

CHAPTER 5

A PROPERTY OF MOBILE BEING: MOTION

Concepts involved in the discussion (Book 3, Lesson 1)

Motion is now the subject of discussion because **nature**, just discussed, is the principle of motion and change.

Because motion takes place over space and time, it is continuous. The **continuum**, defined according to resolution, is that which is “divisible to infinity”; according to composition, it is that “whose parts are joined at a common boundary”.

Later there will be a discussion of the notion of **infinity**, likewise of the external measures of motion, which are **place** and its negative correlative **void**, and **time**.

To define motion will require reference to some basic concepts, first of all the division of all being by potency and act, secondly the division of being according to the ten genera or categories, which are here presupposed.

Thirdly, reference will be made specifically to the category of **relation**, which is always grounded on some other accident, chiefly **quantity** and **action**. For quantity may be a measure even of something external to it; while the agent transfuses its action into something other than itself.

Certain relations are founded upon quantity, especially upon that species of quantity which is number, to which the basic notion of measure pertains, as is evident in “double and half”, “multiple and sub-multiple [fractions]” etc. Similarly “same”, “like” and “equal” are founded upon unity, which is the principle of number.

Other relations are founded upon action and passion: either according to present act, as something is said to be “heating” in relation to that which is heated, or according to past act, as a father is referred to a son because he engendered him, or else according to future act, as a master is related to a servant because he is able to make him do something. All this is treated further in *Metaphysics V*.

The definition of motion, therefore, will involve the notions of potency and act (and therefore also of privation and possession) and the categories of substance, quantity, quality and location, which will be used to determine the species of motion. It will also involve the relationship between the thing being moved and the mover.

Definition of motion (Book 3, Lesson 2)

Some have defined motion by saying that motion is “a going-out from potency to act which is not sudden”. But they are in error, because they have placed in the definition elements that are posterior to motion: for “going-out” is a species of motion; “sudden”, likewise, involves time in its definition, since “sudden” is what occurs in the indivisible of time [i.e. the instant]; time, however, is defined in terms of motion.

Consequently it is impossible to define motion in terms of what is prior and better known otherwise than the Philosopher here does. For every genus is divided by potency and act. Since these are among the first differences of being, they are naturally prior to motion, and it is these that the Philosopher uses to define motion.

Consider, therefore, that some things are in act only, some are in potency only, some others are midway between potency and act. What is in potency only is not yet being moved; what is already in perfect act

is not being moved but has already been moved. Consequently, what is being moved is midway between pure potency and act, which is partly in potency and partly in act—as is evident in alteration. For when water is only potentially hot, it is not being moved; when it has now been heated, the motion of heating is finished; but when it possesses some heat, though imperfectly, then it is being moved—for whatever is being heated gradually acquires heat step by step. Therefore this imperfect act of heat existing in a heatable object is motion—not, indeed, by reason of what the heatable object has already become, but in as much as, being already in act, it has an order to a further act. For should this order to a further act be taken away, the act already present, however imperfect, would be the term of motion and not motion itself—as happens when something becomes half-heated. This order to a further act belongs to the thing that is in potency to it.

Similarly, if the imperfect act were considered solely as ordered to a further act, under its aspect of potency, it would not have the nature of motion but of a principle of motion—for heating can begin from either a cold or a lukewarm object.

The imperfect act, therefore, has the character of motion both in so far as it is compared as potency to something more perfect, and as act to something less perfect.

Hence motion is neither the potency of a thing existing in potency, nor the act of a thing in act, but it is **the act of a thing in potency**, where the word “act” designates its relation to a prior potency, and the words “of a thing in potency” designates its relation to a further act.

Whence the Philosopher most aptly defines motion as **the act of a thing existing in potency in so far as it is in potency**.

This definition can be specified according to the different species of motion: thus **alteration** is the act of the alterable in so far as it is alterable; growth is the size of what is capable of growth in so far as it is capable of growth; locomotion is the localization of what can change place in so far as it is capable of changing place. Later we will see that generation and corruption are not, strictly speaking, motion.

- Motion is **act**: This is because that by which something previously existing in potency becomes actual is an act. But something becomes actual when it is being moved, although previously it was in potency. Therefore motion is an act. Thus when the construction of a building has already begun and is partly in act we say that a house is “being built”. Before something is moved it is in potency to a perfect act which is the term of the motion, and to an imperfect act which is further motion.
- Motion is the act **of a thing existing in potency**: As an act, motion is found in its proper subject, which is something in potency. All bodily things are in act and in potency in different respects, and they subject to the action of one another; thus they both act and are acted upon. When such action is being received, in so far as the recipient is capable of receiving this action it is in motion. Things in potency, whether they act or are acted upon, are moved, since when acting they are acted upon and when moving they are being moved. For most things to act upon another requires a self-actualization; thus they are “moved movers”.
- Motion is the act of something in potency **in so far as it is in potency**: This phrase is necessary, because the act of something in potency can be static. The act is motion only in so far as the subject is capable of further act. Thus the shape of a half-carved statue is not motion unless it is the shape of the wood in so far as the wood is capable of further form. Besides, this phrase of the definition is the only way of distinguishing contrary motions, such as getting sick or getting well; the patient at this instant is as he is; we can only say he is on the road to recovery or is getting worse by reference to the term to which, in his actual state, he is in potency to.

Aristotle goes on [Thomas, lesson 3] to reject other definitions of motion, such as “otherness”, “unequalness”, or “non-being”. Philosophers were led to these inadequate definitions because they were

struck by the **indeterminateness** of motion, as something incomplete and imperfect; so it seemed to belong to the genus of privation. The real reason why motion is indeterminate is that cannot be identified simply with either potency or act, but is something in between, as explained above.

5.3 Action and passion are the same motion (Book 3, lesson 4-5)

After defining motion, the Philosopher now shows whose act motion is, i.e. whether it is the act of the mobile or of the mover. Also he gives another definition of motion which is related to the previous one as material to formal and as a conclusion to its principle. And this is the definition: **motion is the act of the mobile in as much as it is mobile**. This definition is a conclusion from the previous one. For, since motion is “the act of a thing existing in potency in as much as it is in potency”, and since that which exists in potency as such is the mobile and not the mover (for the mover as such is in act), it follows that motion is an act of the mobile as such.

The problem of whose act motion is arises because not only is the mobile in potency to being moved, but the mover is also in potency to moving the mobile, since a mover is not always actually moving something. Its moving something is concurrent to the mobile being moved, and its rest is concurrent with the rest of the mobile. Movers are moved when it is a question of being put in contact with the mobile, such as a saw to wood; they are also moved by reaction from the mobile, as when the blade grows dull.

Nevertheless, motion is essentially an act of the mobile and only accidentally an act of the mover, and if it is an act of the mover, that is in so far as the mover is itself mobile. This is clear also because the mover or agent normally has the actual developed form towards which the mobile is being moved; thus something hot causes heat, and animals beget their like.

On the other hand, the act of the mover is not distinct from the act of the mobile. Since motion is an act of the mobile it is somehow also an act of the mover, since what the mover causes by acting and what the moved receives in being acted upon are one and the same thing. Just as the same relationship differs according to term—thus two to one is double, while one to two is half—so motion, in so far as it proceeds from the mover to the mobile, is an act of the mover, but in as much as it is in the mobile from the mover, it is an act of the mobile.

An objection comes from the distinction between **action**, which is the act of the agent, and **passion**, which is the act of the patient. Both are motion, and are either (1) the same motion or (2) diverse motions. If they are diverse, then each of them must be in some subject. Either (a) both will be in the patient (the mobile) or (b) action will be in the agent and passion in the patient, since it would not make sense to say that passion is in the agent and action in the patient; nor (c) can we say that both are in the agent.

The case of (2b), that action is in the agent and passion in the patient, would require either that there be motion in every agent, since action is a kind of motion [then there could be no unmoved mover] or that the agent would have motion without being moved; both consequences are unreasonable.

The case of (2a) would mean that the patient has two motions; for example, both teaching and learning would be in the student, and that is nonsense. What is clear is that action and passion terminate at the same specific term; for what the agent does and what the patient receives are one and the same.

We are then faced with (1), that action and passion are one motion. This position has its own difficulties: It would reduce two specifically different things to one, namely, action which is an act of the agent, and passion which is an act of the patient. Thus teaching, which is ascribed to the teacher, would be the same as learning which is ascribed to the student. Moreover, if teaching is the same as learning then acting is the same as being acted upon; thus every teacher would be learning and every student teaching.

The answer to this problem is that action and passion are not two motions, but one and the same motion;

in so far as it is from the agent it is called “action”, and in so far as it is in the patient it is called “passion”. As for the difficulties raised, there is nothing wrong with an act of one thing being in something else, for teaching is an act of the teacher, an act continuing from the teacher into the student; this act which is the agent’s in its source is the very one which is in the patient as received in him. But it would be wrong to say that the act of the one is the act of the other in precisely the same way.

Likewise, there is nothing to prevent one act from belonging to two things so long as it is one reality with two different aspects. Thus it is not necessary to say that a teacher is learning or a learner is teaching, because the same motion has different aspects, just as the road from Lagos to Ibadan is the same as the road from Ibadan to Lagos, but the direction one is going is all important and makes the concrete difference. The idea of motion abstracts from the fact that it is action or passion. The latter terms designate the same motion, but include two different real relations, to the source of the motion or to its term or recipient. These relations are the reason why action and passion are listed among the ten categories of real being.

Motion, being an imperfect reality, is placed reductively in that genus which terminates the motion (quality, quantity or location), as the imperfect is reduced to the perfect. But in regard to what reason apprehends about motion, namely that it is midway between two terms, there the notion of cause and effect are brought in; because for something to be reduced from potency to act an agent cause is required. From this aspect, motion pertains to the predicaments of “action” and “passion”, for these two predicaments are based on the notions of an acting cause and of an effect.

In conclusion, we can say that motion is the act both of the mover and of the mobile. To give a specific example, we can say that building is the act of the builder and of the buildable in so far as each is capable of building or of being built.

Book 3, Lesson 5 *The Categories (Predicaments)*

Pertaining to essence	1 Substance
Not of essence, but inhering:	
following upon matter	2 Quantity
following upon form	3 Quality
in respect to another	4 Relation
Extrinsic:	
as caused:	
Acted upon	5 Passion
Acting upon other	6 Action
as measured:	
by time	7 When
by place:	
as whole	8 Where
as order of parts	9 Posture
as completing man	10 Clothed

For the clarification of these points it must be noted that being is not divided univocally into the ten predicaments as genera are divided into species. Rather it is divided according to the diverse modes of existing. But modes of existing are proportional to the modes of predicating. For when we predicate something of another, we say this is that. Hence the ten genera of being are called the ten predicaments.

Now every predication is made in one of three ways. One way is when something pertaining to the essence is predicated of the same subject, as when I say Socrates is a man, or man is animal. The predicament of **substance** is taken in this way.

Another mode is when something not of the essence of a thing, but inhering in it, is predicated of a thing.

This is found either on the part of the matter of the subject, and thus is the predicament of **quantity** (for quantity properly follows upon matter—thus Plato also held the “great” to belong to matter), or else it follows upon the form, and thus is the predicament of **quality** (hence also qualities are founded upon quantity as colour is in a surface, and figure is in lines or in surfaces), or else it is found in respect to another, and thus is the predicament of **relation** (for when I say a man is a father, nothing absolute is predicated of man, but a relation which is in him to something extrinsic).

The third mode of predication is had when something extrinsic is predicated of a thing by means of some denomination. For extrinsic accidents are also predicated of substances; nevertheless we do not say that man is whiteness, but that man is white. However, to be denominated by something extrinsic is found in a common way in all things, and in a special way in those things which pertain only to man.

In the common way a thing is found to be denominated by something extrinsic either according to the intelligibility of a cause or of a measure. For a thing is denominated as caused and measured by something extrinsic. Now although there are four genera of causes, two of them are parts of the essence, namely matter and form. Hence a predication which can be made in respect to these two pertains to the predicament of substance, e.g., if we say that man is rational and that man is corporeal. But the final cause does not cause anything outside of the agent, for the end has the nature of a cause only insofar as it moves the agent. Hence there remains only the agent cause by which a thing can be denominated as by something extrinsic.

Therefore, insofar as a thing is denominated by the agent cause, there is the predicament of **passion**. For to be acted upon is nothing other than to receive something from an agent. And conversely, insofar as the agent cause is denominated by the effect, there is the predicament of **action**. For action is an act from the agent to another.

Furthermore some measures are extrinsic and some are intrinsic. Thus the proper length and breadth and depth of each thing is intrinsic. Therefore, a thing is denominated by these as by something inhering intrinsically. Hence this pertains to the predicament of quantity.

However time and place are extrinsic measures. Therefore, insofar as a thing is denominated by time, there is the predicament “**when**”, and insofar as it is denominated by place, there are predicaments “**where**” and “**posture**” (*situs*), which adds to “where” the order of parts in place.

Now it was not necessary that this latter point be added in respect to time. For the order of parts in time is implied in the very meaning of time. For time is the number of motion in respect to before and after. Therefore, a thing is said to be “when” or “where” by a denomination from time or place.

However there is something special in men. For nature has adequately provided other animals with those things which pertain to the preservation of life, as horns for defence, and heavy and shaggy hides for clothing, and hoofs or something of this sort for walking without injury. And thus when such animals are said to be armed or clothed or shod, in a way they are not denominated by anything extrinsic but by some of their own parts. Hence in these cases this is referred to the predicament of substance, as, for example, if it were said that man is “handed” or “footed”.

But things of this sort could not have been given to man by nature, both because they were not suitable for the delicacy of his make up and because of the diversity of the works which belong to man insofar as he has reason. Determinate instruments could not have been provided by nature for such works. But in the place of all of these things there is reason in man, by which he prepares for himself external things in the place of those things which are intrinsic in the other animals. Hence, when a man is said to be armed or clothed or shod, he is denominated by something extrinsic which has the nature neither of a cause nor of a measure. Hence there is a special predicament, and it is called “**being clothed**” (*habitus*).

But it must be noted that this predicament is attributed to other animals also, not insofar as they are considered in their own nature, but insofar as they come under the use of man, as when we say that a horse is decorated or saddled or armed.