5. From "Physics," II.8ⁱ

PROJECTILE MOTION IN A VOID

1. [133] If there is forced motion in the projectile as a result of some power in the void, then [the motion] must continue without ever abating or being interrupted. [That follows] because when the power is in the body, it must either remain or cease. If it remains, then the motion would continue perpetually. If it ceases, or even weakens, its cessation or weakening must either be from a cause or owing to itself. The discussion concerning cessation will provide you the way to proceed with respect to weakening.

2. We say that it is impossible for [the power] to cease owing to itself; for whatever necessarily ceases owing to itself cannot exist at any time. If it ceases by a cause, then that cause is either in the moved body or in something else. If [the cause of the motion's ceasing] is in the moved body, and at the beginning of the motion it had not actually been causing that [cessation] but in fact had been overpowered, and then later became a cause and dominated, then there is another cause for its being such, in which case an infinite regress results.

3. If the cause is either external to the body or cooperates with the cause that is in the body, then the agent or cooperative cause act either by direct contact or not. If it acts by direct contact, then it is a body that is directly contacting the mobile, but this cause would not be in a pure void, and so the forced motion would neither abate nor stop in the pure void. If it does not act by direct contact, but is something or other that acts at a distance, then why did it not act initially? The counterargument is just like the argument concerning the cause if it were in the body.³⁸ It is most appropriate, instead, that the continuous succession of opposing things is what causes this power to decrease and corrupt [134], but this is not possible unless the motion is not in the pure void.

VI. SELECTIONS ON PSYCHOLOGY FROM THE CURE, "THE SOUL"³⁹

I. From "The Soul," I.I^a

ESTABLISHING THE EXISTENCE OF THE SOUL AND DEFINING IT AS SOUL

1. [4] We must first direct our discussion to establishing the existence of the thing we call a soul, and next to whatever follows from that. We say: We commonly

³⁸ That is, it leads to an infinite regress of causes.

³⁹ For a general overview of Ibn Sīnā's psychology see Herbert Davidson, *Alfarabi, Avicenna, and Averroes on Intellect;* for its subsequent influence on medieval Latin philosophy, see Dag N. Hasse, *Avicenna's* De Anima *in the Latin West.* For more specific studies see Micheal E. Marmura, "Avicenna's 'Flying Man' in Context," 181–95; Thérèse-Anne Druart, "The Human Soul's Individuation and Its Survival after the Body's Death: Avicenna on the Causal Relation between Body and Soul," 259–73; Dimitri Gutas, "Intuition and Thinking," 1–38.

observe certain bodies perceiving by the senses and being moved by volition; in fact, we observe certain bodies taking in nutrients, growing, and reproducing their like. That does not belong to them on account of their corporeality; so the remaining option is that in themselves there are principles for that other than their corporeality. The thing out of which these actions issue and, in short, anything that is a principle for the issuance of any actions that do not follow a uniform course devoid of volition, we call "soul." This expression is a term for this thing not on account of its substance but on account of a certain relation it has, that is, in the sense that it is a principle of these actions.⁴⁰ We will seek to identify its substance and the category to which it belongs later. For now, we have established the existence of something that is a principle only of what we stated, and we have established the existence of something in the sense that it has a particular accident. [5] We need to move from this accidental thing it has to a point at which we can verify the thing itself, if we are to discover what it is, as though we had already come to know that there is a mover for something set in motion but we do not thereby know what this mover is itself.

2. So we say: Since we think that the things to which the soul belongs are bodies, and since it is only through this thing belonging to them that their existence as plant and animal is complete, then this thing is a part of their subsistence. As you have learned in a number of places, there are two parts to subsistence: a part through which the thing is what it is actually, and a part through which the thing is what it is potentially, that is, what is like the subject.⁴¹ If the soul belongs to the second division-and there is no doubt that the body belongs to that division-then the animal and the plant will not be complete as animal or plant by the body or by the soul. So we will need another perfection that is the actual principle of what we said, in which case that would be the soul, but that is the very thing we are discussing. In fact, the soul rightly should be that through which the plant and the animal actually are a plant and an animal. So if it is also a body, then the form of the body is what we said. Now if it is a certain body through a certain form, then that body is not that principle, inasmuch as it is a body; rather [that body's] being a principle will be due to that form, and the issuance of those states [i.e., sensation, motion, etc.] will be from that form itself, albeit through the medium of this body. So the first principle is that form, and its first actuality is through the intermediacy of this body, where this body is a part of the body of the animal; but there is a primary part [i.e., the form] associated with it that is the principle, and [that] is not a body as such except as part of the whole subject. Clearly, then, the soul itself is not a body; rather it is a part of the animal [6] and the plant: it is a form, or like a form, or like a perfection.

⁴⁰ That is, actions such as perceiving and being moved by volition, taking in nutrients, growing, reproducing, and the like.

⁴¹ Ibn Sīnā refers here to form and matter, respectively; cf. the translation of "Physics," I.2, par. 2 and 4, pp. 157–58.

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3. We say now that the soul can be called a "faculty" ($q\bar{u}wa$), in relation to the actions that issue from it. In another sense it can be called a "potentiality" ($q\bar{u}wa$) in relation to the forms of the sensible and intelligible objects that it receives. It also can be called a "form" in relation to the matter it occupies, in which case a material plant or animal substance is a combination of the two. It also can be called a "perfection" in relation to the genus being perfected by it as a fully determinate species among the higher and lower species. [This is so] because the nature of the genus is imperfect and indeterminate as long as the nature of the simple or nonsimple difference is not added to it; once it is added to it, the species is perfected. So the difference for every species (as you have learned), but only for species compounded of a matter and a form, where the form is the simple difference because it is the perfection [of such species].

4. Now every form is a perfection, but not every perfection is a form. For the ruler is a perfection of the city, and the captain is a perfection of the ship, but they are not respectively a form of the city and a form of the ship. So whatever perfection that is itself separate is not in fact the form belonging to matter and in the matter, since the form that is in the matter is the form imprinted in it and subsisting through it, unless perhaps one says in a technical sense that the perfection of the species is the form of the species. Strictly speaking, however, the technical language has settled on [7] "form" when [talking about] something in relation to matter; "end" and "perfection" when it is something in relation to the whole; and "efficient principle" and "motive faculty" when it is something in relation to causing motion. Consequently, the form requires a relation to something at a remove from the substance itself resulting from [the form], and to something through which the actual substance is what it is potentially, and finally to something to which the actions cannot be attributed-that is, the matter—because [the form] is a form with respect to its belonging to the matter. The perfection also requires a relation to the complete thing out of which the actions issue, because it is a perfection on account of its being said of the species.

5. It is clear from this, then, that when we define the soul as a perfection, this most properly denotes its meaning and likewise includes all species of the soul in all respects, not excluding the soul that is separate from matter. Furthermore, when we say that the soul is a perfection, it is more fitting than saying "potentiality," because some of the things that issue from the soul fall under motion and some fall under sensation and perception. Now, properly speaking, perception belongs to them not inasmuch as they have a potentiality that is a principle of action but rather a principle of reception; whereas moving belongs to them not inasmuch as they have a potentiality of reception but rather a principle of action, and neither one deserves more than the other to be related to the soul by reason of its being a potentiality. So, if [the soul] is said to be a potentiality, and both things are meant,⁴² this is by way of homonymy.

 $^{^{42}}$ That is, the potentiality of reception and the potentiality of action.

[8] If [the soul] is said to be a potentiality and [potentiality] is limited to one of the two things, then both what we said results as well as something else, namely, it does not include an indication of what the soul is as a soul absolutely; rather, it indicates one of the things and not the other, and we have already explained in the logic books that that is neither good nor correct. When we say "perfection," however, it includes both meanings; for the soul is a perfection due to the potentiality by which the animal's perception is brought to perfection, and it is also a perfection due to the potentiality out of which the actions of the animal issue. Also, both the separate soul and the inseparable soul will be a perfection. [...]

6. [11] Perfection has two modes: first perfection and second perfection. The first perfection is that by which the species actually becomes a species, like the shape that belongs to the sword. The second perfection is whatever comes after the species of the thing, such as its actions and passions, like the act of cutting that belongs to the sword, and the acts of discernment, deliberation, sensation, and motion that belong to the human. Certainly these latter perfections belong to the species, but not initially; in order for the species to become what it is actually, it does not need these things to belong to it actually. It is rather the case that, when the principle of these things actually exists, such that these things belong to it in potentiality after having not been in potentiality (save in remote potentiality, [in which case] they need something to be present before them in order really to be in potentiality), it is then that the living thing becomes a living thing actually. Now the soul is the first perfection and, because perfection is a perfection of something, the soul is a perfection of something. This thing is the body, where body must be taken in the sense [12] of the genus not the matter (as you learned in "Demonstration").43 This body of which the soul is its perfection is not just any body, for [the soul] is not the perfection of an artificial body, such as the bed, the chair or the like. On the contrary, it is the perfection of a natural body, but not just any natural body-for the soul is not the perfection of fire or earth-rather, in the [sublunar] world, it is a perfection of a natural body out of which issue its second perfections by means of organs that aid in the activities of life, the first of which are nutrition and growth. Thus, the soul-the one that we are defining here-is a first perfection of a natural body possessed of organs that performs the activities of life. [...]

7. [15] . . . For the purposes of establishing the existence of the soul belonging to us, here we have to provide a pointer that serves [both] as alert and reminder [16] by hitting the mark with anyone who is at all capable of catching sight of the truth on his own, and also does not require straightening out his way of thinking, or hitting him over the head with it, or steering him away from sophisms. So we say that it has to be imagined as though one of us were created whole in an instant but his sight is veiled from directly observing the things of the external world. He is created as though floating in air or in a void but without the air supporting him in such a way that he

⁴³ "Book of Demonstration," I.8; for a parallel passage, also see Ibn Sīnā's "Metaphysics" V.3. Neither text is translated here.

would have to feel it, and the limbs of his body are stretched out and away from one another, so they do not come into contact or touch. Then he considers whether he can assert the existence of his self. He has no doubts about asserting his self as something that exists without also [having to] assert the existence of any of his exterior or interior parts, his heart, his brain, or anything external. He will, in fact, be asserting the existence of his self without asserting that it has length, breadth, or depth, and, if it were even possible for him in such a state to imagine a hand or some other extremity, he would not imagine it as a part of his self or as a necessary condition of his self-and you know that what can be asserted as existing is not the same as what cannot be so asserted and that what is stipulated is not the same as what is not stipulated.^b Thus, the self whose existence he asserted is his unique characteristic, in the sense that it is he himself, not his body and its parts, which he did not so assert. Thus, what [the reader] has been alerted to is a way to be made alert to the existence of the soul as something that is not the body-nor in fact any body-to recognize it and be aware of it, if it is in fact the case that he has been disregarding it and needed to be hit over the head with it.

2. From "The Soul," I.5^c

CLASSIFICATION OF THE FACULTIES OF THE SOUL

1. [39] Let us now enumerate the faculties of the soul according to convention and then direct our attention to explaining the nature of each faculty. We say that the faculties of the soul have three primary divisions. The first is the vegetative soul, which is the first perfection of a natural body possessed of organs in terms of its reproducing, growing, and taking nourishment. (The nourishment is a body characterized as similar to the nature of the body of which it is said to be its nourishment, and to which it adds the amount spent, or more or less.) The second is the animal soul, which is the first perfection of a natural body [40] possessed of organs in terms of it perceiving particulars and moving by volition. The third is the human soul, which is the first perfection for a natural body possessed of organs in terms of attributing to it the performance of actions occurring by choice based on thinking and the ascertainment of opinion, and in the sense that it perceives universals.

2. Were it not for convention, it would be best to make each initial [perfection] an explicit condition in describing the second [perfection], if we wanted to describe the soul and not the faculty of the soul belonging to it by reason of that actuality. For "perfection" is used to define the soul not a faculty of the soul. You will learn the difference between the animal soul and the faculties of perception and motion, and the difference between the rational soul and the faculty for the things mentioned, such as discrimination, etc. If you want a thorough account, the correct thing to do would be to make the vegetative soul a genus of the animal, and the animal a genus of the human, using the more general in the definition of the more specific; but if you consider the souls in terms of the faculties peculiar to them as animal and human [souls], you may be satisfied with what we have mentioned.