Genus and Differentia:
Reconciling Unity in Definition

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April 26, 2004
INTRODUCTION

In I.8 of the *Metaphysics*, Aristotle makes the perplexing claim that animals are identical insofar as they are animals, but different with regard to their animality. In other words, what it is to be an animal is the same for men and horses, but what it is for men and horses to be animals is different. As with all philosophical questions, a totally obvious and unsatisfying answer presents itself at the outset. Aristotle gives both the claim and such an answer below.

Not only must the common nature attach to the very different things, e.g., not only must both be animals, but this very animality must also be different for each (e.g., in the one case equinity, in the other humanity), and so this common nature is specifically different for each from what it is for the other. One, then, will be in virtue of its own nature one sort of animal, and the other another, e.g., one a horse and the other a man.¹

So, we see quite clearly that men and horses are animals, but that men are humans and horses are equines.² To give a more thorough analysis of *Metaphysics* 1058a, I propose two theories that offer a more fleshed out version of a very similar reading. But before we can begin to understand how these theories approach this passage, we need to find a way to read it; for the quote cited above obscures a number of features that are central to our problem.

When Aristotle says that men and horses are animals, he is not making the biological claim that they are both a variety of life that evolved along similar evolutionary lines. If this were his point, it would be obvious (and satisfying) to find that our evolution terminated in humanity and horses in equinity. But this is not the point. Aristotle is making the metaphysical claim that being an animal is, in a sense, what it is for man to be man. Similarly, being an animal is what it is for horses to be horses. In this way, horses and men are identical; for both are animals. The twist that makes this interesting is that that by virtue of which men and horses are animals—their animality—is somehow different. It is a problem for metaphysics to decide whether or not this is true, but my concern is not metaphysical. My aim in this essay is only to expose the logical
implications involved with the claim that men and horses are identical insofar as they are animals and different in that by virtue of which they are animals.

The nature of our inquiry is made complicated less by the concepts involved than by the vocabulary it employs. Therefore, I suggest we refine the claim at 1058a using the terminology appropriate to our investigation. When Aristotle says that men and horses are animals, he means that both men and horses are thinkable at the same time under a common term, viz. ‘animal’. In other words, the name ‘animal’ picks something out that men and horses share in common and it signifies them both universally. ‘Animal’, then, is the genus—i.e. the universal—of men and horses. But, since men are essentially different from horses, ‘animal’ can only signify both things if it disregards the differences between them. These differences are their differentiae. In the passage at 1058a, ‘humanity’ and ‘equinity’ are examples of differentiae, but these conceal more than they illuminate; for a thing’s differentia signifies its essence and it does not help to say that the essence of humans is humanity. For the sake of clarity and to help move my arguments along, I use the following differentiae instead: ‘bipedality’, ‘quadrupedality’, ‘rationality’, and ‘irrationality’. Finally, the combination of one genus and one differentia is the definition of a thing, which signifies a species. Thus, in the definition ‘rational animal’, ‘rational’ is the differentia and ‘animal’ is the genus, and the two combined is the species ‘man’. Therefore, the species is also a kind of universal; for it signifies both Socrates and Plato, though they are different from one another. However, the species is unlike the genus because it does not disregard differentiae to pertain to Socrates and Plato. Though Socrates may be paler, shorter, and heavier than Plato, their differentia is the same. They are both rational.

With these remarks, we are sufficiently prepared to see the logical problem with which I am concerned. If what it is to be an animal is the same for horses and men then the genus
‘animal’ is the same for both. But since animals are rational, irrational, quadruped and biped, the genus ‘animal’, as a universal, comprehends these differentiae. Therefore, ‘animal’ is, in a sense, its differentiae; for things that possess these properties are animals. Therefore, if the definition of the species ‘man’ is ‘rational animal’, where ‘animal’ is the genus belonging also to horses, the definition of ‘man’ is actually ‘irrationally rational, two-footed quadruped’, which is absurd. Our task, then, is to explain the genus in such a way that we are not forced to admit this impossible outcome, but we must not violate the universality of the genus; for the genus is above all a universal. Finding a solution to this problem will prime us for the second leg of our discussion. For Aristotle, things are unities—i.e. they do not exist as a composite of elements stuck together with metaphysical glue. Since the definition must reflect the species as it essentially is, the definition itself must be a unity. Therefore, any account that solves the problem of multiple differentiae must also address the problem of unity in the definition.

In this essay, I offer two theories that solve these problems. The first section discusses a univocal theory, which, it should be noted, is consistent with the description of the genus from above. This means that the univocal theory is the very source of the problem of unity and what we must overcome. In the first section, then, I develop our problem further by demonstrating how unsuccessfully a univocal theory accords with Michael Slattery's claim that the genus is resolvable into the differentia. The second section then deals with this notion of resolvability exclusively. There, I develop an analogical theory that helps Slattery's notion of resolvability overcome the univocal theory to unify the definition. Ultimately, however, I return in the third section to the univocal theory and advance an approach that does not ask how the genus is resolved into the differentia, but actualized by the differentia. In this way, I will resolve the
problem of unity by demonstrating that the definition is not two terms, ‘rational’ and ‘animal’, but one term, viz. the species.

THE GENUS ON A UNIVOCAL THEORY

Slattery approaches the problem of unity by attempting to demonstrate that the genus can be resolved into the differentia. In other words, that the genus is identical to the differentia. This is where Slattery saw that a univocal theory of the genus would interfere with his understanding. If the genus is identical to the differentia then the differentia must articulate everything the genus implies indeterminately. But the genus on a univocal theory contains differentiae that are contrary to one another. It is by virtue of these contrary differentiae that both mammals and reptiles are called animals even though the genus ‘animal’ determines nothing about being warm or cold blooded. The differentiae ‘warm-blooded’ and ‘cold-blooded’ are indeterminately contained within the genus ‘animal’ because there are animals that are both warm and cold-blooded. Had Slattery held that the genus is identical to the differentia, he would have slipped into the absurdity that one differentia is identical to its contrary. Think again of the differentia ‘warm-blooded’, which is predicated of all mammals. If the genus were identical to the differentia, ‘warm-blooded’ would be identical to its genus, viz. ‘animal’. But, since there are cold-blooded animals, this would mean that the differentia ‘cold-blooded’ is identical to the differentia ‘warm-blooded’. Likewise, ‘giving live birth’ and ‘laying eggs’ would be identical to ‘warm-blooded’; for animals do both. Thus, the genus cannot be identical to the differentia on a univocal theory because the range of the genus greatly exceeds the intension of the differentia.

Having anticipated that a univocal theory would be incompatible with the notion of resolvability, Slattery must argue that the genus is somehow non-univocally predicated of its
various species. We should not assume from this that the only remaining possibility is a theory that describes the genus as *equivocally* predicated of its various species, but exploiting such a notion as a heuristic device might illuminate features that will help us understand what the genus is and how it could be resolved into the differentia.

Let us begin with some preliminary remarks on univocity and equivocity. Something is said univocally of diverse species when the species share both the same name and definition. For example, the genus ‘animal’ is univocally predicated of the species ‘man’ and ‘horse’ because both men and horses are called animals and what it is to be an animal—the form that determines something as an animal—means the same in the two cases. In other words, both the name and definition of what it is to be an animal can be said equally of men and horses. On the other hand, something is said equivocally of diverse species when each of the species has the same name, but the meaning of that name is different for each. For example, the bank of a river is not the same as a savings bank, and the fact that both receive deposits of either sediment or money does not bring them any closer in definition. Thus, ‘bank’ is equivocally predicated of riverbanks and savings banks because what it is to be either does not coincide.

An equivocal theory would understand the genus to comprehend each of its species uniquely. This configuration states that the only differentiae the genus has are the ones expressed by one single species. Thus, the genus ‘animal’ is one thing for men and another for horses, and whichever differentiae pertain to men are comprehended by the sense of the genus belonging to men alone. It should be clear why this is an appealing alternative to a univocal theory. Since what it is to be a man is to be rational, ‘irrational’ is non-predicable of ‘man’. Therefore, not only does the genus contain the differentiae of one species alone, but these differentiae are not contrary to one another. For this reason, the genus is resolved into its differentiae *ipso facto*. For
example, if the genus ‘animal’ contained the differentiae of horses only, ‘animal’ would be the entire and logically unambiguous definition of the species ‘horse’—i.e. the species could be defined by its genus-name. We would only mention a differentia (e.g. equine) for the sake of clarity the same way we might say ‘riverbank’ to distinguish it from savings banks. Likewise, we could define the species ‘horse’ as ‘equine’ and omit the genus ‘animal’ from its definition entirely; for, on this view, what it is to be an animal is to be a horse. However, this theory fails to describe one of the most characteristic features of the genus, viz. universality.

The sense of ‘bank’ that is equivocally predicated of riverbanks and savings banks does not serve as a universal. Since what it is to be a bank is different for geographical formations and institutions, the word ‘bank’ cannot serve as the genus of both; for the universal must comprehend a property shared by the species it signifies. Since the premise of an equivocal theory is that the genus contains the differentiae of only one species, the genus will signify only one species. Therefore, it would be by a mere ambiguity of language that we think of all animals when we consider the genus ‘animal’; for there is no unity of species in the genus on an equivocal theory except by some accidental likeness, as when we say that riverbanks and savings banks are the same because both receive deposits.

Since the very premise of an equivocal theory opposes universality, it cannot give an adequate description of the genus. Nonetheless, we should press this theory further because it seems to respond well to Aristotle’s claim that the animality of one species is different from the animality of another. Since the genus signifies the kind that a thing is—as the genus ‘animal’ signifies the kind of being for men—the equivocal theory argues that if two animals are different kinds of animals, that they are literally of different kinds, i.e. their genera are different. Again, 1058a:
For not only must the common nature attach to the very different things, e.g., not only must both be animals, but this very animality must also be different for each (e.g., in the one case equinity, in the other humanity), and so this common nature is specifically different for each from what it is for the other. One, then, will be in virtue of its own nature one sort of animal, and the other another, e.g., one a horse and the other a man.\(^5\)

An equivocal theory would understand this to mean that both horses and men are, in fact, animals, but that this is only their common name. Since the animality of horses is different from the animality of men, the claim is that their animality is different at the generic level. Thus, the genus belonging to animals being men is homonymous to the genus of animals being horses; for the definition of ‘animal’ is different for both. Such generic equivocity seems confirmed when Aristotle says, “This difference, then, must be an otherness of the genus. For I give the name of ‘difference in the genus’ to an otherness which makes the genus itself other” (my emphasis).\(^6\)

While an equivocal theory demands generic otherness and the previous passage confirms that such otherness exists, as it stands this theory does not account for the following principle: There are things belonging to different species of which an identical genus is predicated. Aristotle says, “By genus I mean that one identical thing which is predicated of [things other in species] and is differentiated in no merely accidental way” (1057b36) (my emphasis).\(^7\) Of course, it cannot be the case that one and the same genus is predicated of different species if those species are generically equivocal.

Thus we are faced with the following problem: There is a sense in which the genus is other such that it is different for different species. The equivocal theory anticipates this fact and accounts for it by declaring that each species has its own genus, which is equivocally predicated of various other species. However, by accounting for the otherness of the genus in this way, the equivocal theory fails to meet the criterion that the genus, properly understood, is something predicated of diverse species. An equivocal theory would falsely understand this to mean that ‘institution’ is predicated of ‘riverbank’ and ‘savings bank’ since ‘institution’ is the genus of
some things called ‘bank’. Our aim, then, is to explain how an identical genus can be predicated of diverse species (1057b) and yet be uniquely related to each, such that the animality of ‘man’ might be different from the animality of ‘horse’ (1058a). In order to get clear on this, we will need to examine differentiation. But we must first know what the genus essentially is before we can understand how it is differentiated. We should already have a sense of where this inquiry will lead. Since the genus of which men and horses are members is predicated of both, we know that the genus must comprehend contrary differentiae. For, if ‘animal’ is non-equivocally predicated of ‘man’ and ‘horse’, it must comprehend some property or differentia that belongs to both men and horses. But in order to signify this and nothing else, the genus must disregard what makes men essentially different from horses, i.e. the differentiae that differentiate men from horses—e.g. ‘quadrupedality’, ‘bipedality’, ‘rationality’, and ‘irrationality’. In other words, the genus must contain these contraries indeterminately. But to remove any doubt that the genus subsumes contrariety, we should spend a moment considering what contrariety is and how it relates to the genus.

Aristotle describes contrariety as that which is between a positive state and privation⁸—i.e. a differentia insofar as it is the contrary of another differentia is neither expressed nor unexpressed. We will hear more about this in the section on the unity of definition, but first let us concentrate on privation. There are two senses in which a thing can suffer privation: (a) Something is in a privative state if it is capable of possessing some attribute, but simply does not have it (paper is uncolored), or (b) something does not have some attribute because the attribute contradicts its nature (seven is non-blue). In the former case, we call the privation contrariety because contraries have within them intermediaries between which a thing can shift. For example, a surface can be any color by changing between the contraries white and black. For this
reason, (b) is not contrariety, but contradiction; for a subject that is incapable of possessing a
contrary is likewise incapable of changing between contraries. Something that is non-colored
cannot move between states of being non-colored. On account of this, contradictions need not
belong to the same genus; for numbers are non-colored in the same way 7 o’clock is non-
colored. However, unlike contradiction, contrariety must exist within the same genus because
things that are one color do not become another by becoming numerical or temporal, but by
shifting between colors within the genus ‘color’. Thus, if rationality and irrationality are truly
contrary to one another, they must belong to the same genus; for *animals* are both rational and
irrational, not plants. Furthermore, things that are different from one another must belong to the
same genus; for they must have something in common whereby they differ. For example,
whereas the genus ‘animal’ is different from ‘plant’ because they are different kinds of the genus
‘body’, and this is what they have in common, seven is different from blue in *no* way because
their genera do not unite them. We see, then, that the genus must contain contrariety; for if it did
not there would be neither difference nor comparison between anything, but everything would
simply be other.

We should next see what the essence of the genus is. The function of the genus is to
universally signify diverse species. When we think of the genus ‘animal’, the univocal theory
argues that the idea involves neither notions of how the animal walks nor whether it thinks. The
genus comprehends animals absolutely, and it does so by disregarding the differences between
them. In other words, the genus subsumes contrariety. Since this is the unique capacity of the
genus, that by virtue of which it comprehends diverse species should be its essence, and this, I
suggest, is the differentia.
Consider how the genus comes to be. When we look at two different things—e.g. a horse and a man—we see what they have in common that distinguishes them from all other beings. For Aristotle, one of their common differentiae is ‘self-moving’—i.e. they have their principle of motion within themselves. This differentia differentiates the genus ‘substance’ into the genus ‘animal’, which is distinct from the genus ‘plant’ because no plant moves itself. Having realized a reason issuing from the essences of both horses and men to categorize them as animals, we see that horses and men are essentially identical in the genus. But in order to see the basis for this identity, consider how we categorize things.

If we were set the task of deciding whether some unknown thing is a man or a horse, we would first have to evaluate whether it could be either at all. Noting that the thing possesses both size and dimension (unlike colors and sounds), we admit it as a possibility. Here, we have determined ‘having size and dimension’ as the basis to both exclude colors and sounds and include every embodied thing. Next, we observe that the thing moves itself around, as all animals do, and we use this as our second basis for exclusion—i.e. we include all animals as possibilities and exclude all non-animals. Since ‘having self-movement’ is a basis for both exclusion and inclusion, we do not yet have a way to determine the third unknown thing as either a man or a horse. Therefore, we require one final differentia to determine what the unknown thing is: Men are bipeds. We see, then, that differentiae serve as a basis for both comparison (the revealing of likenesses) and contrast (differentiation). This explains not only how ‘substance’ differentiates into ‘animal’ and ‘plant’, but also how things are identical in the genus. Distinguishing some substances (things) by their self-movement picks out a difference between this kind of thing and all others. This establishes the genus ‘animal’. At the same time, this distinction gathers all self-moved things under the heading ‘animal’ and identifies them. Hence, the genus is established by
the differentia, which excludes, and the _identity_ of men and horses in the genus ‘animal’ is based on the exclusion of all non-animals, i.e. _identity is based on difference_. For this reason, the genus _consists_ of differentiae because the differentia differentiates the genus into a lower genus. ‘Substance’ is differentiated into ‘plant’ and ‘animal’ based on the differentia ‘self-moving’ because ‘self-moving’ is present neither positively nor privatively (i.e. as a contrary) in the genus ‘substance’.

But it is not enough that the genus consist of differentiae merely. Its differentiae must be contrary to one another; for the genus is a universal. The genus is a universal only if it comprehends the two extremes of some pair of differentiae and thereby all those in between. For instance, the genus ‘color’ would not be a universal if it comprehended only grey and white because grey is not completely opposed to white. Only the constituent of grey is, viz. black. Thus, black might exist outside of any categorical framework. However, comprehending the contraries ‘black’ and ‘white’, the genus ‘color’ comprehends not only these, but all contraries in between.

In summary, the genus is a universal. The criterion for universality is that the genus comprehend _all things_ that possess the differentia that divides the genus above it. In other words, that ‘animal’ comprehend all beings whose differentia ‘self-moving’ divide the genus ‘substance’ into ‘plant’ and ‘animal’. Finally, the condition for meeting that criterion is that the genus comprehend the two most extremely opposed differentiae of its species. Thus, the genus is established by the differentia and it consists of contrariety.

Although we have not yet found a solution for Slattery that explains how the genus is resolved into the differentia, we have a better sense for what such a theory should and should not say. Because the genus is a universal, it must signify a property shared in common by its species.
In other words, the genus must articulate something that belongs to a number of essentially diverse things. This, we have come to understand, is the principle of universality in the genus, which an equivocal theory cannot accommodate. Since the genus only comprehends the differentiae of one species on the equivocal theory, species whose definitions share the same genus-name (e.g. ‘rational animal’ and ‘equine animal’) are no more alike than riverbanks and savings banks. In other words, an identical genus is not predicated of diverse species as 1057b states. A univocal theory, on the other hand, accords perfectly with 1057b because it understands the genus as that which is predicated univocally of diverse species. Though we are satisfied with the univocal theory for its cogency, it does not seem to answer the question of difference in the genus as articulated by 1058a. In accordance with 1057b, it makes precisely the opposite claim: The genus is identical for things other in species. We know that the definition must be unified in some way; for the things they define are unities. However, as I mentioned in the introduction, the definition of ‘man’ on a univocal theory would look something like this: ‘irrationally rational, two-footed quadruped’, i.e. ‘rational animal’. It seems, then, that the genus cannot serve as a term in the definition because it contains contrariety. Therefore, we need a new theory that can somehow overcome contrariety without slipping into equivocity. For this, we turn analogy.

THE GENUS ON AN ANALOGICAL THEORY

Again, Slattery must prove that the genus is somehow identical to the differentia if he wishes to demonstrate that the former can be resolved into the latter. Our own account of the genus as univocal has proven itself to be wholly incompatible with his aim; for the genus on a univocal theory is contrariety, which is precisely opposite any differentia. Likewise, the genus on an equivocal theory makes no sense as a universal and only serves to accentuate the plausibility
of the univocal theory. Our solution for Slattery, then, is to deny both theories and argue instead for a compromise between univocity and equivocity, viz. analogy.

Analogical predication is distinct from univocal and equivocal predication in that it signals neither an identity nor a definitional difference between things. There are two primary senses of analogy: Indirect analogy and focal meaning, the latter of which has two secondary senses: analogy of proportion and analogy of proportionality. We can disregard indirect analogy and analogy of proportion immediately; for the former treats of causality and the latter of direct proportions. Causality is irrelevant to this inquiry because Slattery does not argue the Platonic point that the genus bestows being upon its species. Neither does he argue the absurd notion that one species might be the cause of other species—for example, that the species ‘man’ might be the cause of ‘horse’. Likewise, direct proportions are irrelevant because they do not involve a third term; i.e. they reject the genus altogether. For instance, ten is analogous and directly proportional to five because ten is the double of five. Focal meaning and analogy of proportionality, then, must be considered more thoroughly; for it is unclear which theory, if either, will demonstrate that the genus is resolvable into the differentia.

According to focal meaning, something is predicated of two other things if the predicated term is explained with reference to some primary term. For instance, consider how ‘healthy’ is predicated of urine, food, attitude, and animal. Urine is healthy because it is a sign of health in an animal. Food is healthy because it produces health in an animal. And an attitude is healthy because it is an expression of health in an animal. While the predicates are clearly different from one another, they are all explained with reference to the healthy animal, whose health is explained with reference to itself. To get a clearer idea of how distinct the terms of focal meaning are from one another, consider a second example. ‘Being’ is predicated of the genera
‘quantity’ and ‘quality’ because being blue is a mode of being different from the mode of being seven. However, neither quantities nor qualities are being in the primary sense, for both are modes of being belonging to things. In other words, nothing is blue if not some thing just as nothing is healthy if not an animal. Therefore, we define the distinct modes of being that belong to quantities and qualities with reference to the same outside genus, viz. ‘substance’—the genus of things that admit quantities and qualities. For this reason, being seven is analogous to being blue because both are meant with respect to things that have these attributes. We see that the analogical predication of being is different from univocal predication because a man cannot have the quantity of being pale or the quality of being one, but the genus ‘animal’ on a univocal theory can be either a horse or a man. We see also that analogical predication is distinct from equivocal predication because quantities and qualities cannot exist in the world without existing in something. For this reason, a complete definition of either mode cannot be given without including a common genus, viz. ‘substance’. Therefore, the definitions of quantities and qualities are neither identical nor entirely different, but analogical with reference to the genus ‘substance’, which gives them their focal meaning.

It is not difficult to see why focal meaning fails as a satisfactory account of how things are defined. This type of predication explains the analogy between things with reference to some outside thing that makes the others possible. To claim that ‘animal’ is so predicated of its species is to say that all animals are defined with reference to some primary animal. It is not our concern to investigate whether or not this is true, but only to see if it could help Slattery's case. Of course, we can already see how it does not; for something that has its being only by analogy to some other thing must include that other thing in its definition. In other words, just as quantities and qualities are not self-subsistent and must be defined with reference to the things in which they exist, so must the genus ‘animal’. Therefore, the definitions of quantities and qualities are neither identical nor entirely different, but analogical with reference to the genus ‘substance’, which gives them their focal meaning.
subsist, so is the healthiness of urine not self-subsistent and must be defined with reference to the thing in which it subsists, viz. the healthy animal. Likewise, if species of animals were analogous by focal meaning, they would only be definable with reference to one another, or to some primary animal. Consequently, ‘rational’ would be a term in the definitions of ‘horse’ and ‘ox’. This makes the problem of unity unsolvable because focal meaning definitions have several essences. Unify these differentiae would be like merging the essence of blue with the essence of surface, which does not follow because what it is to be a surface is not to be blue. Similarly, what it is to be healthy urine is not what it is to be a healthy animal. Since what it is to be a horse is not what it is to be a man, the focal meaning definition results in a plurality of forms. Thus, the genus seems to have been replaced with an even more stubborn predicable, a second differentia, which has no way of being resolved into any other term.

Whereas analogy by focal meaning seems only to have worsened the problem of unity in the definition, analogy of proportionality should provide an alluring solution. Two things are analogous by proportionality if the same term is predicated of both, but their relation to that term is proportional to their being. This type of predication was first conceived by the scholastics to demonstrate the logical basis for human knowledge of God. Since we are believed to know God not directly but by reference to creation, there should be a way to predicate the same attributes of both God and man. However, since God possesses every attribute perfectly, nothing can be predicated of God and man univocally. But neither are attributes predicated equivocally because knowledge of savings banks does not teach anything about riverbanks whereas knowledge of man’s rationality should teach something about God’s. To resolve this problem, analogy of proportionality acknowledges that what it is for God to be rational is not what it is for man to be rational, but it does not locate this difference in the meaning of rationality itself. Rather, the
rationality of man is different from God’s because what it is to be man is different from what it is
to be God. In other words, ‘rational’ is predicated of God and man with respect to their being.
Since God is infinite and man is finite, ‘rational’ is predicated with respect to their incongruent
existences as rational beings.

Our use of proportionality is not entirely suited to its original purpose; for to predicate
‘rational’ of God and man is not the same as predicing ‘animal’ of men and horses. A
differentia is predicated in the former case and a genus in the latter. Since the scholastics were
interested in questions concerning the attributes of God and denied that God had a genus, we
must employ an expanded usage of analogical predication if we hope to apply it to Slattery’s
argument. Thus, the example ‘8:6::4:3’ gives a second sense of proportionality better suited to
uniting the genus with the differentia. For, while both eight and six are doubles, what it is for
eight to be a double is different from what it is for six to be a double—eight is the double of four
and six is the double of three. Therefore, the genus ‘double’ is predicated of eight and six by
analogy of proportionality because their doubleness is proportional to their being, i.e. to their
quantity. Similarly, the argument goes, when we call man an animal we do not mean the same
thing as when we call ox an animal; for what it is for them to be animals is different. Thus,
‘animal’ is predicated analogically of its species because they are called ‘animal’ with respect to
what it is for them to be animals, i.e. with respect to their differentiae. Whereas the species ‘man’
is called ‘animal’ with respect to bipedality, for example, horses are called ‘animal’ with respect
to quadrupedality.

Notice how well the analogical theory harmonizes with Aristotle’s assertion that
members of the same genus have a common nature, but that the form—the differentia—of their
nature is different for each species. I quote 1058a again, this time replacing the genus ‘animal’ with ‘double’ to apply the argument to numbers.

For not only must the common nature attach to the very different things, e.g., not only must both be [doubles], but this very [doubleness] must also be different for each (e.g., in the one case [double-of-fourness], in the other [double-of-threeeness]), and so this common nature is specifically different for each from what it is for the other. One, then, will be in virtue of its own nature one sort of [double], and the other another, e.g., one [the double of four] and the other [the double of three].

This passage seems to be Aristotle’s clearest recognition of an analogical theory of the genus, and, standing alone, it leaves very little room for interpretation. Consider what this says, returning now to Aristotle’s original language involving animals. The animality in ‘man’ is different from the animality in ‘horse’. In the species ‘man’, the animality is humanity, in ‘horse’, equinity. In other words, the form of animality is different for men and horses; for the form is not animality as such, but animality of such a sort in men (humanity) and of a different sort in horses (equinity). Thus, Slattery solves the problem of unity quite nicely. Even if the genus consists of contrariety—more on this later—since what it is to be an animal is different for men and horses, the genus does not apply to them in the same way. Therefore, when we identify the differentia ‘rational’ with its genus, the absurdity that ‘irrational’ too would be identical does not follow, as was the case on the univocal theory. Rather, since the genus is analogical, ‘animal’ is predicated with respect to the rationality of rational things and so the differentiae in the genus ‘animal’ predicated of irrational things do not pertain to those that are rational any more than the genus ‘double’ predicated of eight pertains to the ‘double’ that is predicated of six. Thus, the animality of the genus ‘animal’ belonging to the species ‘man’ is humanity, and the humanity of man is just as much animal as his animality is rational. In other words, the analogical theory regards ‘man’ as entirely animal and entirely rational. The genus and differentia are thereby
distinct in no way because the only sense in which man is an animal is in the sense that he is rational.

An analogical theory solves the problem of unity by resolving the genus into the differentia. It seems to succeed in this by suggesting that the genus is predicated of diverse species not in respect to a common differentia, as on the univocal theory, but only with respect to what it is for species \( x \) to belong to the genus. Since what it is for man to be an animal is to be rational, ‘animal’ is predicated of man with respect to the differentia ‘rational’. For this reason, the genus does not contain contrariety on an analogical theory because no single species consists of contraries; for how could ‘quadruped’ be predicated of bipeds or ‘irrational’ of men? Therefore, differentiae exhaust the genus *ipso facto* because the genus consists of differentiae and ‘animal’ is predicated of man with respect to the differentia belonging to men.

While the univocal theory must acknowledge the difference in animality between species—that men are animals in a way that no other animal can be without themselves being men—the analogical theory makes an altogether different claim. Not only is what it is for man to be an animal different from what it is for horses to be animals, but what it is for animals to be men is different from what it is for animals to be horses. We have already heard an argument that supports this suggestion in our discussion of the analogical predication of ‘double’, but that argument only gave the intuitive grounds to admit the theory as a possibility. We have yet to examine the method of analogical predication. Since the mark of an analogical theory is proportionality, we shall begin first by examining how predication by proportionality works. But before we can appreciate the peculiarities of proportionality, we need to remind ourselves of several arguments derived from the univocal theory.\(^{14}\) From there, we will be better situated to
see the inadequacies of predication by proportionality and how the analogical theory makes up for these inadequacies.

We said that the genus is established by identifying a differentia that makes one kind (genus) of being different from all others. Using the example ‘substance’, we showed how the genus ‘animal’ comes to be by determining ‘substance’ according to the differentia ‘self-moving’. This revealed the importance of similarity in the genus; for if the genus is to maintain its universality and avoid further division into ever more specific genera, it must disregard all differentiae within it. Consider the example ‘body’. In order to be a universal, the univocal theory requires that the genus consider only the differentia that establishes it as a genus, viz. ‘being extended’. If ‘body’ acknowledged extended things as being self-moving, it would be divided into the genus ‘animal’. As it is, though, ‘body’ comprehends self-moving things indeterminately because it comprehends stationary things at the same time. Notice that the genus ‘animal’ has a general criterion for what it is to be an animal: Animals are self-moving. According to the univocal theory, the genus is a universal because ‘self-moving’ is univocally predicated of all animals—\textit{that} they move themselves makes them animals. \textit{How} they move themselves makes them feathered or featherless, biped or quadruped.\textsuperscript{15}

Predication by proportionality rejects the univocal model and, in fact, reverses it. Watch how this happens. If being self-moving is what it is for man to be a body then the genus ‘body’ comprehends man only insofar as he is self-moving, i.e. as an animal. If being rational is what it is for man to be an animal then the genus ‘animal’ comprehends man only insofar as he is rational. Therefore, the genus ‘body’ does not comprehend man according to some property belonging to all bodies; for what it is for man to be a body is not to be extended as all bodies are, but to be self-moving. Since all self-moving things are extended, the genus ‘body’ comprehends
man according to what it is to be an animal. Thus, ‘body’ is not established as the genus of man because ‘being extended’ is predicated univocally of all embodied things, but because ‘self-moved’ is predicated of man and all self-moved things are embodied. Hence, there is no contrariety in the genus on an analogical theory; for, insofar as the genus is predicated of species \( x \), it is established by and contains the differentia of that species only.

Herein lies the true nature of the genus on the analogical theory, but only as far as proportionality can describe it: The genus is not established by a differentia univocally predicated of diverse species as on the univocal theory. For from that follows the idea that the genus arises by the differentiation of the genus above it, as ‘animal’ is established by differentiating ‘substance’ into things that are and are not self-moved. Rather, predication by proportionality says that the genus is established by the differentiae of the various genera beneath it. Again, since ‘body’ is predicated with respect to what it is for embodied things to be corporeal, the genus ‘body’ is not established in proportionality by predicing ‘being extended’ of all embodied things; for this would be predicated univocally insofar as all extended things occupy space, i.e. displace other objects. To predicate ‘body’ analogically of diverse species is to predicate ‘being extended’ of the differentia that determines the type of extension belonging to species \( x \). Man is extended, as it were, “self-movingly”. Rocks are extended “not self-movingly”. Thus, what it is for man to be extended is to be self-moved and ‘body’ is predicated of man with respect to this differentia. Since rocks are embodied differently from men, the genus ‘body’ must be predicated of inanimate things with respect to a different differentia. Hence, there is no contrariety in the genus as far as proportionality is concerned because predication by proportionality is always with respect to a single differentia rather than to a pair of contraries.
But our account is deficient in no small way; for proportionality offers no explanation of universality. In fact, it seems to have left us with the unfortunate problems of the equivocal theory, which, above all has taught that universality is impossible without identity. The genus must signify something that things other in species share in common and this has to be more than a name just as the rationality of God and man is more than a name. But if ‘animal’ were predicated of ‘man’ insofar as men are rational and of ‘horse’ insofar as horses are equine, there would be no property unifying men and horses by which ‘animal’ would be anything but a name belonging to both species. We now have to ask how an analogical theory might go beyond mere predication by proportionality to bring universality back to the genus. Since numbers are easier to dissect than animals, let us return to the genus ‘double’.

The genus predicated analogically of eight and six must embrace something that eight and six share in common whereby both are doubles. Since the formula of eight as a double is ‘4 x 2’ and the formula of six as a double is ‘3 x 2’, the common feature of all doubles is ‘P x 2’ where ‘P’ is the numerical differentia of ‘double’. As the differentia of ‘double’, ‘P’ determines the proportionality of the genus; for this number determines the quantity of the double by which we said that the genus is predicated proportionally of eight and six. Because ‘P’ can be any natural number, ‘double’ cannot universally signify all doubles according to this differentia. But irrespective of ‘P’, all doubles are identical insofar as they are the value of ‘P’ multiplied by two. ‘Being a multiple of two’, then, is the common differentia that establishes the universality of ‘double’ on the analogical theory and what it is for some value ‘P’ to be multiplied by two determines proportionality.

Returning now to the genus ‘animal’, we should be prepared to see what gives the genus its universality on an analogical theory. In the case of ‘double’, universality is derived from that
particular feature of being a double that all doubles share, viz. being a multiple of two. The same is true of the genera ‘substance’, ‘body’, and ‘animal’; for the very fact that the genus is predicated of diverse species admits that something exists in common between species \( x \) and \( y \).

For, though what it is to be extended is different for animals and minerals, what it is to be extended unqualifiedly is uniformly the same, viz. to occupy space. An analogical theory would diverge from the univocal only by claiming that the common differentia is predicated with respect to its nature in the species. In animals, extension moves. In rocks, it lies still. Therefore, the predicate ‘body’ signifies not only that animals and minerals are extended, but in what way. This latter feature, called proportionality, is the foundation of analogy in the analogical theory. Because men and rocks are extended in dissimilar ways, Socrates’ body is analogous to the Lyceum’s insofar as both are bodies. And while both Socrates and the Lyceum are identical insofar as being a body is to be extended, this unqualified sense of extension is wrongly predicated of them on an analogical theory because Socrates is not extension \textit{as such}, but extension of a specific sort different from that of rocks.

But there is a problem here. If the common differentia that unifies these analogous species is predicated analogically of them, of what is the differentia predicated univocally? We should be particularly troubled by this because if the genus is predicated univocally of nothing at all, whence does it derive the differentia with respect to which its species are analogous? We know that the genus cannot be univocally predicated of any pair of species because it is impossible for one species to express every kind of extension. But since every kind must be expressed in order to predicate extension \textit{as such}, the genus on an analogical theory is non-univocally predicated of any species. However, one could respond that ‘body’ \textit{is} univocally predicated of the genera ‘mineral’ and ‘animal’ because ‘self-moving’ and ‘not self-moving’ are
contrary differentiae. Since every mode of being extended is comprehended either by or between these contraries, extension as such is univocally predicated of these genera. Though the cogency of this argument is questionable, it is not my aim to topple the analogical theory on logical grounds if it is more expedient to test its accord with 1057b. Again, “By genus I mean that one identical thing which is predicated of [things other in species] and is differentiated in no merely accidental way” (my emphasis). An analogical theory can only explain Aristotle's claim that an identical genus is predicated of unlike species if those species are at either extreme of having movement. ‘Body’ is non-univocally predicated of ‘man’ and ‘horse’ on an analogical theory because men and horses are embodied by only one sense of extension, viz. the kind that is self-moving. ‘Body’ is also non-univocally predicated of ‘man’ and ‘water’ because, while water is not self-moving and men are, the movement of water is not contrary to ‘self-moving’ because water is moved by an external agent, the wind. Therefore, an identical genus $x$ is predicated of two things other in species on the analogical theory only if those species represent the extremes of what it is to belong to genus $x$. We have no choice but to dismiss this theory; for its very foundation (proportionality) demands that an analogous rather than identical genus be predicated of diverse species.

Both the univocal and analogical theories have failed to explain how a genus-differentia definition is not two terms, but one term signifying a being that is itself one. The univocal theory described the genus as an umbrella of differentiae whose meanings are either contrary or unrelated to the differentia that determines the genus. ‘Rational animal’ is the definition of man, but ‘animal’ is not only rational, but irrational, biped, quadruped, and any number of other contrary differentiae. This is what we take Aristotle to mean when he says, “The genus is not thought to share in its differentiae for then the same thing would share in contraries; for the
differentiae by which the genus is divided are contrary.” Realizing a univocal theory’s inherent inability to be unified with the differentia, the analogical theory proposed to unify the definition by demonstrating the resolvability of the genus into the differentia. To accomplish this, the analogical theory had to show that the genus is somehow non-univocally predicated of its species. Avoiding the absurdities associated with our provisional equivocal theory, we suggested an intermediate method of predication called proportionality. Our investigation into this method showed that the genus is predicated with respect to the differentiae of species $x$ and $y$. By virtue of this, the genus is logically indistinguishable from differentiae. Predication by proportionality thereby escapes the pitfalls of univocity, viz. contrariety, and can be resolved into the differentia, in accordance with Slattery’s argument. Man is defined ‘rational animal’, but the term humanity denotes an animality that is rational and a rationality that is animal. Unfortunately, the analogical theory’s solution is the crux of its incapacity to address Aristotle’s claim that an identical genus is predicatable of things other in species (1057b). If ‘animal’ is equinity in horses and humanity in men then their genus is as identical as they are in their very natures, i.e. they are merely analogous. Our only choice is to face the problem anew. We know that the genus-differentia definition must be a single term, but our approach with Slattery has been to find a way to resolve the genus into the differentia. Attempting this with a univocal theory is unpromising because there is no way to cram unrelated and contrary differentiae into a single differentia. But I suggest we reconsider the univocal theory speaking the language familiar to Aristotle’s *Metaphysics*. Rather than asking how the genus can be resolved into the differentia, let us ask how the genus is actualized by the differentia.
THE UNITY OF DEFINITION

A point we have already realized but should perhaps state explicitly is that the genus is not something apart from the differentia. There are two layers of complexity to this statement. We say that the genus is its differentia because it is established by the differentia. To predicate ‘self-moving’ of horses and men is to establish the genus of self-moving things, which we name ‘animal’. There is in addition to this another reason to describe the genus as not being apart from the differentia. In this sense, the genus would simply not exist if it were not for the differentiae it subsumes, not because they establish the genus, but because the subsumption of differentiae is incidental to the genus as a universal. Since the genus and species are universals that signify essences, species are predicated of essentially identical subjects and genera are predicated of things of different species. For example, a species is predicated of Socrates and Plato rather than a genus because Socrates and Plato are essentially identical, i.e. no differentia distinguishes them. But a genus is predicated of Socrates and Mr. Ed because the genus must signify something essential belonging to both Socrates and Mr. Ed (e.g. ‘self-moving’). The genus cannot do this without subsuming their essences (humanity and equinity) because insofar as Socrates and Mr. Ed are self-moving, one is not a man and the other is not a horse. For this reason, the genus literally does not exist apart from the differentiae it subsumes because it must subsume differentiae to qualify as a genus rather than a species. I say that this is incidental because the genus does not become a universal by virtue of subsuming differentiae, but it happens to subsume them by virtue of the differentia that makes it a universal (e.g. ‘self-moving’). The genus is not something apart from its differentiae, then, because it is a differentia and what it is subsumes differentiae.
Returning to our discussion of contrariety, we should have the suspicion that the genus does not actually exists in the world; for there can be no irrationally rational, two-legged quadrupeds. Such a beast is as improbable as its definition is illogical. Therefore, we define contrariety as that which is between a positive state and privation. Earlier, we took this to mean that contrariety is neither expressed nor unexpressed, which means that the attribute ‘rational’ is neither affirmed or denied of anything because its contrary ‘irrational’ negates it. Since actual animals in the world are determinately rational or irrational, the genus cannot represent them in this state. Therefore, rather than regarding the genus as actually existing, we should regard it as potentially existing, i.e. as a potentiality. If we say that the genus exists potentially by virtue of the contraries it subsumes, we should not be surprised to find that it becomes actualized by the removal of contraries. By ‘actuality’, I mean that it should become an actual definition of some being, i.e. a species. By ‘potential’ I mean that ‘irrationally rational, two-legged quadruped’ is the potential definition of some being. We have already explained differentiation of the genus to illustrate how lower genera are established, but we should examine precisely what differentiation does to contrariety.

‘Substance’ is differentiated into ‘animal’ when one of the contraries of ‘substance’ is expressed. Since plants and animals are both substances, one pair of contraries that ‘substance’ comprehends is ‘self-moving’ and ‘not self-moving’. Once the differentia ‘self-moving’ is expressed, its contrary—i.e. the potentiality for its contrary—withdraws from the genus. Consequently, the differentiated genus itself withdraws because the potential for motionless things to be substances endures, but the genus is no longer able to comprehend them. In its place emerges a lower genus consisting of fewer contraries, viz. ‘animal’.
For Aristotle, ‘animal’ is the ultimate genus of all animals—i.e. it cannot be differentiated into a lower genus. We could, of course, say that the ultimate genus of ‘man’ is ‘mammal’, ‘primate’, or ‘hominid’ as is customary in modern taxonomy, but for our purposes we will be satisfied to stop at ‘animal’. If generic differentiation terminates at ‘animal’, we are naturally moved to ask what would happen if one of the differentiae belonging to ‘animal’ were expressed. Our answer is the same: Anything not possessing that differentia would no longer belong to the genus. Since there is only one species of being that is rational and many that are not, the genus, once again, withdraws, only this time another genus does not emerge. Since Socrates and Plato are essentially identical (rational), there are no additional differentiae to subsume. Thus, the differentia ‘rational’ exhausts the genus by removing all contrariety. Consequently, the genus is no longer a genus at all; for the genus is potentiality. With ‘rational’, the genus is actualized. It is no longer potentially a species but exists as a species in full actuality; for there actually are such things as rational animals.

We might already expect the problem of unity to have been solved. The genus is not one thing and the differentia another, but both are the species—the former by the expression of the latter. However, two problems remain: Though the species comes to be by the movement of the genus from potentiality to actuality, we may still wonder why it is not comprised of two terms, viz. ‘rational’ and ‘animal’. Further, it does not seem altogether true that a single differentia has successfully rid the genus of all contrariety; for what of ‘biped’ and ‘quadruped’? While it is empirically true that there are no rational quadrupeds and we might say that ‘rational' exhausts the genus by virtue of this, we cannot be satisfied with such an answer from a logical perspective. Accordingly, we move next to the differentiation of differentiae.
When we call a man a bachelor, we do not mean first that he is a bachelor and second that he is unmarried; for this is what it is to be a bachelor. Similarly, in defining man ‘biped animal’, we do not mean first that he is two-footed, second that he has feet, and third that he is legged. Since ‘having feet’ and ‘legged’ belong to bipeds insofar as they are two-footed, the differentia ‘having feet’ differentiates ‘legged’ just as ‘biped’ differentiates ‘having feet’. The same is true in the case of the differentia that establishes the genus, viz. ‘self-moving’. Since bipedality is a manner of self-movement, the differentia ‘self-moving’ is differentiated into ‘biped’. Therefore, the definition ‘biped animal’ is not two terms, but one in which the ultimate differentia ‘biped’ (the supposed essence of the thing) differentiates the differentia that establishes the genus (self-moving).

But what about ‘rational’? If ‘rational’ is predicated of bipeds at all, it is not by virtue of their being bipeds; for men are not bipeds rationally or rational bipedally. It only happens to be the case that all bipeds are rational. Therefore, we would be wrong to say that the genus has been actualized as the species ‘man’ upon being determined by the differentia ‘rational’. With ‘biped’ and ‘quadruped’ subsisting, the genus remains in potentiality until one final determination. For, if the process of differentiation ended here, the definition of man would not be ‘rational animal’, but ‘rational biped animal’. If this were so, there would be no difference between a univocal theory of the genus and the focal meaning account we effortlessly dismissed on the grounds that it resulted in a plurality of forms. For, again, it is unacceptable that the definition should contain any more than one differentia because it is believed to signify a thing’s essence. A definition consisting of several differentiae signifies that things consist of several forms, which we know is not true for Aristotle. Therefore, since differentiae signify forms, if it is true that things have only one essence then there can be no more than one differentia per species in the genus. The others
are either superfluous or non-essential—as ‘legged’ is superfluous and ‘having skin’ is non-

essential.

Notice that the genus can be established by no more than one differentia. If ‘animal’ were
established by the differentiae ‘self-moving’ and ‘having a sensitive nature’, two differentiae
would be required to exhaust the genus, viz. ‘biped’ and ‘rational’. Since ‘rational’ can neither
differentiate nor be differentiated by ‘biped’, the genus cannot be established by two logically
distinct chains of differentiae. Since Aristotle defines man ‘rational animal’, the common
differentia that establishes the genus of all animals must be differentiable by ‘rational’. However,
it is a task for metaphysics to investigate what this differentia is, and we cannot take on this
question here.21

We have only to conclude with an interpretation of the passage that set us along this
excursion.

Not only must the common nature attach to the very different things, e.g., not only must both
be animals, but this very animality must also be different for each (e.g., in the one case
equinity, in the other humanity), and so this common nature is specifically different for each
from what it is for the other. One, then, will be in virtue of its own nature one sort of animal,
and the other another, e.g., one a horse and the other a man (my emphasis).

It seems that all talk of resolving the genus into the differentia can be attributed to a simple
misreading of this passage. The analogical theory attempted to solve the problem of unity by
showing how the common nature (being an animal) is generically different for different animals.
With proportionality, the genus is not the same thing for each of its species, but is for species $x$
precisely what it is for species $x$ to be of that genus. But Aristotle is not telling us that the genus
is different for each of its species; for this contradicts 1057b, which states that an identical genus
is predicated of diverse species. Rather, the genus is specifically different for each of its
species—rational animal is different from equine animal. This is not because the genus ‘animal’
is somehow different for different species, but because having a sensitive nature that is rational is
different from having a sensitive nature that is equine. Therefore, just as ‘legged’ is predicated of
both quadrupeds and bipeds insofar as both are legged, ‘having a sensitive nature’ is predicated
of rational things and equine things insofar as both possess kinds of sensitive natures. This
satisfies 1057b because the differentia that establishes the genus is predicated of two things that
manifest that differentia in specifically different ways. It seems, then, that our perhaps
unenlightened conjecture from the beginning was right after all. Horses and men are, in fact,
animals, but men are human animals and horses are equine animals.

2 I am grateful to my friend Samantha McCoy for this most philosophically uninteresting interpretation.
3 It does not matter whether the differentiae we choose are appropriate to the things they are said to signify.
5 *Metaphys.* I.8, 1058a-5.
6 Ibid.
7 Ibid. 1057b36-39.
8 Cf. Ibid., c. 4, 1055a34.
9 Numbers are of the genus ‘quantity’ and 7 o’clock is of the genus ‘time’.
10 For the purposes of this essay, think of substances as anything that has a body. It is not important, but ‘substance’
is a higher genus than ‘body’ because some things are substances that have no bodies, e.g. God, angels and souls
have no bodies but they are things, not colors.
11 This is a particularly interesting case of analogy. Recall our discussion of contrariety. Two things must be in the
same genus to be different from one another (horses and men). If they do not belong to the same genus, they are
other than one another (seven and blue). The genera ‘quantity’ and ‘quality’ are not other than one another (as
colors and numbers are), but neither are they of the same genus ‘being’ because there is no such genus (Cf.
*Metaphys.*, B.3, 998b20). Therefore, comparisons made between the genera ‘quantity’ and ‘quality’ must all be
analogous with reference to ‘substance’.
12 Refer to pp. 7-8 for the original passage.
13 Genus,:Genus,:;Species,:;Species,: The genus is not separate for each of its species the way the genus of
riverbanks is separate from the genus of savings banks, but neither is it the same in the sense that the genus of black
is the same as the genus of white. Instead, the genus pertains to each of its species in proportion to its predicability
of the species to which it pertains. In other words, the genus ‘double’ is predicated of eight in proportion to what it is
for eight to be a double and the genus ‘double’ pertains to eight in proportion to the double that eight is. This means
that the genus ‘double’ will not pertain to eight in proportion to the double that six is. Thus, the differentiae
pertaining to irrational things in the genus ‘animal’ will have no share in the analogous genus predicated of rational
things; for the contrary ‘irrational’ is non-predicable of rational things and so has no share in the ‘portion’ of the
genus ‘animal’ that pertains to rational things.
14 pp. 9-11.
15 Aristotle thought of such differentiae as representing how animals move. Feathered things fly, bipedal things
walk, etc.
16 It is fascinating to note that the analogical theory understands the genus to contain contrariety after all—not with
respect to individual species (for this is proportional), but with respect to its universality—i.e. with respect to the
differentia predicated of its contraries (‘extension as such’ predicated of ‘self-moving’ and ‘not self-moving’).
That Plato is so many feet tall and Socrates is of such a complexion does not make them of different species.

See n. 15.

I would suggest that ‘having a sensitive nature’ is differentiated into ‘rational’ as ‘legged’ is differentiated into ‘biped’. This is, naturally, worthy of its own detailed study, but whatever establishes the genus, it must be both one and differentiable into ‘rational’ if the definition of ‘man’ is ‘rational animal’.

17 Metaphys., I.8, 1057b36-39.
18 Metaphys., Z.12, 1037b17-20.
19 That Plato is so many feet tall and Socrates is of such a complexion does not make them of different species.
20 See n. 15.
21 I would suggest that ‘having a sensitive nature’ is differentiated into ‘rational’ as ‘legged’ is differentiated into ‘biped’. This is, naturally, worthy of its own detailed study, but whatever establishes the genus, it must be both one and differentiable into ‘rational’ if the definition of ‘man’ is ‘rational animal’.