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Aristotle's definition of motion

L. A. KOSMAN

“Motion,” says Aristotle, “is the actualization of what potentially is, as such – ἡ τοῦ δυνάμει ὄντος ἐντελέχεια, ἥ τοιοῦτον.”¹ If we are to believe Aristotle, this definition speaks to a problem which was perplexing and refractory to his predecessors, and it is itself complex and subtle, employing concepts which are, as he says, “difficult to grasp.”² Given the intricacy of many of Aristotle’s technical concepts, this claim might seem outrageous; for on the usual understanding, his definition of motion is straightforward and pellucid. I shall try to show that that understanding is wrong, and that Aristotle’s definition is more subtle than it is usually taken to be.

I

“Actualization” is an inelegant and in many ways misleading rendering of “ἐντελέχεια”; I have used it because it incorporates an interesting ambiguity about which we must become clear. Like other terms used to translate “ἐντελέχεια,” “actualization” may refer either to a process or to the result of a process. In one sense, the actualization of a man’s hopes may be said to be taking place in the unfolding of some event; in another, it may be said to exist as a result of that event. When Aristotle says that motion is the *actualization* of the potential, in which sense is he using that term; does he mean a *process* or a *product*?

There is an immediate temptation to suppose that he means the former. For he is defining motion, that is, the *process* by which the potential to be something or other is actualized. In any case of motion, it is obvious that the product is not this process, but its result. For example, in the building of a house, the product is not the act of building or of being built,³ but the building, that is, the house itself, which

¹ *Physics* III, 2, 201a11. Similar versions are in the same chapter at 201a29, 201b5, 202a7 and at *Physics* VIII, 1, 251a9 and *Metaphysics* Kappa, 1, 1065b16, 1065b23. As so often in Aristotle, “is” is here used as a predicate variable; read “of what potentially is so-and-so . . .”.

² *Physics* III, 1, 202a1.

³ Like Aristotle, I have been indiscriminate in my use of *building* and of *being*

results from this act. So it is not in this sense that the actualization of bricks and stones *qua* potentially a house is said to be motion; it must therefore be actualization in the sense of process, the actualizing of bricks and stones *qua* potentially a house, which Aristotle defines as the motion of building.

So Aristotle's definition has often been taken. W. D. Ross writes that for Aristotle "motion is 'the actualization of that which is potentially, as such.' I.e. if there is something which is actually *x* and potentially *y*, motion is the making actual of its *y*-ness."⁴ And in commenting directly upon Aristotle's central formulation of the definition, Ross is more explicit; "ἐντελέχεια," he writes, "must here mean 'actualization', not 'actuality': it is the *passage* from potentiality to actuality that is κίνησις."⁵

But this answer is wrong. I do not mean that Aristotle would have been unhappy with the *description* of motion as the actualizing of a potentiality, but only that this is not the *definition* which he offers at the beginning of Book III of the *Physics*.

In the first place, the definition on this account becomes astonishingly vacuous. For to say that motion is the process of actualization by which a potentiality is actualized is to attempt to define motion in terms of the very concept in question, that of the process of actualization. The reason that the definition of motion is, as Aristotle complains, so difficult, is that it is unclear just what sort of thing a process of actualizing a potentiality *is*. Aristotle's definition might, on this account, be helpful in exhibiting important connections between motion and the potential-actual distinction, but it could be an illuminating definition (if at all) only of one or both of these latter concepts; as a definition of motion, it is empty and uninformative.⁶

There is a parry to this objection; for there is a broad sense of "actualization" in which not every actualization, according to

built, though in a strict sense only being built should serve as an example. The reason for this will become clear.

⁴ W. D. Ross, *Aristotle*, (Fifth Edition, London, 1949), 81.

⁵ W. D. Ross, *Aristotle's Physics*, (Oxford, 1936), 537. One could multiply examples; Zeller, for instance, says that Aristotle means to define motion as "Verwirklichung . . . Thätigkeit . . . Bestimmtwerden . . . Uebergang . . .", *Die Philosophie der Griechen*, (Leipzig, 1921) II, 2, 351.

⁶ Aquinas voices just such an objection, arguing that those who define motion as *exitus de potentia in actum* have committed a fallacy of definition, since *exitus* is itself a species of motion; *Commentaria in Octo Libros Physicorum Aristotelis*, Lib. III, Cap. I, Lec. II, n. 2.

Aristotle, is a motion. The actualization of a skill or disposition to act in a certain way, such as occurs, for example, when a wise man exercises and makes manifest his wisdom, is not.⁷ We might then understand Aristotle to be defining motion as one species of a broader genus of actualization, of which the actualization of a disposition in its exercise is another.

But this lacks force as a counter to the objection. Once again, it substitutes a true characterization of motion for the particular definition with which we are concerned. Nowhere in that definition are any differentiae offered which might serve to distinguish motion as such and such a kind of actualization distinct from that by which a disposition is actualized.

There are, in any case, further and more serious objections to this account. For it to make sense, the term “ἐντελέχεια” must signify a process and not a state or condition which might result from a process. There is a sense in which it would be correct, though dangerous, to say this of “ἐνέργεια”. But although Aristotle elsewhere speaks of motion as a kind of ἐνέργεια, he consistently employs the term “ἐντελέχεια” in versions of the definition of motion which we are considering.⁸ And there is little question that in Aristotle’s use, this term signifies a state of having arrived at completeness or perfection.⁹

But the most serious difficulty with this account is that it renders mysterious the crucial phrase in the definition “ἢ τοιοῦτον - as such.” For the actualization of a being *qua* anything at all, given the sense of “actualization” proposed, would be *some* sort of motion. There would then be no point to the inclusion of this phrase in the definition, whereas it is clear that Aristotle takes the phrase to be a crucial and important part of the definition. Furthermore, if we take the phrase seriously, the definition as understood will not give us what we want. The actualization, for example, of bricks and stones *qua* potentially a house will not be the building of a house, but the process of bricks and stones becoming potentially a house.

⁷ *On the Soul* II, 5, 417b10ff. Cf. below, 54 ff.

⁸ The only exception is at *Metaphysics* Kappa, 9, 1065b16, where the excerpter who authored the latter part of Kappa has, as at line 18, replaced “ἐντελέχεια” by “ἐνέργεια”. At *Physics* VIII, 1, 251a9, Ross follows Simplicius and reads “ἐνέργειαν,” but I see no reason to prefer this to the reading of “ἐντελέθειαν” found in the majority of the manuscripts and Themistius. But see George Blair’s interesting study, “The Meaning of ‘Energeia’ and ‘Entelecheia’ in Aristotle,” *International Philosophical Quarterly*, VII, 101 ff.

⁹ Cf. Ross’ note at 1074a30 in *Aristotle’s Metaphysics*, (Oxford, 1953) II, 245.

There is, however, no *process* by which bricks and stones become potentially a house, unless it is that by which they become bricks and stones, and this is what Aristotle specifically rules out when he says, in the passage following the definition, that it is not the actualization of bronze *qua* bronze which is motion.¹⁰ And even if there were such a process, we should not have the definition which Aristotle means to give. For the actualization of the buildable *qua* buildable would be the process by which the buildable becomes *buildable*, rather than, as Aristotle has in mind, building, i.e., the process by which the buildable becomes *built*.

I think that these objections are fatal enough to the proposed account to let us dispense with the uncomfortable courtesy of translating “ἐντελέχεια” or “ἐνέργεια” by “actualization” and use the much preferable term “actuality.”

But what about our initial concern, namely that only a definition in terms of process would yield the *motion* rather than the *result* of the motion. The seriousness of this concern will become clear if we now turn to a second question: what is meant by that part of the definition which states that motion is the actuality of what potentially is, *as such*? What do the words “as such” *add* to the definition? These words seemed superfluous on the previous interpretation; given that they are not, just what is their force?

A helpful beginning is to note that for anything which is potentially A, there is some B which at the same time that thing is *actually*. The bricks and stones which are potentially a house are actually bricks and stones. Now it is not the actuality of bricks and stones *qua* bricks and stones which is relevant to building a house, but their actuality *qua* potentially a house. So Aristotle says that motion is the actuality of something which is potentially, but not *qua* what that something is actually at the moment, but *qua* what it is potentially.

When the matter is put this way, however, it is easy to feel the force of our concern that such an account will yield not the process of building, but the physical building which is a result of that process. Ross shares this concern, and his solution is both ingenious and interesting. He writes:

An aggregate of bricks, stones, &c., may be regarded (1) as so many bricks, stones, &c., (2) as potentially a house, (3) as potentially being in course of being fashioned into a house. The movement of building is the realization not (1) of the materials as these materials (they are, previously to the

¹⁰ *Physics* III, 2, 201a 30 ff.

movement of building, already actually these materials), nor (2) of their potentiality of being a house (the *house* is the realization of this), but (3) of their potentiality of being fashioned into a house.¹¹

Ross clearly takes this to be an interpretation, not an emendation of Aristotle's theory, and looks for support to Aristotle's remarks at the end of the chapter in which motion is first defined. Aristotle there argues, by way of illustration, that

the actuality [*ἐνέργεια*] of the buildable *qua* buildable is building. For either building or the house is the actuality of the buildable; but when it is a house, it is no longer buildable, whereas what is built is the buildable.¹²

It is hard to believe, however, that this passage expresses what Ross takes it to express. For if so, motion will be defined as the actuality of a certain potential, namely the potential of being in motion. And it is surely a calumny to suggest that Aristotle might have considered this an instructive definition. It might serve as a definition or part of a definition of "actuality" and "potentiality": part of the list, for example, given in *Metaphysics* Theta, 6.¹³ But it could no more be an instructive definition of "motion" than "white is the actuality of what is potentially white *qua* potentially white" could be an instructive definition of "white".

Secondly, the suggestion that the actuality to which Aristotle is referring is that of the object's potentiality to *become* rather than to be something else, of the potentiality of bricks and stones, for example, to *be fashioned into* a house, simply finds no substantiation in the text. Not only does Aristotle nowhere suggest this as the potentiality he has in mind, he is explicit that it is something's potentiality to *be* and not to become something else in terms of which he means to define the motion by which it becomes that something else. In explicating the phrase "as such," he distinguishes between bronze (a) *qua* potentially a statue and (b) *qua* bronze. When a number of lines later he concludes that "motion is the actuality of the potential *qua* potential,"¹⁴ he is clearly referring back to (a) the bronze *qua* potential-

¹¹ Ross' commentary on the *Physics*, *op.cit.*, 536, and also with slight changes, his commentary on the *Metaphysics*, *op.cit.* II, 327. The view is substantially that of Aquinas, *Commentaria*, *loc.cit.*, especially nn. 3 and 5.

¹² *Physics* III, 1, 201 b9ff.

¹³ 1048a37ff.

¹⁴ *Physics* III, 1, 201 b4f.

ly a statue, not *qua* potentially *being made into* a statue; that possibility is never mentioned.

But if it is correct that the potentiality which Aristotle has in mind is that of the bronze to be a statue, or of the bricks and stones to be a house, the problem once again arises that the definition gives us the finished *product*, the statue or the house, rather than the process or motion in which the bronze is wrought or the house built. If, of course, we had followed Ross much earlier in taking the definiens to refer to a *process*, there would be no such problem. For it is only when we understand "actuality" in the sense of *product* that a definition in terms of bricks and stones *qua* potentially a house threatens to yield the house itself rather than the act of building. It was precisely for this reason that we ever felt tempted to understand the definiens as including reference to a process.

All of this makes rather mysterious why Ross should have felt it necessary to identify the potentiality in question as e.g. that which bricks and stones have of being fashioned into a house. The mystery is heightened by the realization that the two views are not simply supererogatory; they are incompatible. For if we talk of actualization in the sense of *process*, the actualization of the potentiality of bricks and stones to be built into a house will not be the process of building, but the process of that process coming into being. It will be, in other words, the movement by which bricks and stones begin being built into a house: not the first stage of building a house, but the process by which that first stage begins. Aristotle, however, is adamant (and correct) in his view that there is no such process. As a counter to Parmenidean arguments and for internal reasons which we shall see, it is important for him to deny, as he does throughout Books V and VI of the *Physics*, that there is a period of time in which motion begins, and that something's beginning to undergo motion is itself a motion.

We are faced, then, with two independent and unhappy accounts of Aristotle's definition of motion. On one account, Aristotle is understood to be defining motion as the actualization (process) of a potentiality into an actuality; on the other, he is understood to be defining motion as the actuality (product) of a potentiality to be in motion.¹⁵

¹⁵ Both of these definitions of motion were current among Aristotle's medieval commentators, some of whom took Aristotle to be stating that *motus est exitus de potentia in actum*, others of whom took him to be stating that *motus est actus exeuntis de potentia in actum*. On this subject, see Anneliese Maier, *Zwischen Philosophie und Mechanik*, (Rome, 1958) 3-57.

These accounts articulate theories of motion which are by no means contradictory, but as accounts of Aristotle's definition, they are incompatible and embody complementary difficulties.

Can we frame an alternative account of Aristotle's definition which can steer us between Scylla and Charybdis? Ross unwittingly gives an account so wide as to become trapped, bargelike, in both difficulties. We must construct an account more svelte which (1) recognizes that Aristotle's definition talks about the *actuality* of a potentiality. (2) recognizes that potentiality as a potentiality to *be*, e.g. the potentiality of bricks and stones to be a house, but (3) yields motion and not its result, i.e., the act of building and not the house which is its product.

II

I have spoken throughout of the actuality (and making actual) of a *potentiality*, rather than of the subject of a potentiality. In his definition of motion, Aristotle speaks only of the latter, but it is clear that he would allow the other mode of speech, which he sometimes uses. The function of "*qua* . . ." ($\xi\eta$) makes clear this fact. If I am told that over the summer my friend has improved considerably, a context or further statement would normally be needed to make clear in what respect, *qua* what, he had improved. And to be told that he has improved e.g. *qua* stutterer, is to be told that he has improved *his stutter*, (not his chess openings, say, nor his manhood.) So to say that bricks and stones have been actualized *qua* potentially a house, is to say that their potentiality to be a house has been actualized (and not, say, their potentiality to be a statue.)

The fact that the words "*qua* . . ." in the phrase "so-and so has been actualized *qua* . . ." specify the respect in which it has been actualized is of little help in understanding our definition. For "*qua* potential" is too general to serve any function other than to make clear that it is the actuality of bricks and stones *qua* potentially something else and not *qua* bricks and stones which is in question. It is clear, however, that in considering what it is to speak of the actuality of a being which is potentially φ *qua* potentially φ , we may justifiably attend to the locution "the actuality of a potentiality to be φ ."

But what does it mean to speak of the actuality *of* a potentiality to be φ ? What does such a phrase signify? The natural temptation is to answer: being φ . But such an answer is what caused us trouble, for if it is correct, then Aristotle's definition seems to capture the product of a

motion rather than the motion itself, the physical building and not the act of building. Is there some alternative? Could actualizing a potentiality mean something other than destroying the potentiality and replacing it by its concomitant actuality?

Consider my stuttering friend. If I am told that he has spent the summer improving his stutter, I should then normally expect him to speak more fluently, less haltingly, in short, with less of a stutter. This is the sort of fact which philosophers sometimes find strange. Improving something here turns out to be equivalent to destroying it. One is now moved to imagine other expectations. Suppose my friend is an actor working on a role which demands a noticeable and convincing stutter, or a secret agent, who must for some recondite reason exhibit a speech impediment, or a neurotic who cultivates wounds, infirmities, and defects. In any of these cases, my expectations upon hearing that he has been improving his stutter might be quite different; I might now expect a man who stutters not less, but more.

There is nothing mysterious about these facts. They are instances of a general feature of what might be called *privation* or *imperfection* terms. When such terms are the objects of terms signifying improvements, perfections, fulfillments, etc., an ambiguity results as to whether talk of perfecting the imperfection signifies its attenuation or amplification. Upon completing a fragment of a poem, for example, does one have a whole poem or a whole fragment?

At one level, this is simply a linguistic ambiguity, and we can, if necessary, make clear within the language which sense we are intending. One way of doing this, which locates an uneasiness which might have been felt about my earlier example and to which I shall return in a moment, is the following. Since a stutter is imperfect speech, we might distinguish between the cases by saying in the one instance that my friend had improved his stutter *qua* speech, or that he (a stutterer) had improved himself *qua* speaker, and in the other that he had improved his stutter *qua* stutter, or himself *qua* stutterer.

Behind all this is the fact, which Aristotle finds revealing and important, that all change is from something which, though numerically one, may be considered either as the privation from which the change occurs, or as the subject which changes. Thus he points out that we can say either (1) that a man becomes educated, (2) that the uneducated becomes educated, or (3) that an uneducated man becomes educated, and so, he goes on to argue, what changes is

numerically one, but not formally one, that is, it can be described in different ways. For it is not the same thing to be a man and to be educated, and the one endures, while the other does not; what is not an opposite endures (for the man endures), but the not educated or uneducated does not endure, nor does the compound of the two, the uneducated man. We speak of becoming that from this, rather than of this becoming that, with respect to what does not endure, as we speak of becoming educated from being uneducated, not from being man.¹⁶

This distinction between the development of a subject and the development of a privation explains the case of my friend's stuttering. Where improving his stutter resulted in greater volubility, the stutter was the *privation from which*, in the annihilation of which the change resulted. But where the improvement resulted in an even greater halting and stammering, the stutter was clearly the (at least proximate) *subject of* the change. And in general, "the perfection of an imperfection" will signify the attenuation or amplification of that imperfection depending on whether the imperfection is the privation from which, or the subject of, the act of perfecting. Let us speak in the former case of the *deprivative perfection* of an imperfection, and in the latter of the *constitutive perfection* of an imperfection.

The question of whether certain descriptions are best understood as referring to the privations or to the subjects of perfections is often of some philosophical importance. The perfection of something, understood as *deprivative* perfection, entails, as I have suggested, its disappearance; its perfection, therefore, lies in something other than it-

¹⁶ *Physics* I, 7, 189b32ff. Cf. also *On Generation and Corruption* I, 4, 319b3ff. and *Metaphysics* Zeta, 7, 1033a5ff. Although there is an important difference between the material and privative *terminus a quo*, which Aristotle here notes and elsewhere expands in the simple observation that statues are brazen, not bronze, caskets wooden, not wood, (*Metaphysics* Zeta, 7, 1035a5ff., Theta, 7, 1049a19ff.) the distinction here drawn is clearly related to that between form and matter. For the different senses of "of" in "the perfection or development of x" when x is the subject of that development and when x is the privation from which the development proceeds, parallel what we might call the formal and material "of" as in "a statue of Pericles" and "a statue of bronze." Imagine a piece of wood, sculpted to have molten flow, perhaps painted a bronze color, entitled *Alloy of Copper and Tin*, and exhibited; that would be a statue of bronze in a formal sense. A statue of Pericles in the material sense is imaginable, but too macabre to describe. An interesting artistic game might be the attempt to unite these senses; it is conceivable that someday one might encounter in a museum a statue of a brillo box made out of a brillo box, or see a film in which Fritz Lang plays Fritz Lang.

self. In *Sylvie and Bruno*, the constant improvement of maps results in their disappearance, for the perfect map is just the land itself: in color, relief, and at a scale of one mile to the mile, somewhat cumbersome, but terribly accurate. Is the ideal language similarly the world, and therefore *not* language? Perfect empirical knowledge not empirical knowledge at all? The ideal life not of this world? The perfect man not a man, but a god?

These questions ultimately involve a deeper question, which is whether or not any and every thing can be the subject of a perfection, as well as the privation from which a perfection results. For they ask whether the criteria of perfection for some entity or class of entities lie elsewhere than with the entity itself. An affirmative answer to the deeper question suggests that each entity is to be seen as setting its own criteria of perfection. Such a view, or something like it, underlies visions of the world which tend to be aesthetic and mystical, which counsel a happy and benign acceptance of life, as against those which tend to be more moral and political. A more restricted and local version of such a view provides the basis for camp sensibility, for the willingness, i.e., to see virtually anything as a good or beautiful instance of its kind (even when its kind might be *bad example of a larger kind*). “It is one of the best bad movies I have ever seen,” where that does *not* mean one of the least bad, is a legitimate piece of camp praise; it may offend us aesthetically, but we must make sense of it logically.

The logical possibility of such views shows that it is at least superficially possible (a) to find for any description some criteria in terms of which it at least makes sense to say that items which fall under that description are good or real or perfected, and therefore (b) to understand “the perfection of an imperfection” in both ways I have suggested. At the end of this paper, I shall suggest ways in which I think Aristotle might have wished to modify such a claim. But subject to such modification, I would submit what might be called the principle of universal perfectability: any privation may be the *subject* of some perfection as well as the *privation* from which a perfection results, or alternatively, “the perfection of a privation” may refer to a constitutive as well as deprivative perfection. In a sense, this is only a version of the larger point concerning the being of non-being which is argued by the Stranger in the *Sophist* and made repeatedly by Aristotle throughout the *Metaphysics*.¹⁷

¹⁷ For example, *Sophist* 237, 256ff., *Metaphysics* Zeta, 4, 1030a20ff.

One version of this principle is the following: the actuality of a potentiality may be constitutive as well as deprivative, for the potentiality may be the subject of the process of actualization and not the privation from which the actualization proceeds and which gives way to the resultant actuality. In such a case “the actuality of potentially being φ ” will refer not to actually being φ , but to potentially being φ .

This fact affords us the possibility of an answer to my second question which will not result in the difficulties which have until now plagued us. We may now say: the phrase “as such” signals that it is the constitutive and not the deprivative actuality which is referred to in Aristotle’s definition. Motion, in other words, is not the actuality of a potentiality in the sense of the actuality which results *from* a potentiality, but rather in the sense of an actuality which *is* a potentiality in its full manifestation. That the phrase “as such” plays this role is a fact for which we might have been prepared had we paid careful attention to the case of my friend’s stuttering. For we saw there that one method of signalling that we were talking about the subject of a development was by the use of such a phrase; we talked of his improving his stutter *qua* stutter rather than *qua* speech. Similarly, to speak of the actuality of a potentiality *qua* potentiality is to signal that the actuality is constitutive and not deprivative.

I think we can now attend to Aristotle’s own words with greater understanding:

when the buildable, in so far as we describe it as just that, is fully real [$\acute{\epsilon}\nu\tau\epsilon\lambda\epsilon\chi\acute{\epsilon}\iota\alpha$], it is being built, and this is building . . . The actuality of what is potential, when it is fully real and functioning, not in this, that, or some other respect, but just as movable, is motion.¹⁸

It is only when bricks and stones are being built, Aristotle is claiming, that they are fully manifesting their potentiality to be a house *qua* potentiality; only then that the constitutive actuality of their potentiality to be a house is realized, prior to the coming to be of the deprivative actuality of that potentiality, which occurs when bricks and stones *qua* buildable disappear, to be replaced by the brick and stone house which has been built.

III

But how are we to make sense of the notion of a potentiality being

¹⁸ *Physics* III, 1, 201a16ff.

more or less manifest as a potentiality? What is the difference, in terms of their potentiality to be a house, between bricks and stones when they are lying in a pile and when they are being built? We need here, it seems, some concept of differing degrees of potentiality.

Perhaps the distinctions which Aristotle draws and employs so fruitfully in *On the Soul* will be helpful. Consider speaking Greek. Aristotle wants to argue that there are two quite distinct senses in which we may attribute to an entity the potentiality of speaking Greek. A normal Athenian infant (A) potentially speaks Greek in that he is capable of learning Greek and coming to speak it (and thus has the potentiality to speak Greek in a way that a dog, say, does not.) But an adult Athenian who is (not dumb but) at the moment silent (B) potentially speaks Greek in a different sense. Let us say that A potentially₁ speaks Greek, whereas B potentially₂ speaks Greek. There is obviously yet a third possibility, that of an adult Athenian who at the moment *is* actually uttering Greek sentences in a syntactically correct and meaningful way etc. (C). But it is clear that given C, we must also distinguish between two senses of “actually,” the distinction which Aristotle exploits in his discussion of living, sensing, etc. For we need to be able to say that A potentially speaks Greek, as distinct not only from a dog, who does not potentially speak Greek, but from *both* B and C, who actually speak Greek; there must, however, be another sense in which B does *not* actually speak Greek, for we want to be able to distinguish him from C. So let us say that B actually₁ speaks Greek, while C actually₂ speaks Greek.¹⁹

Note that as B both potentially₂ and actually₁ speaks Greek, so in general potentially₂ speaking Greek and actually₁ speaking Greek are materially equivalent. This expresses somewhat awkwardly the fact which Aristotle would have expressed by saying that a first actuality is a potentiality toward a second actuality. There is therefore a sense in which the infant A’s potentially₁ speaking Greek is a double potentiality; it is, to venture further into the labyrinth of technical expression, potentially potentially speaking Greek (where “speaking Greek” means actually₂ speaking Greek), as distinct from potentially₂ speaking Greek, which is *actually* potentially speaking Greek. More

¹⁹ I suppose there are reasons, which it might be fruitful to explore, why it is natural for us to express this difference by saying that B speaks Greek and C is speaking Greek, whereas we should never say that B is speaking Greek, and only in special cases that C speaks Greek.

colloquially, we might say: C is speaking Greek, B is *able to speak* Greek, A is *capable of being able to speak* Greek.

This account provides a distinction between degrees of potentiality and actuality of the sort which we sought. Considering it, we might be led to depict motion as comparable to a first actuality, intermediate as it is between a potentiality and the resultant product. The attractiveness of such a claim may be highlighted by asking, What is the actuality corresponding to A's potentiality to speak Greek? Is it speaking Greek à la B, i.e. actually₁ speaking Greek or à la C i.e. actually₂ speaking Greek? In a sense, both answers are correct, and one can imagine the arguments in favor of each. But although actually₁ speaking Greek is the proximate actuality of A's potentiality, the conceptual and ontological priority which actually₂ speaking Greek enjoys, the degree to which the identity of actually₁ speaking Greek is dependent upon it, should lead us to say that it is in the most serious sense the actuality of A's potentiality. Similarly, although Aristotle sometimes speaks as though in such cases there were two different potentialities with different actualities, such that the proper actuality of one could *not* be that of the other, he more often speaks as though there were but a single actuality of which both potentialities were potentialities, though in a different sense. Thus he sometimes describes the distinction in terms of being nearer to and further from some goal; the sleeping geometer, he says, is more distant from his actuality than the waking, the waking from the actually theorizing.²⁰ At another point, the distinction is illustrated by the fact that we say both of a boy that he is potentially a general, and of an adult that he is potentially a general; but it would be decidedly odd to suggest that the actuality of a boy's potentiality to be a general is his being an adult.²¹

But B's speaking Greek is, after all, the proximate actuality of A's potentiality; there should be some way we can refer to it as the actuality of a potentiality. Deep in the neological maze, we distinguished between A and B by saying that A only potentially potentially speaks Greek, whereas B actually potentially speaks Greek (where in both cases "speaks Greek" means actually₂ speaks Greek.) Having gone this far, we have little to lose by venturing one step further. Speaking Greek in the sense in which B speaks Greek (actually₁ or potentially₂ speaking Greek) is the actuality of the potentiality to potentially

²⁰ *Generation of Animals* II, 1, 735a9ff.

²¹ *On the Soul* II, 5, 417b31ff.

speak Greek in the sense in which C speaks Greek (actually₂), and this potentiality to potentially speak Greek, potentially₁ speaking Greek, is exhibited by A. Actually₁ speaking Greek is then the deprivative actuality of the potentiality to potentially speak Greek, or the constitutive actuality of potentially₍₂₎ speaking Greek. We might say, to distinguish it from actually₂ speaking Greek, that it is the actuality of the potentiality to speak Greek *qua* potentiality.

We have thus been led by this final step into corridors of expression which are tortuous, but at least familiar, and we should now see the attractiveness of comparing motion with a first actuality or disposition like B's speaking Greek. In both cases, we have something which is in one sense potential and yet in another actual, poised between a prior potentiality and a further actuality. When Aristotle introduces his discussion of motion by observing that "some things are only actually, some potentially, some potentially and actually,"²² the reference is to a distinction of this sort, not to pure intelligences, God, prime matter, or the void.

Furthermore, in both cases this something is the constitutive actuality of a potentiality, and the deprivative actuality of a double potentiality. Now apply these considerations to motion. When I am in Philadelphia, I am potentially in Berkeley. But that potentiality to be in Berkeley lies dormant, so to speak, until I quit Philadelphia; it becomes manifest, becomes, we might say, actual, only as I embark upon a journey to Berkeley. There is then a sense (so odd that only a philosopher would want to use it) in which situate in Philadelphia I am only *potentially* a potential inhabitant of Berkeley, whereas motor-ing through Council Bluffs on a pilgrimage from Philadelphia to Berkeley, I am *actually* a potential inhabitant of Berkeley. And so my *journey to Berkeley* is the constitutive actuality of my potentiality to be in Berkeley, or of myself *qua* potentially in Berkeley. There is, to be sure, a more ordinary sense in which *being in Berkeley* is the actuality of my potentiality to be in Berkeley; but in that case, the potentiality is seen as privation-from-which, not as subject-of. Or consider again building. Bricks and stones are potentially a house, that is, buildable into a house. But they are manifesting this buildability only when they are actually being built; there is therefore a (once again odd) sense in which bricks and stones lying about are only po-

²² *Metaphysics* Kappa, 9, 1065b5f. These considerations suggest to me that this is the correct text. The version at *Physics* III, 1, 200b26f., may be due to haplography.

tentially buildable into a house or (odder still) are only potentially potentially a house. The process of being built into a house is then the deprivative actuality of this (double) potentiality; in this sense Ross is right,²³ and it is perhaps this way of putting the matter which led him to suppose that this is how Aristotle put the matter. Another way to say that building is the deprivative actuality of the potentiality to be potentially a house is to say that it is the constitutive actuality of the bricks and stones *qua* potentially a house, and it is this way which Aristotle chooses. Motion is, he means to say, the constitutive actuality of what is potential as such.

We can now understand the passage at the end of the first chapter of *Physics* III which earlier led us to think, incorrectly, that since we should otherwise be left with the product of the motion rather than with the motion itself, Aristotle must be defining motion either as a process, or as the actuality of a potentiality for being in motion. But what Aristotle says is quite simple and straightforward. The expression "the actuality of the buildable" can mean building or the product of building, i.e., the house. But by the time the house is there, the buildable has been actualized in such a way that it is no longer buildable. It is, on the contrary, when the buildable is being built that it is most fully manifesting itself as actually buildable. Therefore the actuality of the buildable *qua* buildable, that is, the *constitutive actuality of being buildable*, must be the process of building.

IV

The attractiveness and helpfulness of comparing motion to a first actuality such as the dispositional ability to speak Greek are thus great; they must not blind us, however, to the serious and important differences between the concepts. To see these differences, we must look more closely at what Aristotle says about the distinctions we have explored in the last section. For the kinds of potentialities distinguished are more seriously different than we have made them out to be. Most importantly, they differ with respect to the mode in which their goal is achieved, the potentiality in each case translated into actuality.

Aristotle points out that of the entities termed potential in different ways,

²³ Above, n. 11.

the one is called potential because of his kind and matter, the other because he can [speak Greek] if he is not prevented by anything external.²⁴

And accordingly, he goes on to say, the transition from potentiality to actuality is in each case different. For the one proceeds by a change of quality, the other by the transition from having a quality but not exercising it to having the same quality fully manifest, that is, to exercising it: “μὴ ἐνεργεῖν δέ, εἰς τὸ ἐνεργεῖν.”²⁵ Let us call this latter mode of transition *energization*; it is what occurs when a wise man manifests his wisdom, or in general, when a skill or disposition to act is realized in the appropriate action. Aristotle entertains serious and well founded reservations about calling energization a transition at all; at least, he says, we must recognize that there are two quite different kinds of transition.²⁶

The acquisition of a first actuality, such as learning to speak Greek, is a process of the former sort; its realization in the act of speaking Greek is an energization, a transition of the second sort. But although there are similarly two extremes and a middle term in the case of motion, the situation is importantly different. For here the energization takes place not between the second and third terms, but between the first and second. It is not, therefore, motion which is the most proper analogue of a first actuality, but the potentiality of which the motion is the (constitutive) actuality. The analogy, in other words, ought to be drawn in the following way: as the exercise of a disposition is to that disposition, for example, actually₂ speaking Greek to actually₁ speaking Greek, so is motion to potentiality, e.g., the motion in (by) which bricks and stones are built into a house to the potentiality for being a house which those bricks and stones have when they are not being built, and so is the movable in motion to the movable at rest.

It is for this reason among others, that there is, as I claimed earlier, no motion by which motion comes into being, nor, what is the same thing, by which a potentiality comes to be realized as a potentiality. There may be a motion by which an object acquires a potentiality, but once the potentiality has been acquired, only an act of energization

²⁴ *On the Soul* II, 5, 417 a 26 ff. Aristotle's actual example is the exercise of knowledge.

²⁵ *Ibid.*, 417 b 1.

²⁶ *Ibid.*, 417 b 6 ff.

is needed for motion to begin. And there are, Aristotle believes, powerful arguments which show that this must be the case.²⁷

It is not, of course, the buildable which by its own agency manifests its buildability; but then many dispositions are not wholly within the power of their subjects.²⁸ The buildable is brought to the full realization of its buildability, that is, to the constitutive actuality of its potentiality to be a house, only by the agency of the builder, as he in turn exercises his power to build, makes actual his skill in the act of building. These actualities, as Aristotle repeatedly points out, are different only in definition; moving and being moved, acting and being acted upon are one and the same actuality, differing only as the way from Athens to Thebes differs from the way from Thebes to Athens.²⁹ It is only to be expected then that building, like being built, is in one sense an actuality, though in another a motion. It must not surprise us to find Aristotle cautioning that it would be

wrong to say that the thinker in thinking undergoes a change, just as it would be wrong to say this of *the builder when he builds*,³⁰

while at other times, building is clearly classified as a motion. Building and being built are indeed motions (one and the same motion), but each is at the same time the exercise of a dispositional first actuality, in the one case that of being buildable, in the other that of being a builder.

V

Motion, then, is the functioning, the full manifesting of a potentiality *qua* potentiality, or more precisely, the functioning of a being which is potential as that potential being. It should now be clear why Aristotle says that “motion is a kind of *ἐνέργεια*, but incomplete [*ἀτελής*].” The reason for this, he goes on to say, “is that the potential of which it is the *ἐνέργεια* is incomplete.”³¹ This clearly cannot mean that there is some *special* kind of incomplete potentiality, the actuality of which is incomplete and is motion. For all potentiality is *ἀτελής*, incomplete or

²⁷ Such as are explored throughout Books V and VI of the *Physics*.

²⁸ Sensation is a notable instance; cf. *On the Soul* II, 5, 417b19ff.

²⁹ *Physics* III, 3, 202a10ff.; *On the Soul* III, 2, 425b26ff. Cf. above, n. 3.

³⁰ *On the Soul* II, 5, 417b8f. My italics, of course.

³¹ *Physics* III, 2, 201b31f.; *Metaphysics* Kappa, 9, 1066a20f. Cf. also *Physics* VIII, 5, 257b9 and *Metaphysics* Theta, 6, 1048b29.

unperfected. The point is rather that motion is the constitutive actuality of an entity which is by definition incomplete, and since the constitutive actuality of an entity is simply that entity in its full manifestation, motion itself is an incomplete actuality.

But in that case, what will count as a complete *ἐνέργεια*? If the relation of motion to potentiality is that of *ἐνέργεια* to disposition, and if a disposition is itself a kind of potentiality, then why isn't any *ἐνέργεια*, as the actuality of a dispositional potentiality, incomplete?

In the case of motion, the actuality, because it is the actuality of a potentiality *toward some other entity*, remains incompleting even in its actuality. But in the case of *ἐνέργεια* proper, the actuality *has no other end than itself*. Consequently, in being actualized *qua* potentiality, it is at one and the same time actualized *qua* the actuality which that potentiality is a potentiality toward. There is, in other words, an entity in the case of motion which is intermediate, namely the motion itself. But in the case of what I have called energization, what is analogous to the motion is one and the same entity as what is analogous to the resultant state toward which the motion is directed. There is therefore, no distinction between actuality *qua* potential and *qua* the actuality of that potential.

This fact may be put in terms of our earlier discussion: in all cases of energization, the resultant actuality is constitutive, never deprivative. In cases of motion, however, the ultimate actuality is deprivative, although there is an intermediate constitutive actuality. This is essentially how Aristotle characterizes the two modes of transition when he says that "the one, which is a change of qualities, is with respect to privation, the other is with respect to dispositional qualities [ἕξις] and nature."³²

The sense in which motion is incomplete, then, is the sense in which it is *ἀτελής* in the literal sense, i.e. in which it does not contain its own end, but is directed toward an end outside itself. Putting the matter this way suggests but does not fully bring out the self-destructive (and what might be called, even at the risk of extravagance, tragic) dimension of motion. For motion is the actuality of a potentiality which is aimed ultimately at an actuality *other* than the motion and fatal to it. Motion does not, therefore, just happen to cease, its essential activity is devoted to ceasing. Its being is auto-subversive, for its whole purpose and project is one of self-annihilation.

³² *On the Soul* II, 5, 417b14ff.

The essential self-destructive character of motion brings out what is ultimately wrong with comparing motion to a first actuality disposition. For while motion is aimed at a fulfillment which lies outside itself and brings about its destruction, the fulfillment of a disposition preserves and often enriches it. The completion of a house, towards which the process of building the house is aimed, brings an end to that process, whereas it would be more than just absurd to claim that one cannot speak Greek while he is speaking Greek. It would be exactly contrary to the truth; speaking Greek is just the full manifestation of the ability to speak Greek. To say that a man speaks Greek is to predict that on some occasions he will blossom forth in Greek sentences; but this is very different from the fact that to say that a house is being built is to predict that on some occasion there will be a house. For the existence of the house is proof that it *was*, but is no longer, being built, whereas the uttering of Greek sentences is proof that the man *does*, and under normal circumstances will in the future, speak Greek.

VI

It is this feature which similarly provides the ground of distinction between motion and ἐνέργεια proper. Aristotle distinguishes between actions, like the removing of fat, or walking from one place to another, or building, which are not an end, but are relative to an end, and actions like seeing, living well, walking in the sense of strolling (*spazieren*) which are their own end, and are thus not limited by the necessity of having to cease in order that they may not be frustrated. Of the latter, he says, in a famous sentence:

At one and the same time we are seeing and have seen, are understanding and have understood, are thinking and have thought, while it is not true that at the same time we are learning and have learnt, or are being cured and have been cured.³³

No reference is here being made to any temporal point such as that presently seeing entails having seen at some time in the past, nor to the possibility of combining present and past tenses. To detach *having seen* and consider it in any relation whatsoever to seeing is to miss precisely Aristotle's point, which is an explication of the earlier fundamental point. For he goes on to say:

³³ *Metaphysics* Theta, 6, 1048 b 23 ff.

In some cases the ultimate thing is the exercise; as in sight, the ultimate thing is seeing, and no other product results from sight.³⁴

There is nothing which lies outside seeing which can be identified with *having seen* as the house which is the result of building can be identified with *having (been) built*. The end of building is having (been) built, but the end of seeing is not having seen; it is seeing. And in general, the end of a motion is having moved, but of an ἐνέργεια, the ἐνεργεῖν, the acting itself. Seeing and the completion of seeing happen together, for they are one and the same thing. It is not that an ἐνέργεια can go on forever, whereas motion must cease; it is rather than an ἐνέργεια is eternal, for its full actuality and realization is present in every instance of its occurrence.³⁵

This issue demands considerably more discussion than I have given it, but I hope that the central point is clear and correct. Another issue is raised by that point, about which I shall also make only (what I hope will be provocative) suggestions. If motion is a degenerate kind of ἐνέργεια, it is not clear why Aristotle should have thought it an (even putative) *paradigm* of ἐνέργεια. It is clear that he did; a serious question for first philosophy, included in the list of *aporiai* in *Metaphysics* Beta, is whether or not there is a distinction between actuality and potentiality *other* than with reference to motion,³⁶ and the answer to this question later in the *Metaphysics*, an answer, to be sure, in the affirmative, is prefaced by the remark that “actuality is thought to be above all motion.”³⁷

The reason for this emerges if we remember that ἐνέργεια is a kind of *acting*; the temptation for the Greeks to put true reality with movement was much greater than the temptation to put it with rest.³⁸ Actuality is de-motionalized being not by virtue of having been brought to quiescence, but by virtue of having become entelic, having become its own end.

It is for this reason that circular motion, of which each part is as

³⁴ *Metaphysics* Theta, 8, 1050a23ff. My reading of this passage is somewhat tendentious, but not unfair. Literally the passage expresses the view that with regard to some faculties, their actual use (χρῆσις) is the only end or purpose (ἔσχατος) of their being; there is no product toward which that exercise is in turn directed. But this is substantially the same point as I have been stressing.

³⁵ See the discussion of pleasure, *Nicomachean Ethics* X, 4, 1174a13ff.

³⁶ *Metaphysics* Beta, 1, 996a10ff.

³⁷ *Metaphysics* Theta, 3, 1047a33ff.

³⁸ Witness the exchange between Theaetetus and the Stranger at *Sophist* 249a.

much the end as any other, is the closest analogue to full reality.³⁹ In one sense that reality is most closely approximated in the axis of such motion, in the still point at the center of the most *energetic* activity. The immovable peg of the furiously spinning top in Book IV of the *Republic*⁴⁰ is an εἶδωλον, a type of the calm and ordered soul at the center of the politically active man who is the hero of that dialogue. This vision of ceaseless activity with a calm center is to be found earlier in the shining, singing axles of the chariot which takes Parmenides to the place of his revelation, a revelation which in turn is of the “unmoving heart of well-rounded truth.”⁴¹

The center as focal point holds together that which is moving, prevents it from disintegrating, and thus preserves its integrity and self-identity; but it does so only in symbiotic union with the limiting and bounding force of the periphery. And so in another sense it is equally the circumference which, in establishing limit and in its very steadiness of circuit and ever-regenerated newness, resembles that reality. Aristotle’s unmoved mover, as much at the circumference as at the center of the cosmos, descends from that more ancient god, the great encircling Okeanos, forever flowing and nourishing, yet unchanged.⁴²

Like Parmenides, Aristotle finds at the heart of all being that which is unmoved, but not inactive. At the heart of the cosmos is that which is full act, total shining forth of being. Substance, that is, οὐσία or be-ing, is an activity, an entity’s manifesting what it is; to be a man is to shine forth with humanity, to act one’s manhood out in the world. Aristotle thus says that of things which are actual, some are “as motion to potentiality, others as οὐσία to some matter.”⁴³ Beings therefore imitate divinity in being, acting out, what they are; *imitatio dei* consists in striving not to be God, but to be one’s self, to emulate that being who is totally active, i.e., who totally is what he is.

That the essence of God is actuality⁴⁴ has other than metaphysical force for Aristotle. For we partake of divinity in our capacity for action which is actuality and which has no limit and no end outside itself. The possibility of such action frees us from the tyranny of motion,

³⁹ *Physics* VIII, 9, 265a33 ff.; *On the Heavens* I, 9, 279b1 ff.

⁴⁰ *Republic* 436d.

⁴¹ Parmenides, Fragment I, lines 6, 29.

⁴² *Physics* VIII, 10; *Iliad* XXI, 194.

⁴³ *Metaphysics* Theta, 6, 1048b8 f.

⁴⁴ *Metaphysics* Lambda, 6, 1071b20.

which is necessarily self-destructive, and at the same time rescues motion from the vanity of infinite regress, by providing the ends which must necessarily lie outside motion itself.

Personal tragedies result when motion and ἐνέργεια are confused, either by a man coming to define his being in terms of motion, or by his taking the necessary motions of his life to be ἐνέργεια. In the one case, he must work simultaneously to sustain and destroy his being; the fulfillment of his desires is the destruction of the self which is defined by those desires. This is a tragedy which is every day made easier for us; for we live in a society in which is celebrated not doing, but having done. Speed reading advertisements teach us to prize not the reading of a book, but the having read it; we value not studying but learning, not working but earning, ultimately not living but having lived. Thus all our actions come to be directed towards ends outside themselves; our life becomes one long motion, which can never be fulfilled.

Where ends become means, there is danger, as in the other case, that what are really means will be taken for ends, and prevented from achieving the fulfillment towards which they are aimed. So intentional processes become alienated from the goals which alone make sense of them; bureaucracy replaces service, image becomes imaged, the medium, which was never meant to be the message (though never meant to be distinct from it) becomes a new message of its own.

With Aristotle, we must learn to ask what in our lives can and cannot be ἐνέργεια. How do we turn our actions in upon themselves so that they become their own ends, but in such a way that ends do not disappear, nor that we turn wholly into ourselves? We are to become at once like Plato's sun, shining for itself with its light, but illuminating and nourishing in the process, and like Parmenides' moon, "wandering around the earth, shining forth in the night with a borrowed light."⁴⁵ Nor is this task distinct from that of living the good life, the life *worthy* of being its own end.

The qualifications which Aristotle would have placed on the principle of universal perfectability I earlier introduced should by now have emerged. In one sense, anything can indeed be the subject of perfection; but just as motion is doomed to annihilation, so some perfections are inherently aimed at further perfections outside themselves, and without these further perfections – genuine ends – would

⁴⁵ Parmenides, Fragment XIV.

never be capable of achievement at all.⁴⁶ This fact is an analogue of logical and metaphysical doctrines of Aristotle. Although in a sense anything can be a subject of predication, only substances are proper subjects, and without them, there could be no predication; the being of qualities, quantities, relations, etc., though incapable of being denied, must be recognized as dependent upon the being of substances.

But the nature of the good life, the life of *ἐνέργεια*, is, as Aristotle reveals in the *Nichomachean Ethics*,⁴⁷ dependent upon our nature as men. This reveals that there is a plurality of such ends worthy in themselves, and that the question of what these ends are (like the question of what logical subjects are) is ultimately associated with questions of what species and substances are. This fact echoes the claim I made about Aristotle's vision of *imitatio dei*; here once more the answers to logical, metaphysical and ethical questions have their common origin in his view of individual substances acting out their identity in the world.

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⁴⁶ *Nichomachean Ethics* I, 1, 2, 1094a1 ff.

⁴⁷ *Nichomachean Ethics* I, 7, 1097b23 ff.