痛苦存在，并且，只要有愉悦和痛苦，必然也就会有欲求。



迄今为止，关于心智或思维能力我们尚未论证；它似乎是一种极其不同的灵魂，其差异就好像永生的事物迥然不同于易死的事物一样；只有它能够脱离所有其他灵魂能力而独立存在。通过我们的以上论述，不难看出，虽然存在某些相反的观点，灵魂所有的其他部分是不能分离存在的，尽管在定义上[它们]确实是可分离的。如果发表意见不同于感知，那么发表意见的能力也必然有别于感知能力，而且对于以上枚举的所有其他形式的生物，情况也是如此。另外，有些动物具有灵魂所有的能力，有些只具有部分能力，有些则仅具有某一种能力（正是这一点才使我们得以对动物进行分类）；其原因须待后文讨论。类似的情况也见诸感觉；有些种类动物拥有全部的感觉，有些只拥有某些感觉，其他的则仅拥有一种感觉，一种必不可少的感觉——触觉。

正如“我们藉以认识之物”这一表述一样，“我们生活和感觉的凭借物”这一表述包含两种意义，其含义可能是知识或灵魂，因为我们可以说，我们凭借或运用两者中的任意一个来认识，同样地，我们保持健康，可以指健康，或指[整个]身体或身体的某一部分；而且在如此对照的这两个术语中——知识或健康是形式、本质或比例的名称，或者如果我们这样表述，那么它则是某一接受质料的现实存在——有认识能力者的知识、有保持健康能力者的健康（因为引起变化者施其作用于被完全改变或部分变动者并且置身于受动者中）；此外，既然主要是凭借或运用灵魂我们才得以生存、感知和思维——那么灵魂就必定是某种比例或形式化本质，而不是某种质料或主体。因为，如前所述，实体一词有三种意义——形式、质料以及这两者的结合——而且在这三者中被称为质料的是潜在存在，被称为形式的是现实存在。那么，这里所说的结合物便是有生命的事物，既然如此，躯体便不可能是灵魂的现实存在；相反，某一种物身的现实存在恰恰就是灵魂。因此，那种认为灵魂无法脱离物身而存在，而它又不可能是物身，它不是物身但却是与物身相关联的某物的观点是正确的。这就是灵魂寄寓于物身之中，并且是寄寓于某种确定的物身[之中]的原因。因此，像过去的思想家们那样，仅只将灵魂归入物身，而对该物身的种类或特征却不加任何明确的说明，是错误的。深入的思考进一步证实了观察所得到的事实；任何特定事物的现实存在都只有在早已潜在地就是该事物的体内才能得以实现，即在与之相适合的其本身的固有质料之中。从以上全部所述，可得出的[结论]是，灵魂是某一事物的现实存在或形式化本质，该事物具有使灵魂得以体现的潜能。

### 第三章

在以上所列的灵魂的诸能力中，有些种类的生物，正如我们业已提及的那样，具有所有的灵魂的能力，有些只具有某几种，有一些则只具有一种。我们业已提及的这些灵魂的能力是营养能力、欲望能力、感觉能力、空间位置运动能力和思维能力。植物只具有第一种能力，营养能力，而另一目生物除具有这种能力之外还具有感觉能力。无论哪一目生物，如果具有感觉能力，那么它也必然具有欲望能力；因为欲望是属，包括欲求、激情和意愿诸种；由于一切动物均至少具有一种感觉，即触觉，并且凡一切具有感觉的事物均有能力感知愉悦和痛苦并因此存在令其感到愉快和痛苦的客体，哪里存在这些客体，哪里就存在欲求，因为欲求就是对令人愉悦的事物的欲望。另外，所有动物都具有对食物的感觉（因为触觉就是对食物的感觉）；所有生物的食物均由干的、湿的、热的、冷的物品构成，而且这些都是可以通过触觉去认知的性质；其他所有可感觉的性质都只能间接地通过触觉被认知。声音、颜色和气味均对营养毫无裨益；滋味属于可触知的性质。饥与渴是欲求的形式，饥是对干和热的食物的欲求，渴是对冷和湿的食物的欲求；滋味是添加在两者中的某种调味品。这些要点，我们须待以后澄清，现在可能只说具有触觉的一切动物也都有欲望就足够了。想象这一灵魂的能力是模糊不清的；我们尚须留待以后仔细讨论。除此之外，某些种类的动物还具有位置移动能力，还有另一目类的动物，即人以及可能与人类似抑或比人更高级的另一目类的动物，[它们还]具有思维能力，即心智。于是，显而易见，正如图形只能有一个定义一样，灵魂也只能有一个定义。因为，就图形而言，除了三角形等图形之外，根本不存在任何其他不同的图形，对于灵魂来说，情况也是一样，除了上述所列的灵魂形式之外，根本不存在任何其他别的灵魂。的确，我们可以给图形一极具普遍意义的定义，该定义适用于所有的图形，但不体现任何个别图形的特殊本质。这里对于灵魂及其具体的形式而言，情况也是如此。因此，在这种或类似的情况下，以下两种作法都是荒唐的：要求给出一个具有绝对普遍意义的定义，而该定义却无法体现任何事物其所是的特殊本质；或者不然的话，[索性]放弃这一定义，转而寻求适用于每一个最低种的个别事物的单独的定义。图形与灵魂两者的情况完全相同；因为在这两种情况中——图形和生物——都是一个通用名称下所包含的由诸个别事物组成的一个系列，每一后继项中均潜在地蕴涵着其前项，例如正方形中蕴涵着三角形，感觉能力中蕴涵着自我营养能力。因此我们必须问，对生物的每一个目类而言，其灵魂是什么，即植物的灵魂是什么？动物的灵魂是什么？人的灵魂[又]是什么？这些项以这种成系列的方式相互关联的原因将是我们留待后文予以讨论的问题。不过，事实是，离开了自我营养能力，感知能力便不复存在，但是——在植物中——自我营养能力与感知能力却是分离的。其次，离开了触觉，其他的所有感觉便都不能存在，但是离开了其他感觉，触觉却能够存在；许多动物既没有视觉和听觉，也没有嗅觉。再次，在那些具有感觉的生物中，有的具有位置移动能力，有的却没有。最后，有一些生物——极少数的动物——具有演算和思维能力，因为（在有生有死的生物中）那些具有演算能力的动物也具有以上提及的所有其他的能力，然而相反的情况却不存在——实际上有些是仅凭想象能力生存，而另有一些甚至就连想象能力也不具备。凭借直觉认识事物的心智属另一种不同的问题。

显然，对灵魂下最恰当的定义的方法就是为每一种灵魂的形式都寻找到一个最适切的定义。

## 第四章

对于探索灵魂诸形式的研究者来说，他有必要首先给出每一种灵魂形式的定义，阐明其是什么，并继而探究其衍生属性等。但是如果要阐明每一种灵魂的形式是什么，换言之，何为思维能力，何为感知能力，抑或何为营养能力，那么我们就必须进一步回溯，首先阐述思维或感知，因为在研究的顺序中主体之所为这一问题一般是先于何以使其为其所为这一问题的。如果这是正确的，我们则必须以同样的理由再进一步回溯以获得对每一灵魂客体的清楚认识；因此我们必须从以下这些客体开始，譬如从食物开始、从可感知的事物开始，或者是从可凭智力认知的事物开始。

因此，首先我们必须讨论营养和繁殖，因为营养灵魂见诸于所有其他灵魂能力之中并且是最原始、最为广泛拥有的灵魂能力，实际上正是由于具有这一能力，所有的生物才具有生命。营养灵魂借以显示其自身存在的行为是繁殖与摄取食物——繁殖，请注意，因为任何生物只要其已经正常发育成熟并且是无残缺的，而且其繁殖方式不是自生的，那么最自然的行为就是生产出另一个与其自身类似的生物，动物生育动物，植物繁殖植物，以便能够，只要其本质允许，分享[大自然的]永恒和神圣。这是一切生物所追求的目标，为此目标所有生物无不为其本质所允许的一切可为之事。“为此目的”这一短语具有双层意义，它既可指欲达到之目的，也可指为某一存在的利益，所施之为。既然任何生物都不能凭[自身存在的]不断持续来分享永恒和神圣（因为凡有生有死的事物均不能使其自身永远作为同一个单一体而存在），它以其唯一可能的方式努力实现这一目的，并且有可能成功，只是其程度不同而已；所以实际上它所保持的不是与其自身相同的那一个体，而是通过与其类似的东西继续其存在——但却不是数量上的一个，而是种类上的一类。

灵魂是生物躯体的因与原。因与原这两个术语有多种含义。但是灵魂是其物身的因却是在我们明确区分的三种意义上而言的：它是[躯体]运动的原或起源，是[躯体运动的]目的，是一切生物躯体的本质。

上述的最后一义，灵魂是一切生物躯体的本质，这一点是显而易见的；因为在万物之中本质等同于其存在的根据，而且在这一点上，对生物而言，其存在就是生存，而对其存在和生存而言，寄寓于其中的灵魂就是因或原。此外，任何潜在生物的现实存在也等同于其形式化本质。

显然，灵魂也是其物身的目的因。因为与心智相类似，自然也总是为了某物而为其一切之所为，某物就是其目的。对于动物而言，其灵魂也同样是为了某一目的而为其一切之所为，这是合乎自然法则的；所有的自然物身都是灵魂的器官。对于构成植物物身的器官，情况确实如此；对于构成动物物身的器官，情况也确实如此。这表明，为了这一目的的其所是就是灵魂。在此我们必须重温“为此目的”的两种意义，即欲到达之目的，以及为了某一存在的利益，其所是或所施之为。

此外，我们必须坚持作为空间位置运动的本原的灵魂也是生物躯体的因这一观点。然而，并非所有的生物都具有空间位置移动能力。但是质量变化和数量变化也都归因于灵魂。感觉被认为是性质变化，而且只有有灵魂之物才有能力感觉。造成生长和衰亡的数量变化也与此相同；任何生物，只有其能够自己摄取食物，才能自然地生长或衰亡，除非其具有灵魂，否则任何生物都不能自己摄取食物。

恩培多克勒[关于植物生长]的补充说明是错误的。他论述道，植物的生长应该这样解释，根的向下生长源于土的下行的自然趋向，而其枝的向上生长则是源于火的上行的与此类似的自然趋向。因为他对向上和向下的解释是错误的；对于所有的植物而言的向上和向下并非对于整个宇宙而言的向上和向下：如果我们根据其功能来区分和确定器官，那么植物的根便与动物的头相类似。此外，[鉴于]土和火趋于向相反方向运行，我们不得不问，将其结合在一起的力量是什么；如果没有中和的力量，那么它们便将会分离开来；如果有的话，这种力必定是灵魂和营养及生长的因。有些人认为，火元素是营养与生长的因，因为据观察，在诸原始物身或诸元素中,火是唯一能够自我摄取食物并自我增长的元素。于是，他们认为不论是在植物体内，还是在动物体内，真正起作用的力量就是火元素。从某种意义上说，它的确是并存原因，但却不是主要原因，其主要原因应该是灵魂；因为火只要有其所需的燃料，它的长势便会无限制地持续，但对于在自然过程中形成的所有的复合整体而言，存在着某种决定其大小及增长的限制或比例，而该限制和比例是灵魂的标志，而不是火的标志，并且其属于[灵魂的]形式化存在，而不属于质料。

营养与繁殖均归因于同一灵魂能力。首先有必要厘清我们对食物的界定，因为正是凭借吸收食物这一功能，该灵魂能力才得以与其他所有的能力相区别。时下流行的观点是，可成为生物食物之物是该物之相反物——这不是指在每一个对立的事物对中任意一物都是其相反物的食物：一相反物不仅必须能够转化成其对立物并且反之亦然，而且还必须在此相互转化的过程中使其相反物得以增长，这样的相反物方可成为食物。许多相反物均可相互转化，但是这种相互的转化甚至都算不上是量的转化，因而也就无助于其相反物的增长，例如一染病体转化成为与之相反的健康体。显然，即使这些相互对立的事物满足上述的两个条件，它们也不是绝对相同意义上的彼此的食物；水据说可以饲火，但是火却不能饲水。在对立对中的两者是[非复合的]基本物的情况下，只有相反物的一方能够饲其相反物，据称，这似乎是可能的。但是，这里存在一个难题。有一派思想家们主张，与量以类增一样，物以类饲。而另一派，正如我们业已论述的那样，所持的却是完全对立的观点，即饲者与被饲者是彼此对立的；他们认为，同类的事物不能被其同类所影响；但是食物在其消化过程中被改变，而且变化总是使之成为其对立物或中间物。另外，食物受其供养者作用，而不是与此相反，正如木料是被木匠加工而非与之相反一样；木匠也有变化，但却只是从非工作状态到工作状态的变化而已。回答这个问题，我们所用的“食物”[一词]是指“已被消化了的”食料还是指“尚未被消化的”食料，会使答案完全不同。如果我们使用的是食物一词的这两种意义，即完全未被消化的食料和业已完全被消化的食料，那么我们便可以评判这两个相反的观点：如果用食物指尚未被消化的食料，那么它便是被饲者的相反物；如果用食物指已被消化的食料，那么它便与消化它的被饲者相似。因此，显然，从某种意义上，我们可以说，这两派既都是正确的，又都是错误的。

除了有生命的物体之外，其他任何事物均不能被饲，既然如此，被饲的物体便是被赋予了灵魂的物体,并且正是缘于此故,其体内才拥有灵魂。因此食物在本质上是与其中寄寓灵魂的事物相关联的。除了使被饲者的躯干增长这一功能之外，食物还具有[其他]某种功能；凡体内具有灵魂的事物便是一个量元，食物可增加其量，但是，只有体内具有灵魂的事物为“这个—某物”或一实体时，食物才能发挥其营养作用；在这种情况下,食物使被饲者得以维持其生存,并且只要营养过程持续,被饲者便可继续维持其所是。此外，食物[也]是繁殖的原动力，即繁殖出与个体相类似的另一个体，而不是被饲个体[自身]的生成；被饲个体的实体早已存在；任何实体的存在均不是自我生成而只是吸取营养以便自我持续生存。



因此我们现在所研究的灵魂能力似乎可这样表述，该灵魂能力趋于为一切具有该灵魂能力寓于其中的事物提供营养，使之一如既往地继续存在，并且食物可助其完成它的这一使命。这就是为什么，一旦失去了食物，它便不复存在。

营养过程包括三个因素，被饲者何也，其被饲所凭者何也和饲者何也；此三者之中，饲者是第一灵魂，被饲者是寓灵魂于其中的物身，其被饲所凭者则是食物。可是，既然依据事物所实现的终极目的来命名是正确的，而灵魂的终极目的[又]是生成另一个与其相类似的后嗣，那么这个第一灵魂应该被命名为繁殖灵魂。词语“其被饲者所凭者何也”具有双重意义，和“船之被驾驶所凭者何也”这一词语一样；它可以既指手，又指船舵，即要么是指被运动者和运动者，要么是指仅仅是被运动者。如果我们回顾一下一切食物都必须是可被消化的，而且引起消化的是热，那么我们在此就可以使用这一类比了；这就是为什么一切寓灵魂于其中的事物均具有热。

既然我们已经对食物的本质作了简要的论述,更加详尽的论述尚须另文专门讨论。

## 第五章

完成了上述的区分与界定，我们现在就讨论最广泛意义上的感觉。诚如我们以上所述，感觉取决于运动的过程或外部的影响，因为它一般被视为某种性质的改变。现在有些思想家认为，同类的事物只能被其同类所影响；在何种意义上这是可能的，在何种意义上这是不可能的，对此，我们已经在我们关于作用与被作用的一般性讨论中解释过了。

这里提出一个问题：为什么我们不能像感知感觉的外部客体一样感知感觉本身？或者，既然它们自身含有火、土以及所有其他元素，而这些元素又都是感觉的直接或间接的客体，那么为什么离开了外部客体的刺激，它们就无法产生感觉呢？显然，具有感觉能力者只能潜在地存在，而不能现实地存在。感觉能力与可燃物类似，因为可燃物绝不可能自燃，而需要有一具有引燃能力的动因；如若不然，可燃物则必然会自燃，并且也无须现实的火种将其点燃了。

回答这一问题，我们必须重温我们所使用的“感知”一词的两种含义，因为我们可以说凡具有听或看的能力者，即使其此刻正在睡眠之中，仍然“看得见”或“听得到”，此外也可说凡实际上正在看或正在听着的，“看见”或“听到”。因此“感觉”也必然有两种含义：潜在感觉和现实感觉。与此相似，“成为有感觉能力者”也有两种含义：有某一感觉能力，或证实某一感觉行为。讨论伊始，我们暂时先对以下两者不作区分：被运动或被影响和起主动作用，因为运动是活动的一种——一种不完善的活动，对此另文已经有过阐释。实际上，正在发挥作用的作用者施其作用于一切被作用或被运动的事物。因此，正如上文所述，从某种意义上说，作用者与被作用者是相类似的，但从另一种意义上说，即在变化之前和变化过程之中这两个因素是不相类似的，而在变化之后，则又归于相类似。



但是我们必须现在就加以区分的不仅有什么是潜在的和什么是现实的，而且还有不同的感觉，在这些不同的感觉中，事物是潜在的或是现实的方可得以确认；至此为止，我们在论述中一直使用的上述这几个词语仿佛均只有一种意义。我们可以称某物为“知者”，其所指要么是我们说那个人是一知者，我们指的是该人属于通晓或拥有知识这一种类的人；要么是我们说某人掌握语法知识，[我们的所指也是一样的]。这两人均可如此称谓是由于在其体内每人都有某种潜在的能力，但是其各自的潜在能力却是有差别的，前者是一潜在的知者，因为其种类或质料是属于某一类的；后者 [也是一潜在的知者，但却是]因为在没有任何外在阻碍的情况下，他可以随意地将其潜在的知识转变为现实的知识。这里隐含着“知者”一词的第三个意思，已在实践其知识者——他是现实中的知者，而且该义是最严格意义上的认知，譬如[认知]这个A。前两者都是潜在的知者，他们实现各自潜在能力的方式不同，前者是通过质的变化，即通过学习，多次使其从一种状态转变为与其相反的另一种状态，后者则是通过从对感觉或语法的消极拥有向对其积极使用的转变。这两种转变是不同的。

“被作用”一词语也有多种意义；它或指相互对立的双方中的一方因另一方而消亡，或指潜在的存在被现实存在的和已被作用同类物所保存，凭借这一相似性，某一现实存在与另一潜在存在相辅相成。因为通过转变，[潜在地]拥有知识者变成了实际的知者，这种转变既不是其自身的改变（因为这实际上是其发展成为了真自我或变成了现实存在），不是完全有别于[被作用一词]一般意义的改变。

因此，当一建筑师运用其技艺建造房屋时，说他正在被改变是荒谬的，与此相同，当一智者用其智慧时，说他正在被改变也是错误的。

对于认识或理解而言，使潜在存在变为现实存在的过程不应被视为教授过程，而应是其他别的什么。凡通过一实际上具有认识能力并具有教授能力者的作用，凭[潜在]认识能力开始学会或获取知识的过程要么根本不应被说成是“被作用”，要么我们必须区分两种不同意义上的改变，即一种品质取代另一种品质，第一种品质是第二种品质的对立物，或现存的品质从其潜在的存在向稳定性或本质方向发展。

至于何为拥有感觉，第一个转变归因于父本的影响，而且该转变发生在[子体]出生之前，以便在出生时，该生物，在感觉方面，便处于和拥有知识相一致的阶段。实际感觉相当于知识应用阶段。但是在这里用以相互对比的两者之间存在一种差异；激发感觉能力进行感觉活动的客体，例如视觉客体、听觉客体等，都是外在的。这一差异的根源是现实感觉所感知的是个别事物，而知识所把握的却是普遍的事物，并且这些均在某种意义上寓于灵魂之中。这就是为什么人可以随其意愿地在任何时候运用其知识，但是他的感觉却不取决于其自身——必须存在某一感觉客体的原因。对我们关于可感知事物的知识也必须作同样的阐述——基于相同的根据，即可感知客体都是个别的、外在的。

以后可找到更合适的时机来阐明所有这一切。目前，识别这些已指出的差别完全足矣；某一事物是潜在的可包含两种意义：我们可说一男孩可能成为将军，这是其中一义；或其另一义，我们似乎可以同样说他将可能成为成年人。“潜在的感觉力”这一术语也包含两种相关的意义。潜在存在的两个阶段没有各自不同的名称，尽管我们已经指出它们是不同的以及它们如何不同，但我们不得不沿用“被作用或被改变”这两个不恰当的术语来指其中的两种转变。诚如我们已经阐述的那样，具有感觉能力的事物潜在地与实际上可以被感知的事物相类似，即在其被作用过程的开始阶段，相互作用的两个因素是不同的，而在被作用过程结束时，一方则被另一方所同化，并在性质上与之相同。

## 第六章

为了研究每一种感觉，我们将首先讨论可为每一感官所感知的客体。“感觉客体”这一术语涵盖三种事物，其中的两种，用我们的话来说，是直接可感知的，而剩下的一种只是偶然可感知的。在前两种之中，一种包括只能被一种感觉所感知的事物，另一种则包括可被任何和全部感觉所感知的事物。对那种不能为任何其他感觉所感知而只能为一种相应的感觉所感知的事物而言，便没有出现任何[感觉]错误的可能，我称这种可感觉事物为这种或那种感觉的特殊客体；从这种意义上说，颜色是视觉的特殊客体，声音是听觉的特殊客体，滋味是味觉的特殊客体。触觉，实际上，可以区分多种不同性质的事物。每一种感觉都有一种它能够分辨的客体，而且在分辨出现在其面前的是颜色还是声音时从不失误（尽管在分辨有颜色的事物为何物或该物在何处，或者发声的事物为何物或该物在何处时，它可能会失误）。这样的感觉客体，我们提议称之为这种或那种感觉的特殊客体。

“共同感觉客体”是运动、静止、数量、形状和度量；这些客体不专门属于任何一种感觉，而属于所有的感觉。至少，有几种运动就是既可以凭触觉感知，也可以凭视觉感知。

我们谈及感觉的偶然客体，在此，以我们所看到的白色物体是狄亚雷之子为例；在此例中，由于狄亚雷之子“碰巧是”可直接可见的白色物体，所以我们说狄亚雷之子是（偶然地）为我们所感知或看见。由于这仅仅是偶然感觉到的客体，所以它这类感觉客体绝不会影响诸感觉。在前两种感觉客体中，两者均为其自身内在本质上就是可以被感觉所感知的，第一种[感觉客体]——几种感觉的特殊感觉客体——构成了此术语的最严格意义上的感觉客体，并且这几种感觉中的每一种感觉的结构恰恰都与相应的感觉客体在事物的本质上相适应。

## 第七章

视觉客体是可见物，可见物是[指]颜色以及某种可以用语言描述但却没有名称的事物，随着讨论的继续，我们所指的后者的意义将会十分清楚。任何可见的事物都是颜色，而颜色之所以是可见的取决于其自身内在本质的可见性；在此，“其自身内在本质的本质”指的不是用以解释颜色的定义所涉及的那种可见性，而是指其自身所含有的能够引起可见性的那一基质。每一种颜色都具有使实际上透明的物体处于运动状态的能力，这种能力构成其真正的本质。这就是为什么如果没有光的帮助，它便是不可见的；只有在光照中，物体的颜色才是可见的。因此我们的首要任务是阐明光是什么。

透明物显然是存在的，我所说的“透明物”指的是可见物，但并非指其自身是可见的，而是由于他物的颜色，它才具有其可见性；气、水以及许多固体都具有这一特征。气和水是透明的原因不在于它是气或水，而在于它们两者中均含有某种物质，该物质在两者中是相同的，并且也存在于构成物质宇宙外壳的永恒物体之中。该物质的活动就是光——透明物不断活动直至其中具有变成透明的决定性能力；哪里有这种能力存在，哪里也就有其相反者的潜在存在，即黑暗。光在某种程度上就是透明物固有的颜色，并且受火或者与“天穹物体”类似的某物的影响，每当潜在的透明物被激活而变为现实存在时，光便存在；因为火中也包含某种物质，这种物质与现在所讨论的物质是同一的。

我们现在已经阐述了什么是透明物以及什么是光；光既不是火，不是任何哪一种物体，也不是任何一种物体的流射物（如果是，其自身将再次成为某一物体）——它是火或与火类似的透明体中的某种存在。它肯定不是某一物体，因为两个物体不能同时在同一空间存在。光的相反者是黑暗，具有上述相应特征的积极状态的透明物的缺失就是黑暗；因此，显而易见，光就是具有这一状态的透明体的存在。

恩培多克勒（以及采用与其相同论述方式的他的支持者们）是错误的，他曾论述道，光在地球与其周围的大气层之间“旅行”或者在某一特定的时刻抵达此处，其运动是我们无法察觉得到的；这种观点既与确凿的论据相悖，又与观察所见的事实相反；假如（光所）穿越的距离很短，其运动可能是我们无法观察得到的，但是这一距离（实际上）是从最东端到最西端，我们竟然都无法发现，这就令我们无法相信了。

凡能够显现颜色的物体均是其自身无颜色的物体，正如一切能够接收声音的物体都是其自身无声的物体一样；无颜色的物体包括透明物以及不可见物或几乎不可见物，即“暗色”物体。当透明物潜在地透明时，当然不是当其现实地透明时，后者与透明物是一样的；它是时暗、时明的同一物质。

并非所有可见物的可见性都取决于光。这只适用于事物“特有的”颜色。某些在光中不可见的视觉客体，即那些看上去炽热的或发光的物体，在黑暗中却能够[刺激视觉感官]产生感觉。这类的事物没有共同的专门名称，不过真菌、肌肉、头、介壳虫以及[某些]鱼的眼睛却都是这类事物的例子。在这些例子中视觉所见的均非其“特有的”颜色。究竟为什么我们能看见这些是另一个问题。现在，显而易见的是，在光中所能看见的总是颜色。这就是为什么一旦离开了光的帮助，颜色便是不可见的。颜色之所以是颜色正是因为它本身有能力使已经是现实的透明物处于运动状态，并且，正如我们所观察到的那样，透明物的现实存在恰恰就是光。

下面将尝试阐明的是[视觉]介质的必要性。如果使有颜色的物体与眼睛直接接触，该物体则不能被看到。颜色不是使视觉感官而是使透明物，譬如气，处于运动状态，而且该透明体在视觉客体和视觉感官之间持续地延展，使后者处于运动状态。德谟克利特在阐述其相关的观点时歪曲了事实，他认为，假如视觉客体与视觉感官之间的空间是空的，那么人们就能够清楚地看见天穹上的蚂蚁，那是不可能的事情。视觉归因于有感觉能力的事物的影响与变化，而且它不能受所见颜色自身的影响；那么它就必然被两者间的事物影响。因此其间必然有某物存在——假若其间没有任何事物，非但不能看得更清晰，我们反而必将什么也看不到。

至此，我们已经阐释了为什么除非在光中否则颜色是不能被看到的。另一方面，火既可以在黑暗中被看到，也可以在光中被看到；按照我们的理论，这一双重的可能性是必然的，因为正是火使潜在的透明物变成了现实的透明物。

同样的阐释也适用于声音和气味；如果这两种感觉客体与其[相应的]感官直接接触，那么将不会产生任何感觉。在这两种情况中，感觉客体只能使存在于[它与感官]之间的事物处于运动状态，继而该中间事物又使[相应的]感官处于运动状态：如果将发出声音或气味的事物与[相应的]感官直接接触，那么将不会产生任何感觉。同样的阐释还适用于触觉和味觉，尽管它们看起来完全不同；为什么存在这一明显的不同，将待下文阐明。对声音而言，其介质是空气；对气味而言，其相应的介质尚无名称。但是，对颜色而言，其相应的透明物具有见诸空气和水之中的某种性质，该性质可作为散发气味之物的介质——我之所以说“在水中”是因为生活在水中的动物以及生活在陆地上的动物似均具有嗅觉，而“在空气中”是因为人与其他所有陆地上能呼吸的动物，只有当其吸入空气时才能感知气味。对此的阐释也将留待下文给出。

## 第八章

现在，我们首先厘清声音与听觉的差别。

声音有两种：现实声音和潜在声音。我们说，有些事物“没有声音”，例如海绵或羊毛；有些事物则有声音，例如青铜以及一般来说所有[表面]光滑的和坚实的事物。后者被认为是有声音的，其原因在于它们能够发出声音，即能够在它们自身与听觉感官之间产生现实声音。

现实声音的产生需具备以下两个必要条件：两个物体以及两物体之间的空间；因为声音是通过碰撞产生的，所以仅有一个物体是不可能产生声音的——必须有某一撞击物体和某一被撞击物体；发声物体通过撞击另一其他物体发出声音，而没有从一处到另一处的空间运动是不可能的。

正如我们业已阐明的那样，并非所有的物体相互撞击都能发出声音，撞击羊毛便不会发出声音，而撞击青铜或任何[表面]光滑并且[内部]中空的物体却会发出声音。青铜受到撞击时便发出声音是由于它是光滑的；而中空的物体发出声音则是因为最初的撞击所引起的回声多次反复，[因为]最初处于运动状态的物体无法从中空部分脱离出来。

此外，我们还必须提及的是，无论在空气中还是在水中，声音均是可以被听到的，尽管在后者中，声音听起来不是那么清晰。然而不论是空气还是水都不是产生声音的主要原因。产生声音所必须的条件是两个固体的相互撞击及其与空气的撞击。如果被撞击的空气在这一撞击前没有退避，即没有因该撞击而消散，则满足了后一必备的条件。

这就是为什么如果它将发出声音，那么对其的撞击必须迅疾而猛烈——撞击者的运动必须快于空气的消散，这就好比人们用鞭子抽击一个沙堆或者抽击一个正在快速运动过去的旋卷着的沙团，便可发出声音一样。

当最初受到撞击物的撞击并处于运动状态的空气，从另一团空气（这团空气结为一体被限制在容器内）上反弹回来，如同一个皮球从墙上反弹回来，且无法消散，这时便出现回声。简而言之，回声很可能就是这样产生的，尽管它通常只能是隐约地被听到。这里所出现的情况肯定与光的情况相类似；光总是被反射的——否则，它便无法被到处传播，那么除了被太阳直接照射的区域之外，其他的地方必将是茫茫的黑暗；但是，当其被水、青铜以及其他表面光滑的物体反射时，被反射的光并不总是强到足以投下阴影，这正是我们借以识别光的区别性标志。

虚空的空间在声音的产生过程中起主要作用，这一说法是正确的，因为人们所说的“虚空”指的是空气，当空气作为一个连续的气团而处于运动状态，它便产生听觉；但是由于其自身的易散性，在受到撞击而与不光滑的[物体]表面相撞时，它便会受撞消散，而发不出任何声音。当其所撞击的[物体]表面非常光滑时，最初撞击所产生的便是一个结为一体的气团，这一结果归因于空气在另一端所接触的[物体]表面的光滑性。

有能力发出声音的事物是有能力肇始结为一体的气团处于运动状态的事物，该气团将这一运动从最初的撞击物继续传递到听觉器官。听觉器官与空气是天然地结合在一起的，而且由于听觉器官存在于空气之中，听觉器官内部的空气与其外部的空气是同时被运动的。因此，动物不是用其躯体的所有部分来听，也并非其所有躯体部分都允许空气进入；因为即使是可以被运动并且能够发声的部位也不是其中处处都有空气。由于其自身的易散性，空气本身是无声的；只有当其消散受阻，其运动才能发出声音。耳内的空气被聚集在一耳室之中恰好阻止这一消散运动，以便动物得以准确地听辨出外部空气的各种运动。这正是为什么我们在水中也能听得到声音，换言之，因为水不能进入耳室，而且由于耳内部的螺旋结构，水甚至无法进入外耳。如果有水进入，听觉便会终止，如果耳鼓膜受损，情况也是如此，正如如果眼角膜受损，视觉就会终止一样。耳是否能像号角一样发出回响也是一种耳聋测验方法；耳内的空气总有其自身的运动，但是我们所听到的声音总是其他物体发出的声音，而不是听觉器官本身发出的声音。这正是为什么我们说我们借以听闻的是虚空的事物和回声，即因为我们借以听闻的是一个其中包含着被结为一体的气团的耳室。

孰为“发出声音者”：撞击者还是被撞击者？难道答案不能是“两者都是，但各自方式不同”吗？声音是在受撞击时撞击一[物体的]光滑表面并反弹回来的物体的运动。正如我们业已阐释的那样，在撞击或受到撞击时，并非所有的物体都发出声音，例如，如果一根针被另一根针撞击，两者均不发出任何声音。因此，为了发出声音，被撞击物体必须表面光滑，以使空气能够反弹并且以一完整的气团经振动而脱离这一表面。



只有在现实声音中不同发声物体的差异才能自己显露出来；如果没有光的帮助，颜色依然是不可见的，与此相同，如果没有现实声音的帮助，尖厉的声音与低沉的声音之间的差别也是无从听辨的。此处的尖厉和低沉是隐喻，是从其原本的感觉，即触觉转借而来的，在触觉中它们分别指在短时间内强烈触动此感觉的事物，和在长时间内微弱触动此感觉的事物。并非尖利之物运动得快，沉钝之物运动得慢，而是这种运动与另一种运动之间在性质上的差异归因于它们各自的速度。看来听觉上的尖厉或低沉之物与触觉上的尖利或沉钝之物之间似乎存在着某种相似性；尖利之物实际上是动则以刺，而沉钝之物则是动则以推，一个在短时间内便产生效果，另一个则在长时间内才能产生效果，因此一个迅速，一个缓慢。

作为对于声音的分析，以上所述足矣，无需赘述。语音是声音的一种，是寓寄灵魂者所具有的特征；没有灵魂的事物是发不出语音的，我们说长笛或竖琴的语音抑或通常所说的那些有能力发出一系列音域、音高及音质不同的音符的事物（无灵魂之物）的语音，那只不过是一种比喻的说法罢了。该比喻基于所有这些差异也都见诸语音之中这一事实。许多动物都发不出语音，例如所有无血动物以及有血动物中的鱼类。这正是我们所预期的，因为语音是空气的某种运动。像阿克罗俄斯河中的鱼一样，这类鱼据说是能够发出语音的，实际上它们是用鳃或某种类似的器官发出声音。语音是动物发出的声音，而且是用专门的器官发出的声音。诚如我们所述，一切能够发出声音的事物在其发声时无不通过某物撞击另一物，通过某一空间，充满空气；因此,唯一可以预料的是只有那些能够吸入空气的动物才能发出语音。一旦空气被吸入，自然便将其用于两个不同的目的，正如舌既被用于品尝味道，又被用于发出语音一样；在这两种功用中，品尝味道是动物生存所必需的（所以该功用更广泛地见诸各种动物），而发出语音则属一种奢侈，有助于其拥有者能够更好地生存；与此相似，在前一种情况中，自然既将呼吸作为生物调节体内温度必不可少的手段，又将其作为发出语音的介质，为的是其拥有者更好地生存。关于为什么调节生物体内温度这一功用是不可或缺的，须待另文讨论。

呼吸的器官是气管，与气管相连，并作为实现呼吸这一目的的器官是肺。肺是躯体的一部分，凭借此部分陆地动物的体温才得以高于其他所有动物的体温。但是迫切需要通过呼吸以吸入空气的不只这一部分，还有心脏周围的部分。这就为什么当动物呼吸时，空气必须进入体内。

因此语音是被吸入的空气撞击“气管”所发出的声音，并且产生这一撞击的动因是寓寄于躯体这些部分之中的灵魂。正如我们所论述的那样，并非动物所发出的每一个声音都是语音（即使是用舌我们可能也只不过是发出一个并非语音的声音，抑或不用舌，就像发出的咳嗽声那样[也不是语音]）；发出撞击声者必定有灵魂寓寄其中，并且一定有想象活动与之相伴，因为语音是一种有意义的声音，而且并不仅仅像咳嗽那样，是任何吸入空气撞击的结果；在发出语音的过程中，气管中所吸入的空气被用作撞击气管壁的工具。这一点可用以下事实证明，当我们正在呼气或吸气时，我们都是不能说话的——只有屏住呼吸我们才能说话；因为只有在屏住呼吸时，我们才能进行这样的运动。鱼类为什么不能发声，其原因也就十分清楚了，它们根本没有气管。而且它们没有气管是由于它们既不呼气，也不吸气。为什么它们不呼吸则属于另一有待探讨的问题。

## 第九章

较之截止目前我们业已讨论的诸感觉，嗅觉及其客体更为难以确定；嗅觉客体的区别性特征不如声音或颜色的区别性特征那么明显。其原因在于我们嗅觉能力的辨别力较差，并且一般说来逊于许多其他种类动物的嗅觉辨别力；人的嗅觉很差，而且我们对特定嗅觉客体的分辨总是不可避免地我们的愉悦和痛苦紧密地联系在一起，并且不可避免地受其迷惑，这表明，我们体内的嗅觉器官是不精确的。很可能，硬眼动物在感知颜色过程中也有类似的失误：它们可能仅凭引起恐惧的事物是否出现来分辨颜色的不同，而且人类正是以与此类似的方式分辨气味。嗅觉与味觉之间似乎可作某种类比，而且不同种类的味道与不同种类的气味相类似——唯一不同的是我们的味觉远比我们的嗅觉更加具有辨别力，因为前者属触觉的一种变异，人类的触觉达到了最高的分辨精度。在所有其他感觉方面，我们都逊于许多其他种类的动物，但在触觉方面我们的辨别精度却是远远超过所有其他动物。这就是为什么在所有动物中，人是最具智慧的。以下事实可为这一点提供佐证：人与人之间在天赋上的差异取决于触觉器官上的不同，而与其他器官无关；凡肌肤粗糙者，其自然禀赋均不高，凡肌肤柔软者，其自然禀赋皆很高。

味道可分为甜、苦，气味也是如此。在有些事物中，味道和气味具有同样的性质，即两者均为甜或两者均为苦；而在另一些事物中，它们却是不同的。与味道相类似，气味也可以是刺鼻的、涩的、酸的，抑或油腻的。不过，正如我们曾经说过的那样，由于气味远比味道难于辨别，这些不同的名称只是以比喻的方式用于气味；譬如“甜的”是从藏红花或蜂蜜的味道引伸到其气味的，“刺鼻的”则是从百里香的味道引伸至其气味的，等等。

从相同的意义上说，听觉的客体既包括可听见物，也包括不可听见物；视觉的客体既包括可见物，也包括不可见物；嗅觉的客体既包括有气味的物体，也包括无气味的物体。“无气味的”可指无任何气味的物体，或指淡薄或微弱的气味之物。同样的双重意义也隐存于“无味道”一词之中。

与此前曾仔细讨论的诸感觉的活动相似，嗅觉活动也要通过某种介质方能实现，即通过空气或水——我之所以加上水，是因为水生动物（既包括有血的，也包括无血的）似乎也与陆地动物一样能够嗅闻；如果食物有气味，至少一些水生动物能够直接找到远处的食物。下列事实之所以对我们构成一个问题的原因就在于此。所有动物均以同样的方式嗅闻，但是人只有在其吸气时才能嗅闻；如果呼气或屏住呼吸，他便无法继续嗅闻，不论有气味之物是在远处还是在近前，即使是将其置于鼻中或者干脆置于鼻孔底下均无济于事；所有感觉均无法感知与其器官直接接触的事物，这是普遍的感觉缺陷，可是失去了吸气的帮助，我们便不能感知有气味的事物，这却是特殊的（在实验中，这一事实显而易见）。既然无血动物不呼吸，人们似可认为，它们一定具有通常所说的五种感觉之外的某种新感觉。我们对此的回答必然是这是不可能的，因为被感知的是气味；感知有气味之物并且辨别其气味好或坏的感觉不可能是任何别的东西，只能是嗅觉。此外，据观察，与人类一样，它们会因沥青、硫磺以及诸如此类的、同样强烈气味的刺激而受到伤害。这些无血动物肯定无需呼吸便能够嗅闻。其可能的解释是，与其他所有动物体内的嗅觉器官相比较，人体中的嗅觉器官具有一定的优越性，这就好像较之硬眼动物的眼睛，人的眼睛具有一定的优越性一样。人的眼睛在眼睑中有一种庇护物或保护膜，它们必须是可移动或可拉开的，以便我们能够看到物体，硬眼动物却不具备任何这类的器官，而只能立刻看到呈现于透明介质中的任何事物。与此相似，在某些种类动物体内，其嗅觉器官与硬眼动物的眼睛类似，属无遮蔽保护的，而在那些吸入空气的动物体内，其嗅觉器官则可能有遮蔽保护，吸气时，由于血管或毛孔的扩张，该遮蔽保护被拉开。这也解释了为什么这种动物不能在水中嗅闻；为了嗅闻，它们首先必须吸气，然而它们在水中不能吸气。

正如味道源自湿润之物一样，气味源于干燥之物。因此，嗅觉器官潜在地属于干性。

## 第十章

凡可被品尝之物都是可被触摸之物，而且正是缘于此故，可被品尝的事物是不能通过外来的媒介而被感知的，因为触觉意味着无需任何媒介。此外，有味的、可品尝的物体是处于液体质料中的，并且是可触摸的。因此，假如我们生活在水中，我们应该能够感知到加注到水中的甜物质，但是水并不是我们借以感知的介质；我们的感知应归因于我们饮用水中的甜味物质的溶解，就好像将甜味物质混合在某些饮品中一样。此处的感知与颜色的感知没有任何相似之处，颜色的感知既不是由于某物与某物的混合，也不是因为某物从某物中流出。与此前所讨论的诸感觉的介质的情形不同，对味觉而言，不存在任何与其介质相对应的事物；但是正如视觉的客体是颜色一样，味觉的客体是味道。但是，如果没有液体的帮助，任何事物都不能激起味感；作用于味觉的事物必须是现实的液体或者是潜在的液体，如含盐物；含盐物必须既本身易于溶解，又能够因舌头而溶解。味觉所感知的既有有味物，又有无味物，我们用无味物指的是只有淡淡或微弱味道的事物，或者是能够破坏味觉的事物。在这一点上，味觉酷似视觉，视觉所感知的既有可见物，也有不可见物（虽然黑暗是不可见的，但却可以被视觉所分辨；[对于]过于明亮的事物，情况也是如此，但却是以一种不同的方式），而且味觉也酷似听觉，听觉所听辨的既有声音，又有寂静，在这两者中，一种为可听到的，而另一种则是不可听到的，而且还有过于高亢的声音。在听觉中，这种情况与视觉中的过于明亮的光相类似。就像一微弱的声音是“听不到的”一样，从某种意义上说，响亮或剧烈的声音也是如此。“不可见的”一词以及类似的表示否定意义的词语所包含的意义不仅有某物完全不具有某种能力，而且还有某物为适应自然应具备某种能力，但却并不具有该能力或者只是在非常低级的水平上具有该能力，正如我们说某一种类的燕是“无足的”或者某一种水果是“无核的”一样。味觉也是如此，其客体既可以是可品尝之物，又可以是不可品尝之物——后者意指淡味之物或不良气味之物抑或破坏味觉之物。无味物与有味物的区分似乎完全基于可饮物与不可饮物的区分，可饮物与不可饮物——两者都是可品尝的，但后者是不好的并倾向于破坏味觉，而前者却是味觉的正常刺激物。可饮物是触觉与味觉的共同客体。

凡可被品尝的事物均是液体的，故而，其感觉它的器官既不可能是现实意义上的液体，也不可能是不能转化成液体之物。味觉的意思是可被品尝物以如此的方式作用于某一存在；因此味觉器官必须被液化，而且是始于非液体但却能够液化而又不失其独特本质。以下事实可以证实这一点：当舌头过干燥或者过湿润时，它均无法品尝；后一种情况中出现的原因在于舌头本身所接触到的是舌头已有的水分，[这就如同]在先品尝了某一强烈味道之后，我们又试图品尝另一味道；同样，病人感觉他们所品之物都是苦的，换言之，这是因为，在他们品尝时，充溢其舌的是苦味的水分。

与颜色的分类相似，味道的种类有单纯味道，即相反的两种味道；有兼性味道，即在甜的这类味道中，还有油性的味道；在苦的这类味道中，还有咸的味道；在这些之间，尚有刺激的、粗涩的、清苦的以及酸的味道，这些几乎就是各种不同的味道了。据此我们可以得出的结论是，凡具有味觉能力者就是潜在地具有这些性质的东西，而且凡可品尝的均为有能力现实地使这种潜能变成现实的东西。

## 第十一章

任何适用于可触摸物的论述，都适用于触觉，反之亦然；如果触觉不是一种单一的感觉，而是多种感觉的组合，那么就一定存在着多种不同的可触摸物。触觉是一种单一的感觉还是多种感觉的组合，这是一个问题。触觉器官是什么，这也是一个问题；触觉器官是不是肌肉（包括在某些动物体内，与肌肉功能相同的是什么）？据第二种观点，肌肉是触觉的“介质”，真正的触觉器官位于躯体内部的更深处。之所以出现这一问题是因为，据普遍接受的观点，每一感觉领域均由单一的一对相互对立的感觉客体所决定，对视觉而言的白与黑，对听觉而言的尖厉与低沉，对味觉而言的苦与甜；但是在可触摸物领域内我们却发现数对这样的对立对，热与冷、干与湿、硬与软等。回顾一下其他感觉，便可找到这个问题的部分答案，在其他的感觉领域中，也可找到不只一个对立对，譬如声音中不仅有尖厉与低沉，还有宏亮与轻柔、圆润与刺耳等；在颜色中也有一些类似的对立对。但是，在触觉中，这些相互对立的性质所依赖的、类似听觉中声音的那种唯一的主体是什么，我们尚不能确定。

触觉器官是位于躯体的内部还是外部（即我们是否需要越过肌肉在躯体内部寻找），对于这一问题，从如果[触觉]客体与肌肉接触，该客体马上就被感知这一事实中，我们看不出任何支持第二个答案的迹象。因为即使是在目前的条件下，如果所做的实验是织一张网，再用其紧紧地包裹住肌肉，只要该网被触摸，感觉就会像以前一样以同样的方式被记录下来，然而触觉器官却不在这个网膜中，这一点是显而易见。假如网膜能够长到肌肉上去，那么感觉记录将会传送得更快。肌肉在触觉中所起的作用与围绕在我们周围的大气层在其他感觉中所起的作用将会是完全一样的；假如我们有这样的大气层包围着我们，那么我们就可以认为凭借某一单一的器官，我们就可以感知声音、颜色以及气味，而且我们也可把视觉、听觉和嗅觉视为同一单一的感觉。但是实际上，不同的[感觉]运动所赖以传递的介质并非自然地依附于我们的躯体，因此，各种不同感觉器官的差别是非常明显，不容忽视的。但是对触觉而言，情况尚不清楚。



因为任何生物的躯体都不可能由空气或水组成，所以必然存在某种自然所赋予的像肌肉一样的“介质”；它一定是某种固体物质。因此它一定是由土与空气和水混合而组成的，该介质很有可能就是肌肉以及没有真正肌肉的动物体内类似肌肉的部分。因此这些多种相互对立的触觉客体借以传递的介质必然一定是自然所赋予该有机体的组成部分。如果我们仔细分析一下舌的触觉，那么触觉客体的多样性就会十分清楚了；在舌上我们既可感知所有的可触摸物，也可感知味道。假设我们其他所有的肌肉，都像舌一样，对味道很敏感，那么我们就该把味觉和触觉视为同一种感觉了；触觉和味觉却不总是见于躯体的同一部位，这一事实使我们不能把这两者视为同一种感觉。人们似可提出下面这一问题，我们假定每一物体都是有深度的，即具有三个维度，而且如果两个物体之间有第三个物体，使其不能彼此相互接触；我们要记住，液态物是一种物体，而且必然是水或必然含有水，如果两个物体在水下相互接触，它们的接触表面不可能是干的，它们之间必然有水，即润湿其接触界面的水；从所有这一切可以得出的结论是，在水中的两物体是不能彼此相互接触的。在空气中的两物体也是如此——空气对在空气中的物体的作用与水对在水中的物体的作用是完全相同的——可是就我们的观察而言，事实却并不明显，因为我们生活在空气中，正如生活在水中的动物，通常不会注意到水中相互接触的物体的表面是湿的。接下来的问题是：对所有感觉客体的感知方式都是相同的吗？抑或不同？例如味觉与触觉要求接触（一般认为味觉与触觉是如此），而所有其他感觉都是远距离感知呢？这种区分不妥；我们既感知硬的或软的物体，也凭借某一“介质”感知听觉客体、视觉客体以及嗅觉客体，只是被感知的后者所处的距离比前者远些；这正是为什么我们没有注意这些事实。因为我们确实是通过某一介质来感知一切事物的；但是在这些情况中我们疏忽了其中的事实。然而，重复一下我们此前的论述，假如触觉的介质是一网膜，它将我们与感觉客体分离开来，而我们也未曾留意其存在，那么我们与该网膜的相对关系将会如同我们与我们现在正置身于其中的空气和水的关系；在空气和水中，我们认为我们能够触摸到客体，在我们与客体之间没有任何东西介入。但是在可被触摸物与可被看见物或能发声物之间还是存在着这样一个差别的；在后两者情形中我们感知是因为介质对我们产生了某种影响，而在对触觉客体的感知中，我们不是被介质所影响，而是和介质一起受到影响；这就好像一个人隔着他的盾被刺伤一样，在这种情况下，不是盾牌受到震动后将震动传至人，而是对两者的震动是同时发生的。

概而言之，肌肉和舌与触觉和味觉的真正器官相关，正如空气和水与视觉、听觉和嗅觉相关一样。因此，无论在哪一种感觉中，如果将感觉客体直接置于器官之上，都无法产生对该客体的任何感觉，譬如将一白色客体放在眼睛的表面。这再次证明，有能力感知可触摸物的器官一定位于[肌肉的]内部。唯有如此，触觉才能与其他感觉形成完全的类比。对于其他感觉而言，如果你将感觉客体直接放在器官上，那么该客体则不能被感知，但对触觉来说，如果你将其放在肌肉上，那么它就会被感知；因此肌肉不是触觉的器官而是其介质。



凡可触摸物均具有物体之所以为物体的独特性质，我的意思是，正是那些体现诸元素特征的不同性质才是物体之为物体的独特性质，即热与冷、干与湿，我们早已在此前关于诸元素的专篇中对这些性质做过论述。感知这些的器官是触觉器官——躯体中触觉器官所主要寓居的那个部分。该部分是潜在存在的那一部分，这就好似其客体是现实存在一样：因为一切的感觉—感知都是被如此影响的过程；所以，凡能够使某物成为现实之所是者均可使另一物如是，因为另一物早已潜在地如是。这就是为什么当触觉客体和我们一样地热和冷或一样地硬和软时，我们便不能感知；我们所感知的事物必须具有或高于或低于中性点的可感觉度。这表明，感觉本身是介于任何两种决定该感觉领域的相互对立性质之间的一个“平均值”。正因如此，感觉才具有了分辨其感觉领域中的感觉客体的能力。位于“中心”者适合辨别；相对于任何一个极端而言，它可以把自己置于另一端。这就像感知到白与黑的对象，首先，必须现实上既不是白，也不是黑，但潜在地则必须既是白，又是黑（并且所有其他一切感觉器官均都如此），所以触觉器官必然既非热，亦非冷。

此外，从某种意义上说，可见物与不可见物两者均属视觉客体（对于业已讨论过的所有其他感觉，其真实情况也都与此类似），与此相同，触觉的客体既包括可触摸物，也包括不可触摸物。这里，“不可触摸物”指的是像空气一样只具有微弱可触摸性的事物以及具有超强可触摸性的事物，如具有破坏性事物那样。

至此，我们已经对以上诸感觉中的每一种都分别给予了简要论述。

## 第十二章

现在似乎可以系统地阐述以下适用于任何感觉的结论了。

(A)“感觉”是指无需事物的质料便有接受事物的可感知形式的能力。对此的理解必须是，感觉发生的方式如同一块蜡呈现图章戒指的印纹，这与其铁的或金的质料无关；我们说产生印纹的是一铜质的或金质的图章，其特有的金属构造不起任何影响：以类似的方式，感觉可以被有色物或有味物抑或发声物所影响，但是在每一种情况下，其实体是什么都无关紧要；唯一重要的是它所具有的性质是什么，即其组成部分相结合的比率是什么。

(B)“感官”是指该能力最终所寄寓的躯体的部位。

感觉及其器官实际上是相同的，但是其本质却是不同的。当然，感知事物者是一空间量，但是我们肯定不能认同具有感知能力或感觉本身是一个量；它们是量中的某一比率或潜能。这使我们能够解释，为什么感觉客体拥有的两个相互对立的可感知性质，如果一方在某种程度上比另一方过于强烈时，感觉客体便会对感觉的器官造成破坏；如果某一客体所引起的运动对器官而言太强烈的话，器官中对立性质的平衡便被打破了，该平衡恰恰就是其感觉能力；正如过于猛烈地弹拨七弦竖琴，其和谐与音质就会被破坏了一样。这也解释了为什么植物不能感知，尽管在其体内寄寓着部分灵魂并且其自身明显地受可触摸客体影响；因为毫无疑问，它们的温度可以被降低或者被升高。对此的解释是，植物根本没有相互对立性质的平均点，因此其体内也没有能够无须借助可感知对象的质料，便接受感知对象形式的本原。就植物而言，它们所受到的影响是一种形式与质料共同作用而产生的影响。人们似可质疑：可以说不能嗅闻者能够受气味所影响吗？或者可以说不具有视觉机能者能够被颜色所影响吗？而且其他诸如此类的感觉者都是这样吗？我们似乎可以说，气味就是可被嗅闻之物，如果它产生任何影响，它也只能是使某物嗅闻到它而已，而且似乎可以认为，凡不能嗅闻者均不能受气味影响，即使是可嗅闻者也只有当气味在其嗅觉能力之内时才能为气味所影响（对于所有其他感觉的相应客体而言，情况也都与此相似）。的确，下列事实完全可以证明情况就是如此。光亮与黑暗、声音与气味未对物体施加任何影响；真正对物体施加影响的不是这些，而是作为它们工具的物体，譬如劈开树干的不是雷声，而是与雷相伴随的空气。这是事实，可是，这也可能遭到反对，物体受可触摸物和味道影响。如若不然，影响没有灵魂之物的，即使其发生性质改变的，是什么？那么，我们肯定不会认为其他感觉的客体也可能会影响它们吗？所有物体都能被气味和声音所影响，但是有一些物体，由于其自身没有界限，当被作用时容易消散，空气就是一例，由于受到了有气味物体的某些影响，它也变成有气味的了，这一说法是真实的论述吗？但是有气味的物体所产生的影响不仅限于引起嗅闻——此外还有什么影响吗？由于受到有气味之物的短暂影响，空气本身确实变得可由嗅觉所感知，嗅是对已经产生的结果的感知，这难道不就是该问题的答案吗？

# 第三卷

## 第一章

除已列举的五种感觉——视觉、听觉、嗅觉、味觉和触觉之外再无第六感觉。这一观点似可通过以下论述得以证明：

如果我们确实具有凭借触觉感觉一切事物的感觉（因为我们可以通过触觉感知可触知物的一切可触知的性质）；其次，如果某一感觉的缺失必然包括某一感官缺失；再次，如果我们通过直接接触感知的所有对象均可凭我们实际拥有的触觉所感知，而且我们通过介质感知的所有对象，即无须直接接触[而感知的客体]，均可以凭借或通过如空气和水一类的简单元素而感知到（并且这又分为如下两类：如果不止一种可感对象可通过一种单一介质而被感知，与介质类似的感官的拥有者有能力感知多种对象；例如，如果该感官是由空气构成，而空气既是声音的介质，又是颜色的介质；但是，如果有不止一种介质可传输同一种可感觉对象，例如，水和空气均能传输颜色，而且两者都是透明的，那么这两者的拥有者都将能感知这类可通过这两种介质传输的客体）；并且如果感官只是由空气和水这两种简单元素构成(因为瞳孔是由水构成的，听觉感官是由空气构成的，嗅觉感官是由这两者之一构成的，然而火要么在全部之中，要么不在任何一种之中——热是一切感觉赖以存在的必要条件——而且土要么不在任何一种之中，要么，如果存在的话，便专门与触觉感官的组成部分相联结；因此，我们可得出以下结论：感官只能是由水和空气构成，除此以外，别无他物）；而且如果某些动物拥有这些感官，——则一切发育完全或无残缺的动物均有一切可能有的感觉（因为观察发现，甚至鼯鼠在其皮毛下也长有眼睛）；因此，如果不存在第五种元素，除了属于我们世界中的四种元素的那些属性外，别无其他属性，那么对这些动物而言也就无需任何其他感觉。

此外，也不可能存在某种特殊的感官能感知诸多共同感觉对象，即我们通过这种或那种特殊的感觉偶然感知到的诸客体，譬如运动、静止、形状、广延、数和统一体；因为所有这些都是我们凭借运动来感知的，例如凭借运动感知广延，并且也凭此感知形状（因为形状是一种广延），我们凭借运动的缺失感知静止之物：数则是通过否定连续性，通过特殊感觉对象被感知的；因为每一种感觉感知一类可感对象。所以，显然不可能存在某种特殊感觉能感知任意一种共同感觉对象，比如运动；因为，如果存在，那么我们对共同感觉对象的感知将完全类似于我们现在用视觉感知甜物。其原因还在于我们具有某一感觉，可以感知两种性质中的每一种性质，由于这一缘故，当两种性质恰巧共存于同一可感对象中时，我们便可同时感觉到两者。如若不然，我们对共同性质的感知必将总是偶然的，这就好比我们对克里昂之子的感知，这里我们并非感知到他是克里昂的儿子，而是感知到白色，只是我们实际感觉到的白色物体恰巧就是克里昂的儿子。

但是，就共同感觉对象而言，我们已具有一种普遍的感觉能力，这种能力使我们能够直接感知这些共同感觉对象；因此根本不存在为了感知它们而必须有特殊感觉：假如有，那么我们对它们的感知也将与上述的感知完全相仿。

诸感觉能够偶然地相互感知其特殊客体；其原因不在于这感觉是这种或那种特殊感觉，而在于所有的特殊客体构成了一个统一体：只要在同一时刻感觉被指向同一客体中的两种截然不同的性质，便会产生这种偶然的感觉，例如关于胆汁的苦味与黄色，无论是嗅觉还是视觉均不能肯定两者的同一性；所以便会产生感觉错误，譬如人们会认为如果某物是黄色的，那么它就是胆汁。

人们或许会提出质疑，为什么我们要有多种感觉，而不是只有一种？这是为了防止感知共同感觉对象时出现疏漏吗？例如与特殊感觉对象伴随存在的运动、广延和数。假如我们只有视觉而没有任何其他感觉，并且该感觉只能感知白色对象，那么这些共同感觉对象将会逃脱我们的注意，而且所有的事物都将合为同一而使我们无法辨别，因为颜色和广延是相伴共存的。实际上，共同感觉对象存在于被多种感觉感知的对象中，这一事实表明，共同感觉对象与每一种特殊感觉对象不同，与所有的特殊感觉对象也都不同。

## 第二章

既然我们是凭借感觉才意识到我们正在看或正在听；那我们必然要么是凭借视觉，要么是凭借视觉以外的某种感觉才意识到我们在看。但是带给我们这种新感觉的感觉一定既能感知视觉，又可感知视觉对象，即颜色。所以，或将有两种感觉均可感知同一可感对象，或该感觉一定能感知其自身。此外，假若感知视觉的感觉与视觉不同，那么我们必定或陷入一种无穷无尽的回推，或必须假设存在某种能够感知其自身的感觉。果真如此，在第一种情形下，我们应该得出这一点。

这自然带来一个难题：如果凭视觉感知就是看见，且所见是颜色（抑或是着色物），如果我们意欲看到看者所见，那么最初的所见一定是着了色的。因此，显而易见，“凭视觉感知”有不只一种含义；因为即使当我们不在看的时候，凭借视觉我们也能辨别黑暗和光明，尽管其方式与我们辨别不同颜色的方式不同。此外，在某种意义上甚至所见也是着了色的；因为在所有情况下感官都能接受可感对象，但却不包括其质料。这就是为什么即使是在可感对象消失时，感觉和想象仍继续留存于感官中。

可感对象的活动与感觉的活动是同一的，但它们的存在依然并不相同。试以现实的声音和现实的听为例来加以说明：一个人可能有听觉，但却没在听，而且能够发声的事物也不总是在发声。但是如果能够听的人正在倾听而且能够发声的事物正在发声，那么这一现实的听和现实的声音便被融合为一（我们可将其分别称为倾听和发声）。

运动，无论是主动的还是被动的，均见诸被作用的事物。如果这一观点是正确的，那么声音和听觉，只要两者是现实的，就一定见诸具有听觉机能的事物；因为正是在被动因素中主动或原动因素的现实存在才得以实现；这就是为什么肇始运动的事物可处于静止状态。如此，能够发出声音的现实存在就是声音或发声，而能够听的现实存在就是听觉或倾听；“声音”和“听觉”都具有双重意义。同样的解释也适用于其他诸感觉及其客体。由于主动与被动均见诸被动因素，而非主动因素，所以感觉客体和感觉主体的现实存在均在后者中得以实现。但是，在一些情况下，这一总的现实存在的每个方面均有各自的名称，例如发声和倾听，而在另一些情况下，或此或彼却没有名称，例如视觉的现实存在被称为看，但颜色的现实存在却没有名称；味觉官能的现实存在被称为品尝，但味道的现实存在却没有名称。虽然其存在形式有别，感觉客体的现实存在和感觉能力的现实存在却同是一种现实存在。因此，现实的听和现实的发声便同时出现，同时消失，而且现实的滋味和现实的品尝等也是如此，但是，对于潜在存在而言，其一方却可在另一方不在的情况下依然存在。早期的自然哲学家们错误地认为，若无视觉，则不存在白或黑，若无味觉，则无滋味。他们的这一表述部分正确，部分错误：“感觉”和“感觉客体”是两个具有双重意义的术语，即[它们]即可指潜在存在，也可指现实存在：他们的表述对于后者而言是正确的，但对于前者而言却是错误的。他们完全没有注意到这一双重性。

如果嗓音总是蕴涵某种和谐，而且如果该嗓音与听到的该嗓音在某种意义上是同一的，而且如果和谐总是蕴涵某一比例，那么听和所听到的必定是某比例。这便是为什么声音过高或过低都有损听觉。（同样，对滋味而言，滋味过度也会损坏味觉，对于颜色而言，过亮或过暗也会损坏视觉，而对于气味而言，不论其是甜还是苦，过度刺激均[对嗅觉]有破坏作用。）这表明，感觉是一种比例。

也是缘于此故，当可感觉的极端物比如纯净的、无掺杂的酸、甜或咸被调至适度的比例时，感觉客体就会变得使人惬意；因为如果那样样的话，那么它们就是令人惬意的：一般来说，与单纯的高音或单纯的低音相比，高音和低音的混合音更和谐；或者，对于触觉来说，既可加热又可冷却的事物[更令人愉悦]：感觉和比例是同一的：但是超出限度的可感觉极端物却是令人痛苦的或是具有破坏性的。

因此，每一种感觉都与其特定的一组可感性质相关联：它存在于相应感官之中并分辨存在于此组中的各性质的差异；譬如视觉辨别白色与黑色，味觉辨别甜与苦，而且所有感觉均如此。既然我们还能够分辨白色与甜，而且更确切地说，[我们能够分辨]每一种可感性质，那么我们凭借什么感知他们彼此相异？一定是凭借感觉，因为我们面对的是可感觉客体。（因此还有一点是显而易见的，肌肉不可能是终极感官：假如它是[终极感官]，若无与客体的直接接触，辨别力则不能从事其工作。）



所以白色与甜的辨别不可能由两个相互分离的感觉来完成；被辨别的两种性质均必须蕴于同一单体事物中。在其他任何假设的情况下，即使我感知的是甜，你感知的是白色，两者间的差异也将是明显的。断言两事物不同者必须是一（一种感觉能力）；因为甜不同于白色。因此，断言该差异必定是具有同一性的，正如它断言一样，它思考或感觉也是这样。有鉴于此，通过两个分离的感觉辨别两个分离的客体是不可能的。这一点是显而易见的；而且如果我们按如下的方式看，就可看出，在不同的时刻做这样的辨别也是不可能的。因为,正如断言的善与恶之间的差异是同一的那样，其断言此不同和断言彼不同的时间对该断言来说也不是偶然的(例如就像我现在断言某一差异，但却不断言现在存在某一差异)；因此，它断言——不仅现在[作出断言]，而且客体也是现在不同；因此客体必须在同一时刻在场。辨别能力与辨别的时间均必须是同一和未分离的。

但是，对此可提出异议，在一不可分割的时刻，使具有同一性的单体事物同时向相反的方向运动，而又保持其单体不被分割，这是不可能的。因为假如甜的东西是被感知的味觉属性，那么它会触动相应的感觉或思想向这一限定的方向运动，但苦的东西则使其向一相反的方向运动，而白色的东西则使其向一不同方向运动。尽管辨别物在数目上为一且不可分离，而同时其在自身存在中却是可被分开的，情况真的如此么？从某种意义上说，正是分开的能力同时在感知两个分离的客体，但从另一种意义上说，它是以完整的身份进行这种感知的；因为其在存在中是可分的，但在空间和数目上是不可分的。难道这不是不可能的吗？自我同一和未被分割的单体可以同时潜在地兼含两个相反的性质。虽然这一点毋庸置疑，但就其存在而言，它却不能是自我同一的——一旦被置于活动中，它就必定丧失其统一性。同一事物不可能同时既为白色，又为黑色，所以，对某一事物而言，假设该事物是上述严格意义上的感觉和思维，它也绝不可能在同一时刻受白色和黑色两种形式的影响。

被称之为“点”的事物，因为其同时既可为一，又可为二，所以它被确认为是可分割的。这就是本章所讨论的难题的答案。在这里，正如被称作“点”事物一样，辨别能力作为不可分的单体，并且在某一瞬间处于活动状态，而当其作为可分物时，其在同一时间两次使用同一个点。所以，至于说它最多可分离成二，则是说它是凭借某一感觉中被分割的两个部分分辨两个分离的客体：而至于说它自成为一，则是指它进行如此分辨所借助的是某一单一的分辨能力并且在其活动中只占用某一瞬间。

关于此原理，即我们阐释的动物借此而具有感觉的原理，以上讨论足矣，不再赘述。

## 第三章

有两种显著的特殊性质,我们可借以概括灵魂的特征——空间位移以及思维、辨别和感知。思辨性思维和实践性思维两者均被认为与某种感知方式相似;因为通过两者中的任意一个,灵魂辨别并认知某物是什么。实际上先哲们甚至认为思维与感知是同一的;例如,恩培多克勒认为,“正是得益于现存的事物,人类的理智才不断增强”,而且他还认为,“人们会时不时地思考不同的想法,其根源就在于此”,此外,荷马的“人心皆如此,所识不相同”表达的也是同样的意思。正如在我们的讨论开始时我曾阐述的那样,他们都把思维看作是一个像感知一样的生理过程,并且认为物以类而被认识,物以类而被感知。可是,与此同时,他们还应该对失误也作出解释;因为失误与动物生存的联系更密切,而且灵魂处于失误状态的时间长于其处于真实状态的时间。他们会不可避免地陷入这样一种两难推理:要么一切看似真的均为真(而且有些人接受这一点),要么失误与不同类的事物相关;因为这与物以类认[原则]相悖。

但是,对相反的事物而言,失误和知识是同一的,这是一条公认的原则。

因此,感知与实践性思维不同,这是显而易见的;因为前者在动物界中是普遍存在的,后者则只属于动物中的一小部分。此外,思辨性思维也与感知相异——我是指我们可从中找出正确与错误——正确存在于审慎、知识和真实意见中,错误存在于它们的对立面中;因为对于个别感觉客体的感知总是正确无误的,并且这种情况见于所有动物,然而正确地思维和错误地思维都可能存在,而且思想仅存在于那些具有推理能力和感觉能力的动物之中。因为想象既不同于感知,又不同于论证思维,尽管没有感觉就不存在想象,或者没有想象就不存在判断。这种活动与作为判断的思维活动是不同的,这是显而易见的。因为任何时候只要我们有意愿,想象总是在我们自己的能力范围之内(譬如,就像使用备忘录一样,凭借心理影像我们就能回想起某一画面),但是,在形成意见的过程中我们却不能随心所欲:我们的意见注定要么是错误的,要么是正确。而且,当我们认为某一事物是可怕的或有威胁性时,马上便会产生强烈的情感,当我们认为某一事物鼓舞人心时,情况也是如此;但是当我们仅仅只是想象时,我们就会像那些正在观看表现某一恐怖的或鼓舞人心的场景的绘画作品的观众一样,并不为之所动。此外,我们发现在判断领域自身中也有不同的种类——知识、意见、审慎,以及它们的对立面;关于这些种类之间的差异,我须在其他地方予以论述。

思维有别于感知并被认为是由想象和判断两部分构成的:既然如此,我们必须首先划定想象的范围,然后再论述判断。而且,如果想象是凭借某种影像呈现在我们心中,[这里]不包括影像一词的比喻用法,那么想象是一种单一的能力还是与诸影像有关的某种性质?凭借它我们进行判断,它们或者正确或者错误。我们借以判断的诸能力是感觉、意见、知识和理智。

通过以下分析可以明确,想象不是感觉:首先感觉是一种能力,抑或是一种活动,譬如视觉或看:即使是在这两者都缺失的情况下,想象仍可发生,譬如在梦中。其次,感觉总是存在的,想象却不然。假如现实的想象与现实的感觉是相同的,那么所有野生动物就都具有想象:实际情况并非如此;例如蚂蚁或蜜蜂抑或蛴螬都没有想象。再次,感觉总是真的,想象却大多数都是假的。再其次,即使是在平常的说话中,当感觉确切地感觉到了其客体时,我们也不说我们想象它是一个人,而只有当感觉不够确切时,我们才会这样说。而且正如我们曾经所说的那样,即使是在我们闭上双眼时,想象也会出现。幻象也并非是这样永远正确无误的事物:例如知识或理智;因为想象可能为假。

因此，现在有待讨论的是它是否为意见，因为意见既可为真，亦可为假。

但是意见包含信念（因为如果我们的想法中没有信念，我们就不可能有意见），而且在野生动物中，虽然我们经常发现想象，但却从未发现有信念。此外，所有的意见都与信念相伴，信念与确信相伴，确信与推理相伴：尽管在一些野生动物中我们发现想象，但未见有推理。因此，显而易见，想象不可能是意见加感觉，或是通过感觉起中介作用促成的意见，抑或是意见和感觉的混合物；这之所以是不可能的，究其根源，除了上述这些理由之外，还因为假定意见的内容不可能和与之相关的感觉的内容相异（我是指想象必须是对白色的感知与它是白色这一意见的混合：它不可能是这是善的这一意见与对白色的感知的混合）：因此，所谓进行想象（按此观点），亦即进行思维，但这完全等同于最严格意义上的其所感知的事物的思维。但是我们所想象的有时是虚假的，尽管我们同时对其作出的判断是真实的；譬如，我们想象太阳的半径是一英尺，尽管我们相信它比我们居住的地球更大；这样，自然就出现下面的两难抉择：或虽然事实没有改变并且观察者既没有忘记也没有放弃其所持真实意见中的信念，但该意见不复存在；或如果他坚持其信念，那么其意见则同时既为真又为假。然而，只有当事实发生改变，但却未引起注意时，真实的意见才会变为不真实的。

因此想象既非上述列举的任何一种状态，亦非它们的混合物。

但是，当一物被处于运动状态时，它可能使另一物运动。既然如此，想象也被视为一种运动而且不可能离开感觉，即想象存在于具有感知能力的生物中，并有可被感知物作为其内容；既然实际感觉可引起运动，且该运动必然在特征上与感觉本身相似，那么该运动一定是必然地不能脱离感觉而存在，也不能存在于我们进行感觉以外的時候；由于想象存在于感觉之中并受其控制，这种情况可能引发出各种各样的、既可是主动又可是被动的现象；在这种情况下，想象既可为真亦可为假。

上述最后一个特征之所以成立的理由如下：首先是对特殊感觉客体的感知总是真实的，或仅有最小的偏差。其次是对感觉客体的伴随状态的感知，这些客体伴有可感觉的性质：在这种情况下，毫无疑问，我们有可能被欺骗；因为虽然我们对出现在我们面前的白色的感知不可能是错误的，但对该白色物体是此物或彼物的感知却可能是错误的。再次是对普遍属性的感知，普遍属性和与之相伴的客体同时存在，特殊的可感觉物附属于这些普遍属性（我意指，譬如运动和广延）；有可能正是在这些普遍属性方面感觉—错觉出现的次数最多。

由感觉活动的上述三种方式所肇始的想象运动与感觉活动相异；当感觉在场时，第一种衍生的运动总是正确无误的；但无论感觉是否在场，其他两种运动均可能是错误的，尤其是当感知客体在远处时。因此，除上述列举的那些特点之外，如果想象再无其他特点，并且它就是我們业已描述的那样，那么想象必定是一种由感觉能力的现实活动而肇始的运动。

既然视觉是最高度发达的感觉，想象（Phantasia）这一名词是由光(Phaos)演化形成的，因为没有光，视觉便看不到[任何事物]。

而且因为想象寓于感官之中并且与感觉相似，所以动物多数都是凭借想象行动，有些动物（譬如野生动物）由于其没有心智，只能依靠想象，另有一些动物（譬如人）受感情或疾病抑或睡眠的影响，其心智会暂时消失，这时它们也要凭借想象行动。

关于想象，它是什么以及它为何存在，我们就讨论到此。

## 第四章

现在讨论灵魂中用以认识和思维的这一部分，（无论这一部分是仅在定义上与其他部分相分离，抑或在空间上也是如此）我们必须探讨是什么使该部分与其他部分相异，以及思维是如何发生的。

如若思维与感知相仿，它一定或者是某种承受思想对象作用于灵魂的过程，或者是一与此相异但又与此类似的过程。因此，灵魂中的思维部分一定能够接受客体的形式，同时又是不为所动的；即它一定潜在地在特性上与其客体同一，但却不必是该客体。心智必定也与可思维物相关，正如感觉与可感觉物相关一样。

因此，既然任何事物都是思维的潜在的对象，诚如阿那克萨哥拉所说，为了支配控制，即为了认识（一切事物），心智必须纯净，远离一切混杂物；因为外来异质杂物的同在对其是一种妨碍和障碍：其结果是，像感觉部分一样，心智也就只有某种接受能力，而不能具有自己的本性。因此灵魂中被称为心智的部分（我所说的心智是指灵魂借以思维和判断的部分），在其进行思维之前，不是实际存在的真实物。正因为如此，将其视为与躯体混合的观点是有悖于理的：倘若如此，它必将具有某种性质，譬如热或冷，甚至抑或像感觉机能一样，具有某种感官：但实际上，它没有感官。称灵魂为“形式的居所”不失为一种很好的说法，但是这种说法只适用于智力灵魂，而且即便如此，也仅限于潜在形式，而非现实形式。

观察感官及其感觉，我们发现，感觉能力的麻痹与思维能力的麻痹之间存在着差异。在某一感官受到强烈刺激之后，我们就不能像此前一样使用该感官，譬如，在遇有巨大声响的情况时，我们就不能轻而易举地马上在此后听到声音，或在看到强烈颜色或闻到强烈刺激性气味的情况时，我们就不能在此后马上看到东西或嗅到气味，但是当心智思维某一高度概念化的客体之后，它思维概念化程度较低的客体的能力会更强，而不是减弱：其原因在于感觉能力依赖于躯体，而心智却是与躯体分离的。

一旦心智已经成为其潜在的客体，犹如一位饱学之士，当该词语被用以指称一位现实存在的饱学之士时（当他此时能够自主地操控其思维能力时，这种情况就会出现），其状态仍然是一种潜在状态，但与通过学习或研究获得知识前的那种潜能相比较，它是一种不同意义上的潜能：这样，心智也就能思维其自身。

既然我们可以区分广延和广延的本质，区分水和水的本质，而且许多其他情况均可作此区分（尽管不是所有情况都是如此；因为在某些情况下事物与其形式是同一的），肌肉与肌肉的本质就可以或者根据不同的机能，或者根据同一机能的不同状态加以辨别：因为肌肉必然包含质料，而且诚如塌鼻，系特殊质料中的特殊形式。既然我们正是凭借感觉机能来区分热与冷，即按一定的比率组成肌肉的诸元素：肌肉的本质特性可通过一种不同的机能来理解，这种不同的机能要么是感觉机能完全分离的，要么是与之相关联的，就好像一条曲线与被拉直了的同一条线的关系一样。

另外，对抽象的客体而言，何为直与何为塌鼻类似；因为它必然隐含着作为一个作为其质料的连续体：其构成的本质是不同的，如果我们可以区分直的性质与何为直：我们权且将直的性质视为数二。因此，必须通过一种不同的能力，或通过同一种能力的不同状态才能理解它。概而言之，既然它所认识的实体能与其质料相分离，那么心智的诸能力亦可如此。

如阿那克萨哥拉所言，思维是一种消极影响，而心智是简单的、不为外物所动的，并且与其他任何事物均无共同之处，果真如此的话，人们也许会提出这样的问题：心智究竟是怎样思维的？因为两个因素之间的相互作用必须依赖于两者间预先存在的本质共同体。此外，人们也许还要问，心智自身是不是思维的对象呢？因为如果心智自身是思维对象，思维对象则属于一个完全相同的种类，那么,心智要么归属于一切事物,要么则包含有某些和其他所有实体相同的元素，正是共同的元素使它们成为思维对象。

当我们说心智在某种意义上是潜在的可思维物，然而在其思维前却实际什么都不是，我们还是没有破解关于[心智与思维客体]包含某一共同因素的互动这一难题吗？心智所思考的必定蕴涵于心智之中，这好比我们可以说字将出现在写字板上，尽管目前写字板上实际空无一字：心智也恰恰是这样。

思考心智自身的方式正如思考心智客体的方式一样。因为在心智客体不包含质料的情况下，思维主体和思维客体是同一的；理性知识与其客体是同一的。（为什么心智不是一直不停地在思维？这一问题，我们须留待以后讨论。）在包含质料的情况下，每一个思维客体只是潜在地存在。由此可以得出这样的结论，尽管它们没有心智（因为心智是一种潜在性，而且只存在于当它们有能力摆脱质料的情况下），心智仍可成为思维对象的。

## 第五章

既然在每一类事物中，如同在作为整体的自然中一样，我们发现两个相关因素：质料，它潜在地就是包括在该种类中的所有个别事物；成因，它造就了一切，从这个意义上来说，成因是具有生产性的（后者与前者的关系，就如同艺术品与其材料之间的关系）。有鉴于此，这两种不同的因素也必然同样地存在于灵魂之中。

而且，实际上，心智，就像我们已经描述的那样，一方面其之所以是其所是，是凭借其可以成为万物，而另一方面其所是为哪一是，则凭借其可以创造万物：这是一种类似于光的积极状态，因为在某种意义上光可使潜在的颜色变成现实的颜色。



此种意义上的心智是可分离的、不为所动的、非混合的，因为它处于其本质活动中（因为主动因素总是优于被动因素，动因总是优于其形成的质料）。

现实知识与其客体同一：就个别事物而言，潜在知识在时间上先于现实知识，但对于作为整体的宇宙而言，即便是在时间上，它也并不在先。心智不是有时认知，有时不认知。当心智被从其目前的状况中分离出来时，它才现出其真正的所是，而别无其他：只有这样的心智才是永不消亡的和永恒的（可是，我们没有记住其前期活动，因为，尽管这种意义上的心智是不为所动的，但作为被动的心智是可消亡的），没有这种心智，万物都不能思维。

## 第六章

因此，对思维的简单对象的思考发生在这样的事物中，对于这样的事物不可能存在着虚假，我们总是在将多个思想混合为准统一体的事物中，才存在着真实和虚假。诚如恩培多克勒所言，“许多生物于无脖颈处生出头来”，而后，又由“爱”的力量将其连接在一起，这里，原本分离的思维的诸客体也是这样被联合到一起，例如“无法度量的”和“对角线”：假如该联合是过去或未来客体的联合，那么该思维的联合应在其内容中包括时间。因为虚假性总是涉及合成；倘若你把白的事物说成是不白的事物，你就已经把非白包括在合成中了。除可将其称为联合之外，我们亦可以把所有这些都称之为切分。无论将其称作什么，都不仅存在克里昂现在是白的这一或真或假的断言，而且还存在他过去或将来是白的这一或真或假的断言。在任何一种情况下组成联合体的都是心智。

由于“单一”一词具有双重含义，即(它)可指“（潜在地）不能被分开的”，也可指“实际上未分开的”。例如，当心智领会一个（实际上未被切分的）长度，而该长度又处于一未被分割的时间中时，没有什么能够阻碍心智认知不可分割的事物；因为和线一样，时间也是可切分的或不可切分的。因此，不可能分辨出心智在时间的一半中正在感知哪部分线：客体在被切分之前，没有现实存在的部分：如果在思维中你分别思考每一半，那么你也就同样切分了时间，被两分的半线也可以说就变成了两个新的完整的长度单体。但是如果你将其当作一个由这两个潜在部分组成的整体来思考，那么你也就是在一个与之相对应的由两部分时间组成的时间之中来思考。（但是，如果客体性质单一而数量不单一，心智则凭借灵魂的单一行为在单一的时间中思考它。）

然而，心智思考的客体和思考所处的时间在这种情况下只是偶然地可分，但就其本身而论却并非如此。因为这些可切分的事物中也蕴涵着某些不可分的因素（尽管其可能并非孤立的），正是此赋予时间以整体，赋予长度以完整；这在任意时间连续体或空间连续体中都可同样被发现。

点和相似的可切分的但本身处于未切分状态之物，在意识中都是以和缺失同样的方式被认知的。

对于其他所有情况均可作类似的解释，譬如，怎样认知恶或黑；在某种意义上，它们是通过它们的对立物而被认知的。认知机能自身中必定存在着一个潜在的要素和其相反要素之一。然而，如果存在没有对立物的事物，那么它就自我认识，而且现实地存在，并拥有独立的存在。

断言是明确与某物相关的某物，例如肯定，而且是在任一情况下要么为真，要么为假；对于心智而言情况却不尽然：心智所思维的关于其是其所是的定义永远是正确无误的，它所思维的也不是某物与某物相关的断言。诚如，尽管所看到的视觉的特殊客体决不会出错，而认为所见到的白色客体是人则可能是错误的，当客体系无质料客体时，情况也是如此。

## 第七章

现实知识与其客体是同一的：就个别事物而言，潜在知识在时间上先于现实知识，但就总体而言，它在时间上并不在先；因为一切成为存在的事物均源自现实的存在。就感觉而言，显然，感觉对象使已经潜在的感觉能力变成现实的感觉能力；这种机能没有被影响或被改变。因此，这必定是另一种不同于一般的运动；因为运动，正如我们所理解的那样，是一种不完善的事物的活动，绝对意义上的活动，换言之，完善物的活动，不同于运动。

既然如此，感觉就像单纯的肯定或认知一样；但是当感觉客体令人愉悦或令人痛苦时，灵魂便会作出相应的准肯定或否定的反应，并追求或回避该客体。感到愉悦或痛苦本身就是凭借感觉介质为了追求善或恶而采取的行动。当它们现实存在时，回避与欲望两者均与此同一：欲望能力与回避能力并无差异，它们彼此之间无差异，它们与感观知觉机能也无差异，但它们的本质却是不同的。

对思维灵魂而言，影像所起的作用就好比它们是感知的内容（而且一旦思维灵魂肯定或否定它们为善或恶时，它就回避或追求之）。这便是离开了影像灵魂就根本无法思维的原因。这一过程就像是空气以这样或那样的方式改变瞳孔，而瞳孔又将这种改变传送给别的事物（听觉过程也大抵如此），但是[感觉]最终的汇聚点是单一的介质，具有多种不同的存在方式。

灵魂凭借其自身的哪一部分分辨甜与热，此前我已经对此做过阐释，现在必须重新表述如下：灵魂作此分辨所凭借的部分是某种单体，但这是在刚刚提及的意义上的，即作为联结项的单体。它所联结的两种能力，当其在类比和数上均为一时，是一一对应的关系，就像其已被识别的诸性质之间的相互关系一样（我们提出的分辨不同类事物这一问题与我们提出的分辨对立事物这一问题，譬如白与黑，会有什么差别呢？）。那么，假设C比D等于A比B：则可得交换比例式 $C:A=D:B$ 。如果C与D属于同一个主体，那么C与D的关系与A与B的关系相同；A与B形成具有不同存在方式的同一体，C与D亦然。如果设A为甜而B为白，同样的推论也成立。

所以，思维能力所思维的是影像中的形式，就像上述[关于感觉]的情况一样，什么是应被追求或回避的都为其选定，这样，在没有感觉而它又专注于处理影像的情况下，它则被动地进行追求或回避的活动。例如，感觉到了烽火是火，由于见其在移动，凭借一般的感能力它确认这意味着有敌人；但是，有些时候凭借灵魂内部的影像或思想，仿佛灵魂正在观看一样，实际却是它依据当前的情况，筹划磋商未来将发生的事情；而且一旦作出决定，如同感觉一样，它断定该客体是令人愉悦的或是令人痛苦的，在这种情况下它就回避或追求，思维能力采取行动的情况，一般来说就是这样。

无行动的事物，譬如真或假，与善或恶属于同一范畴：然而它们却在以下这点上相异，一组涉及某一特殊的人而另一组却不涉及。

假如某人认为“塌鼻者”不是“鼻子下塌的”，而是“空的”，那么所谓心智思维的抽象对象就好似某人思考一去除了使其具体化的肌肉的现实存在：正是用这种方式当其思考数学对象时，心智将它们视为分离的元素，它们其实并不能分离存在。一般说来，正在积极思维的心智就是其所思维的客体。它是否可能在不脱离空间条件下思考独立于空间条件之物，[这一点]我们必须留待以后讨论。

## 第八章

现在我们来概括一下我们有关灵魂讨论的结果，并再次申明，从某种意义上说灵魂是一切存在物；因为存在物要么是可感知的，要么是可被思考的，而且从某种意义上说知识是可认知的事物，从某种意义上说感觉也是可感觉的事物：从何种意义说?这是我们必须探究的。

我们对知识和感觉进行划分以使其符合现实，潜在知识和感觉对应潜在物，现实知识和感觉对应现实物。在灵魂中，知识能力和感能力就是这些潜在的对象，一种是可认知物，另一种是可感知物。它们必定要么是事物本身，要么是事物的形式。前者当然是不可能的：出现在灵魂中的不会是石块，只能是其形式。

据此可以推断，灵魂与手相似；因为诚如手是一种[使用]工具的工具一样，所以灵魂是一种[运用]形式的形式，感觉是可感知物的形式。

根据人们的共识，没有什么能脱离可感知的空间广延而分离存在。既然如此，思想的诸客体就存在于可感知的形式之中，即抽象客体以及可感知物的所有状态和属性。因此，人若无感觉就不可能学习或理解任何事物，而且当心智积极地认识任一事物时，也必然伴有影像；因为影像与感觉的内容均相似，除了其不含质料以外。

想象与肯定和否定相异；因为何为真或何为假包含概念的综合。基本概念与影像有何不同？即使基本概念必然包括影像，我们一定不能说这些概念，甚至我们的其他概念均不是影像吗？

## 第九章

动物的灵魂以下列两种能力为特征：判断能力，负责思想和感觉以及引起空间运动的能力。我们已经对感觉和心智作了充分的说明。下面我们讨论在灵魂中引起运动的是什么。它是在空间或定义上与灵魂分离的一部分吗？抑或它就是整个灵魂？如果它是一个部分，那么该部分是与我们通常区分的或已经论及的部分不同，或者它就是这些部分的其中之一呢？这里马上就会出现这样一个问题，我们要在何种意义上谈论灵魂的组成部分，或者说我们应该区分出多少部分。因为从某种意义上说，灵魂的组成部分是无限的，像一些思想家们将灵魂的组成部分划分为推测、情感和渴望，或者像另一些将其划分为理性和非理性部分；都是不够的；如果我们采用这些思想家们的分类标准，我们就会发现另一些组成部分，较之我们刚刚提及到的那些组成部分，它们之间明显相互背离：比如，营养能力，该部分既属于植物又属于所有动物；再者，感觉能力，我们很难将其划归为非理性或理性的部分；此外，想象能力，在本质上，它与其他所有部分均不相同，如果我们一定要假设灵魂中有相互分离的不同部分，那么我们就很难说它与哪些其他部分是相同的，与哪些部分是不同的；最后欲望能力，不论是在定义上还是在能力上该部分与以上列举的部分似乎均明显不同。

像这些思想家们那样，把上述最后一种能力分离出来是荒谬的，因为意愿存在于推测部分之中，欲望和情感存在于非理性部分之中；如果灵魂是由三个部分组成的，那么在这三个部分中都可找到欲望。我们把注意力转向现在的论题，探讨是什么引起动物进行空间运动。

见于一切生物的生长与衰亡运动肯定归因于生殖和营养能力，这种运动是所有生物所共有的：吸气与呼气、睡眠与醒着，我们留待后面讨论，这些也都是令人困惑的难点；现在我们必须探讨空间运动，追问引起动物作前行运动的是什么。

显而易见，它不是营养能力；因为这种运动总是为着某种目的，并且或与想象或与欲望相伴；因为动物，除非被强迫，如果不受冲动驱使而接近或回避某物，它们就不运动。另外，假如它是营养能力，那么甚至连植物都能够引起这样的运动，而且具有实现运动必需的器官。同样，它也不可能是感觉能力；因为很多有感觉的动物，却是静止的，终生不运动。

既然如此，如果自然绝不会无目的地创造任何事物，也绝不会遗漏必备之物（那些残缺的或发育不全的动物除外；这里我们讨论的是既无残缺不全，也无发育不全[的动物]，这一点可用以下事实论证：这样的动物能繁衍同种后代，能达到生命的鼎盛并走向衰亡），那么，由此可见，假如它们能够引起前行运动，它们就一定拥有实现此目的所必需的器官。另外，这种运动的原因也不可能是推测能力，或者说是被称为“心智”的东西；因为，作为思辨能力，心智从不思维任何实际的事情，它从不确定说什么应该回避，什么应该追求，而这种运动却总是存在于回避或追求某物的东西之中。的确，即使心智意识到这样的东西，它也不直接下命令去追求或回避；譬如心智经常考虑令人害怕或令人喜悦的事物，但却并不强求要有恐惧感。[令人害怕的事物]触动的是心脏（或者说在遇到令人愉悦的事物的情况下，[被触动的是]某一其他部分）。而且，有些时候，即便是在心智确实命令并且思想也的确吩咐我们追求或回避某物时，也没有运动产生；我们的行为受欲望驱使，在道德观念薄弱的情况下便是如此。此外，通常我们观察发现，有医疗知识的人并不一定总是在进行治疗，这表明需要有另外某种东西方可根据知识产生行动；仅只是知识并不构成该动因。最后，欲望也不能完全解释运动的成因；因为对于那些能够抵制诱惑的人，虽然他们也有欲望和渴求，但是他们却能服从心智，拒不为其欲望而行动。

## 第十章

不管怎样，欲望和心智似乎是引起运动的原因（如果可以大胆地把想象当作某种思维；因为许多人通常听凭与知识相反的想象行事，在除人类以外的所有其他动物中，既不存在思维，也不存在推测，只有想象）。

心智和欲望，这两者均能引起位置运动：心智，即实践心智，它能推测到达目的的方式(实践心智的目的特性与思辨心智相异)；相比之下，每一种形式的欲望都与目的相关：因为欲望的客体恰恰是实践心智的刺激物；而且思维过程的终端又正是行为的起点。据此有理由认为，欲望和实用心智，这两者是运动的源泉；因为欲望的客体引起运动而且致使思想产生运动，所以欲望客体是引起刺激的根源。当想象也这样引起运动时，它也必然包含欲望。

因而，始动者是某种单一的能力和欲望的能力；因为如果有两种动因——心智和欲望——那么它们就会凭借某一共同特性引起运动。实际上，人们从未见过心智能离开欲望而单独引起运动（因为意愿是欲望的一种形式；当产生的运动与推测相符时，它也与意愿相符），然而欲望却能够引起与推测相反的运动，因为渴求欲望的一种形式。心智永远是正确的，然而欲望与想象却可以是正确的也可以是错误的。这就是为什么这一欲望客体既可能真的是善，也可能只是看似善，虽然无论如何是欲望客体引起运动。为了引起运动，欲望客体必定不仅限于此：只有[真正]好的客体才可能通过行为被变成现实；而且只有那种能够变得不再是其本身的[客体]才能被变成现实。于是，显而易见，运动是由灵魂中被称为欲望的能力引起的。那些区分灵魂中各部分的人，如果他们依据能力的不同进行区别和划分，那么他们就会区分出许多部分，营养能力、感觉能力、思维能力、审议能力，还有欲望能力；因为它们相互之间的差异比渴求机能与情感能力之间的差异更大。



当理性原则与渴求完全相反时，各种欲望之间便相互对立，这可能仅发生在有时间感的存在物中（心智为了未来而要求我们抑制[渴求]，渴求仅被当前事物影响：由于缺乏对客体在久远后的情形的预见，当前某个愉快的对象便呈现为快乐和善），因此，虽然引起运动必然是特定的一种欲望，即作为欲望机能的欲望（或者进一步追溯到该机能的所有对象；因为它自身保持不动，却通过在思想或想象中被感知而引起运动），但是引起运动的东西在数量上却是多个。

所有的运动均包含三个因素：引起运动的事物、引起运动所凭借的方式，以及被运动的事物。“引起运动的事物”这一表述具有双重意义：它既可指自身不动的某物，也可指既可立刻运动，同时又能被运动的某物。在这一点上，无须被运动而自发运动者是可实现的善，既可立刻运动，又被运动者是欲望的机能（受欲望影响者，只要其实际被影响便处于运动之中，当欲望是指现实欲望时，欲望[本身]就是一种运动），而处在运动之中的是动物。欲望引起运动所凭借的工具已不是精神的范围而是躯体的范围：因此对其研究属于躯体和灵魂的共同功能的范围。现在概而言之，产生运动所凭借的工具可在起点和终点的重合处找到，就好像在球窝关节里的情形一样；因为在那里凸面和凹面分别是运动的终点和起点（那就是为什么当一方处于静止时，后者就运动）：它们的定义截然不同，但在空间位置上却不可分离。因为一切事物都是经由推和拉而被运动。所以，就像车轮一样，其中必定有一点处于静态，而且正是从该点产生运动。

总之，还是重复我以上论述，因为动物有欲望能力，它能够自我运动；如果它没有想象，也就没有欲望能力；而且所有想象均或为推测，或为感觉。人和所有动物都拥有感觉。

## 第十一章

现在，我们还必须考虑，对于那些发育不完善的动物，即那些只有触觉而没有其他感觉的动物，引起它们运动的原因是什么。它们是否具有想象力？抑或有渴求？显然它们有喜悦和痛苦的感觉，如果它们有这些感觉，它们就一定有欲望。可是它们怎么会有想象呢？由于其运动是不确定的，我们一定不能说它们有想象和欲望，[即便有]其想象和欲望也是不确定的吗？

如前所述，感觉想象是所有动物共有的，审议想象只属于能推测的动物：因为决定应该做这或是做那已经是一项需要推测的任务；而且还必须有单一的标准用以衡量，因为追求的是更好的那个。由此可见，以这样的方式行事的动物都必须具有能将多个影像合而为一的能力。

正是由于这一原因，我们认为想象不包含意见，因为它不包含基于推理的意见，尽管意见包含想象。因此，欲望不含任何审议成分。有时它战胜意愿并使其运动，有时意愿也同样作用于欲望，就好像一个球推动另一个球，或者一种欲望也同样地作用于另一种欲望，即在道德[观念]不强的情况下（尽管依据自然法则，较高级的能力总是更具支配力并引起运动）。所以有三种运动方式是可能的。

认识能力根本无法被运动而是处于静止状态。由于一个前提或判断是普遍性的，而另一个则是讨论特殊个体（前者向我们阐明的是如此这般的一种人应该如此这般地行事，而后者则是这就是那种有意采取的行为，我就是这样的一种人），真正引起运动的是后一种意见，而不是普遍性意见；更确切地说是两者[共同引起运动]，只不过前者引起运动但却保持一种更接近静止的状态，而后者[更多地]参与运动。

## 第十二章

另外，每一个有生命的生物都必然具有营养灵魂，每一个这样的生物从生到死都赋有灵魂。因为业已诞生的生物必然要生长，发育成熟，继而衰亡——没有营养所有这些都不可能。所以每个经历生长与衰亡的生物都必然具有营养机能。

然而，不是所有的生物需要有感觉。因为触觉不可能属于躯体结构简单的生物，或离开其质料就无法接受形式的生物。

既然自然不做徒劳无益的事，那么动物就一定都具有天赋的感觉。因为自然化育的万物都有达到其生存目的的方法，或者是为此目的而伴生的附属性状。每一个能够作前进运动的躯体，若无天赋的感觉，都会夭亡，而无法抵达自然赋予它的目的；因为[若无感觉]，它怎么能摄取营养呢？诚然，静止不动的生物从其生长处摄取食物；但是，非静止的、通过生殖而诞生的躯体应有一个灵魂和一个有识别力的心智，但却没有感觉，这是不可能的(即使它不是通过生殖而诞生的，这也不可能。它怎么会没有感觉呢？是因为这样要么对躯体有益，要么对灵魂有益吗？但是显然这对两者都是无益的：感觉缺失，灵魂就不能更好地思维，躯体也不能更好地存在)。所以，没有感觉，非静止的躯体不可能有灵魂。

另外，如果躯体有感觉，那么它必定是简单的，或复合的。可是，它不可能是简单的；因为如果它是简单的，它就不可能有触觉，而触觉又是不可或缺的。通过以下论述这一观点可显清晰明了。动物是有灵魂的躯体：每一躯体都是可触知的，即可通过触觉感知；如果动物要存活下去，其躯体就必然要具有触觉机能。所有其他感觉，如嗅觉、视觉和听觉，都是通过介质来感知；如果动物没有感觉，当发生直接接触时，它就将无法避开某些东西或无法抓到另一些东西，因此它也就无法生存。这就是为什么味觉也是一种触觉；味觉与营养物相关，营养物正是可触摸的物体；而声音、颜色和气味都与营养无关，进而也与[动物的]生长和衰亡无关。既然味觉是对那些可触知的有营养的事物的感觉，那么它必定也是某种触觉。

因此，这两种感觉对于动物来说是不可或缺的，显然，没有触觉，动物便不存在。所有其他感觉都是有助于动物生存得好，也正是由于这一原因，这些感觉并非为任何种类的动物所共有，而只为某些动物所有，例如，那些能够前行的动物必须具有这些感觉；原因在于，如果这些动物要生存，它们就必须不仅能通过直接接触去感知，而且必须在隔着一定距离时也能感知。如果动物能通过某一介质感知，这是有可能的，介质受到可感知对象的作用与推动，继而动物又受到介质的作用与推动。这就好像产生位置移动的事物引起延伸至某一点上的变化，产生推力的事物又引起另一事物产生新的推力，因此通过介质便产生了运动——原动者推动他物而勿需被推动，最后一个被推动者不再推动他物，而介质（抑或许多介质，因为存在多个介质）则可推动他物又可被他物推动——形态的变换也是如此，只不过原动力引起运动，而无需受动者改变位置。因此，如果将一物体浸入蜡液中，运动就会一直持续到完全浸没为止；如果将其置于石头中，则根本没有运动，而一旦将其置于水中，它所引起的扰动就会波及很远；如果将其抛于空气之中，只要空气保持其为连续的统一体，随着空气连续地作用与被作用，它所引起的扰动就会传播开来，直至最远。这正是为什么关于光的反射，与其说视线从眼睛中发出并被反射，不如说只要空气保持为统一体，便会受[可见物的]形状和颜色的影响。在一光滑表面上空气保持其统一体；因此，就像蜡上的印记随着蜡的延伸而被延伸一样，空气就会依次使视觉运动。

## 第十三章

显然，动物的躯体不可能仅由一种元素构成，即只由诸如火或气一种元素组成。因为没有触觉就不可能有任何其他感觉；如前所述，因为每一个有灵魂的躯体都一定具有触觉能力。除土元素以外的其他所有元素均可构成感觉器官，但是它们都只有通过其他事物，即通过一定的介质，方能引起感觉。与其对象直接接触便产生触觉，触觉这一名称也源于此。毫无疑问，所有其他感觉器官，也是通过接触来感知，但只是通过间接的接触：惟有触觉通过直接接触来感知。由此可见，动物的躯体不能只由这些其他元素中的单一元素构成。

它也不能只由土构成。因为在所有可触知的性质中，触觉可谓处于中间，其器官不仅能够接受那些代表土的所有的特殊性质，而且还能够接受热和冷以及所有其他可触知的性质。这就是我们为什么不能通过骨骼、毛发等去感知，因为它们是由土构成的。植物也是如此，因为它们是由土构成的，所以没有感觉能力。没有触觉便没有其他感觉，而且触觉器官不可能由土构成，也不可能由任何其他一种单独元素构成。

因此，这种感觉一旦丧失必然导致动物的死亡，这是显而易见的。因为从一方面来说除动物之外任何别的东西都不可能  
有这种感觉，所以，反而言之，它是使动物成其为动物的唯一的、不可或缺的感觉。此外，这还可解释其他感觉与触觉之间的  
以下差别。对所有其他感觉而言，如果其感知的性质的强度过度，例如颜色、声音和气味的强度过度，只能毁坏相应的感  
觉器官却不会导致动物死亡（但偶有例外，如当过高的声音与撞击或剧烈震动伴随发生时，或者是视觉客体或嗅觉客体导致  
某些其他物体处于运动状态时，[动物]则会因接触毁灭）；当滋味同时是可触摸的时候也会由于触摸而毁灭。但是，诸如热、  
冷或硬等可触知的性质的强度过度就会致使动物本身死亡。正如每一种感觉性质过度都会毁坏相应的器官一样，可触摸物同  
样毁坏触觉器官，触觉器官是生命的基本标志；因为前已阐明，如果没有触觉，动物就不复存在。这就是可触摸强度过度不  
仅毁坏相应器官，而且毁灭动物本身的原因，因为触觉是动物唯一不可或缺的感觉。

如前所述，对于动物而言，所有其他的感觉都是必要的，但却不是为其生存，而是为其生存得好。譬如，动物必须有视  
觉以便观看，因为动物生活在空气或水中，或通常[生活]在透明状态里；动物必须有味觉，为了感觉其食物中甜和苦的这些  
性质，并且引起运动的欲望；动物必须有听觉，以便能够听到发给它的信息，而且动物还必须要有舌，以便用于与同伴交流。