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P. L. Heath (1967)

NOUNS, MASS AND COUNT

Many languages mark a grammatical distinction that is commonly referred to as the "mass/count-distinction"; for example, the distinction between the occurrences of "hair" as a mass-noun in "There is hair in my soup," on the one hand, and its occurrences as a singular and plural count-noun in "There is a hair in my soup" or "There are hairs in my soup," on the other. Awareness of this linguistic contrast may, in the Western tradition, date as far back as the pre-Socratics, Plato, and Aristotle; in modern times, however, the first explicit formulation of it is usually credited to Otto Jespersen (1924).

1. THE PROBLEM OF CLASSIFICATION

Almost every aspect of the mass/count-distinction is unclear and contested, including the question of how it is to be drawn:

The Problem of Classification:

- (i) Between what sorts of entities is the mass/count-distinction to be drawn?
- (ii) By means of what sorts of criteria is the mass/count-distinction to be drawn?

What underlies question (i), for one thing, is a certain ambivalence as to whether the contrast concerns uses or occurrences of expressions or expressions themselves (and, if the former, we face the further question as to what a "use" or an "occurrence" of an expression really is; that is, how, for example, occurrences contrast with types and tokens of expressions). (In what follows, for reasons of convenience, we will speak of both uses or occurrences as well as of expressions themselves as being mass or

count.) Moreover, question (i) also encompasses the issue of whether the contrast in question can be properly drawn only with respect to nouns and noun-phrases or whether it can be sensibly extended to other categories, such as adjectives (e.g., with "red" on the mass-side and "circular" on the count-side) as well as verbs and verb-phrases (e.g., with atelic activity-verbs such as "run in circles" being classified as mass and telic achievement- or accomplishment-verbs such as "recognize" or "grow up" being classified as count; see Hoepelman 1976, Taylor 1977, Mourelatos 1978).

Question (ii), on the other hand, asks whether the distinction in question is best drawn, for example, by means of syntactic, morphological, semantic, or pragmatic criteria. To illustrate—restricting ourselves, as is customary, to the category of nouns and noun-phrases, and to such purely syntactic criteria (exhibited overtly in English) as the admissibility of plural-morphology as well as the licensing of "bare" (i.e., unquantified) occurrences or particular kinds of determiners and quantifiers (e.g., "much" versus "many")—we arrive at the following sort of classification:

- (M) *Mass*: "air," "water," "mud," "sand," "dust," "snow," "gravel," "asparagus," "traffic," ...
- (C) *Count*: "beach," "cloud," "chair," "piece of furniture," "virus," "bacteria," "sheep," "university," "hurricane," "football game," ...
- (D) *Dual-Use*: "hair," "chicken," "carrot," "apple," "cloth," "pain," "disease," ...

The nouns in the first list permit "bare" occurrences (as in "Water is wet"); they do not, in their use as mass-nouns, permit pluralization; and they can occur together with such quantifiers as "much" or "little" (as in "much air" and "little air"). The nouns in the second list do not permit (singular) "bare" occurrences (as in "*Beach is sandy"); but they can, in their use as count-nouns, be accompanied by plural morphology; and they are found together with such quantifiers as "many" or "few" (as in "many beaches" and "few beaches"). The nouns in the third list standardly have both sorts of occurrences. A list of this kind, however, masks several potential sources of trouble, which an adequate treatment of the problem of classification would need to address.

AMBIGUITIES. First, some grammatical contexts are at least at first sight ambiguous, in that the most obvious syntactic criteria such as those just cited do not by them-

selves clearly differentiate a given noun-occurrence as mass or count: examples include the occurrences of “lamb,” “apple,” and “fish” in “Mary had a little lamb,” “The apple in the dessert is moldy,” and “Fish floated in the water”; the occurrence of “home” in “at home”; as well as the occurrence of “tape” in such compound expressions as “tape recorder.”

TRICKY CASES. Secondly, while the syntactic criteria mentioned above involving plural morphology and quantification do speak to most of the following cases, we may wonder whether they do not in fact misclassify at least some of them:

- Collective Mass:* “furniture,” “jewelry,” “silverware,” “clothing,” ...
- Collective Plural:* “spaghetti,” “groceries,” “news,” “clothes,” ...
- Collective Singular:* “crew,” “crowd,” “mob,” “committee,” ...
- Irregular Plural:* “scissors,” “pants,” “tweezers,” “goggles,” ...
- Proper Names:* “Bertrand Russell,” “the Holy Roman Empire,” “the sixties,” ...

Thus, we may feel, for example, that “clothing” and “clothes” are sufficiently similar in their semantic contribution that they should be classified together, even though one occurs standardly as a mass-noun in English, whereas the other standardly occurs as an invariably plural count-noun.

ABSTRACT NOUNS. Thirdly, the syntactic criteria mentioned above also apply to nouns and noun-phrases whose denotations are either abstract or at least not straightforwardly concrete, such as the following:

- Abstract Mass:* “knowledge,” “evidence,” “poetry,” “money,” “information,” ...
- Abstract Count:* “belief,” “mistake,” “rendition,” “symphony,” “discovery,” ...
- Abstract Dual-Use:* “logic,” “truth,” “justification,” “science,” “theory,” ...

It has, however, been questioned whether the mass/count-distinction can be sensibly drawn for such nouns and noun-phrases, possibly because the semantic and ontological vocabulary, which will feature prominently below, may not easily extend to their case.

NEW USES FOR OLD NOUNS. Fourthly, it should be noted that the examples given so far attest only to the way in which these nouns are currently and standardly used in

English. However, it is relatively straightforward to introduce new uses for old nouns, or even to use a noun in a nonstandard way without much setup. For example, the noun “email” has effortlessly acquired a count-use, even though it was initially used only as a mass-noun; moreover, the use of “car” in “A BMW 300-series is not much car for the money,” while deliberately nonstandard, is, as far as issues of grammar are concerned, not completely out of the question. Thus, the mass/count-distinction cannot be viewed as written in stone even within a particular language; expressions can change their status, if speakers of the language, for whatever reasons, so desire.

CROSS-LINGUISTIC VARIATION. Finally, there is considerable cross-linguistic variation in how particular languages pattern with respect to the mass/count-distinction. For one thing, specific nouns that belong to different languages but intuitively have the same meaning can be classified as mass in one language and count in another; for example, the German word for hair (“Haare”) is, except for poetic contexts (such as “Rapunzel, let your hair down!”), standardly used only as a singular or plural count-noun, whereas the English noun “hair” standardly has both mass- and count-uses. Furthermore, different languages can differ in how they mark the mass/count-distinction or, indeed, in whether they do so in any obviously visible way at all. In this context, it has been observed that Asian classifier-languages such as Mandarin Chinese and Japanese are of special interest, because they require that every noun be preceded by a classifier reminiscent of the sort of “reference-dividing” relations we observe in English primarily in connection with mass-nouns and plural count-nouns (“basket of,” “bouquet of,” “bucket of,” ...). This has motivated some writers, such as R. Sharvy (1978) to speculate that perhaps all nouns are at bottom mass not only in these overt classifier-languages, but across the board, on the theory that such classifiers may be present covertly in every language.

2. THE PROBLEM OF LOGICAL FORM

While consideration of the problem of classification is often regarded only as a means to an end—namely, as a way of clarifying the nature of the subject-matter beyond the clear cases—its importance should not be underestimated, especially given its role in deciding whether or not a specific, more or less tricky, case should be viewed as a counterexample to a particular analysis. Most of the attention surrounding the mass/count-distinction, however, has been focused on the question of what (if any) its semantic and ontological significance might be. Thus, the

mass/count-distinction, more so perhaps than any other comparable issue, has provided fertile soil on which to debate questions concerning our most central semantic notions—those of meaning and truth, reference, and quantification—as well as ontological questions concerning the basic categories of what there is; and therein, surely, lies its central interest for linguists and philosophers. Among the wealth of semantic issues that are debated in this connection, the following may be singled out as particularly prominent.

Semantic Role

(iii) What is the semantic role played by mass-nouns and count-nouns?

At least as far as singular count-nouns are concerned, this question is thought to have a straightforward answer; in fact, traditional accounts of meaning, truth, reference, and quantification, with their frequent appeals to the predicate-calculus and the apparatus of set-theory, seem to be in many ways specifically tailored to the semantic needs of singular count-nouns. Such nouns are typically analyzed as playing the semantic role of a predicate whose extension consists of objects, each of which (or so it seems) could at least in principle be referred to as a such-and-such (for some appropriate substantival phrase). These objects, in turn, are thought to compose the domain of values over which variables and quantifiers are interpreted as ranging; and they are taken to enter into set-theoretic relationships with one another.

Mass-nouns and plural count-nouns, on the other hand, have for a variety of reasons resisted straightforward assimilation into this familiar vocabulary. The former in particular have appeared puzzling, for one thing, because they seem to lead, in W. V. O. Quine's words, a "semantic double-life of sorts" (1960, p. 97), in some of their occurrences (e.g., "Snow is white") apparently playing the role of a name or singular term, in others (e.g., "Most snow is white") that of a predicate or general term. This appearance of a "semantic double-life" led Quine to conclude that mass-nouns can play both roles, that of a name and that of a predicate, depending on their position within the statement (see also Ter Meulen [1981] for another version of what may be called the "mixed view"). Others have thought it necessary to choose between these two semantic categories, by defending either a version of the "name view" or the "predicate view." (For examples of the name view, see Parsons 1970, Moravcsik 1973, Bunt 1979, 1985, Chierchia 1982, Link 1983, Lønning 1987, and Zimmerman 1995; for examples of the predicate view, see Burge 1972, and Koslicki 1999; as well as, arguably, Cartwright 1963, 1965, 1970; Montague 1973;

Pelletier 1974; Bennett 1977; Sharvy 1980; Roeper 1983; Pelletier and Schubert 1989; and Higginbotham 1994; though some of these writers are difficult to place.)

Finally, an influential attitude toward the apparently schizophrenic semantic behavior of mass-nouns has also been to detect here a category that resists this sort of classification into either name or predicate, because it harks back somehow to a more "primitive," "pre-individuative," "pre-reference-dividing," "merely feature-placing," "non-objectual," "pre-particular level of thought," one which predates the dichotomy of singular term and general term (see especially Strawson 1953–1954, Quine 1960, Evans 1975, and Laycock 1972, 1975, 1989, 1998 for expressions of this attitude). It is not obvious, however, what to make of this somewhat ambivalent sentiment, because apparently the mode of expression associated with the use of mass-nouns fits comfortably into our present usage and we do not currently inhabit this supposed "archaic" time.

As argued convincingly in Burge (1972), all three views—the mixed view, the name view, and the predicate view—give rise to potential difficulties. The mixed view has trouble capturing inferences which turn on the common semantic core apparently shared by both namelike and predicative occurrences of mass-nouns (e.g., "Snow is white; this stuff is snow; therefore, this stuff is white"). The name view, on the other hand, is forced to invoke an arguably question-begging "reference-dividing" relation, of the form "is a ... of" (e.g., "is a quantity of"), to account for those cases in which mass-nouns play an apparently predicative role (e.g., "most snow," on this view, becomes something along the lines of "most quantities of snow"). Moreover, as noted in Koslicki (1999), the supposed evidence for the name view (and, hence, for one half of the mixed view, as well) is shaky to begin with, because it is drawn from the class of so-called generic sentences; but genericity is not a phenomenon peculiar to mass-nouns and is exhibited to an equal extent by singular and plural count-nouns.

Finally, the predicate view, given our familiar way of thinking about predication as involving domains of objects, threatens to do away completely with the intuitive contrast between the different kinds of noun-occurrences. Whether this threatened obliteration should be taken as cause for alarm, however, depends in part on one's reaction to the kind of skeptical attitude displayed in Burge (1972), according to which the mass/count-distinction seems ultimately to be a pragmatic phenomenon, the grammatical manifestation of the contrast between cases in which, for whatever reasons, standards (though not necessarily clear ones) are already available

for what is to count as a such-and-such (for some appropriate substantival phrase) and cases in which there has not been any comparable pressure to clarify or supplement our current practice.

This skeptical outlook takes the linguistic distinction in itself to be a relatively superficial phenomenon, at least from the point of view of semantics and ontology, though there might be a good deal of interest to be said about it, for example, from the perspective of epistemology, philosophy of science, philosophy of mathematics, and psychology especially concerning our practices of counting and measuring (see for example Frege 1884, Carnap 1926, Carey 1985, 1994, Xu 1997). Some of the considerations raised above in Section 1, especially the striking heterogeneity of class of expressions at issue noted in (b) and (c), as well as the flexibility of current usage and the cross-linguistic variation noted in (d) and (e), might in fact be thought to count as *prima facie* evidence in favor of such a skeptical approach.

In addition to the apparent “semantic double-life” that has been ascribed to mass-nouns by writers such as Quine, this mode of expression has also seemed to pose special challenges with respect to the following question:

Mass-Logic and Mass-Quantification:

(iv) How do mass-nouns behave under quantification and in combination with logical connectives such as negation, disjunction, and others?

As R. Sharvy (1980), P. Roeper (1983), J. T. Lønning (1987), and J. Higginbotham (1994) in particular have discussed in detail, it seems that such statements as “The hot coffee did not disappear” or “All phosphorus is either red or black” cannot be understood straightforwardly in terms of quantification over quantities of coffee or phosphorus and in terms of such set-theoretic notions as membership, subset, union, intersection or complement. For example, it has been argued that “All phosphorus is either red or black” does not mean the same as “Every quantity of phosphorus is either red or black,” because, of those quantities of phosphorus that include both red phosphorus and black phosphorus, it is neither true to say that they are red nor that they are black (Roeper 1983, p. 254). Statements of this kind have been taken to provide motivation for thinking that, as in the case of predication, our familiar approach to quantification and other logical operations, as involving domains of objects that can be interpreted as standing in set-theoretic relations to one another, does not do justice to the semantic properties of mass-nouns and the system of determiners that accompanies them.

The suspected failure of the traditional apparatus to yield a fully general logic has commonly been traced to a certain combination of mereological characteristics exhibited by mass-nouns (or their denotations, or the concepts expressed by them). Thus, from the beginning, writers have been struck because not only do sums of, say, mud yield more mud (as of course do sums of, say, people), but because divisions of mud generally (i.e., with the exception of small and not readily accessible parts) also yield more mud (see, for example, Leonard and Goodman 1940, Goodman 1951, Quine 1960, Burge 1972, Laycock 1972, Cheng 1973, Bunt 1979, 1985, Ter Meulen 1981, Roeper 1983, Simons 1987, Higginbotham 1994, and Zimmerman 1995). The first of these properties is known as “cumulativity,” the second as “distributivity,” and their conjunction is often called “homogeneity”; the semantic relevance (if any) of “parts that are too small” (Quine 1960, p. 98) has given rise to what is known as the “problem of minimal parts.”

Moreover, while divisions of mud into more mud, as we now know from empirical inquiry, cannot go on forever, it has been said that, at the very least, it is not part of the meaning of the term “mud” that there are atoms of mud, in the mereological sense of “atom” (i.e., quantities of mud that have no proper parts that are themselves mud), while apparently it does follow from the meaning of such terms as “person” or “people,” or at least from the fact that they are standardly used as count-nouns, that their extensions do consist of such atoms, with each single person counting as one of them.

Thus, if these observations are correct, they would lead to the following tripartite division: (i) singular count-nouns are neither cumulative nor distributive, but they are atomic; (ii) plural count-nouns are cumulative and atomic, but not distributive; and (iii) mass-nouns are homogeneous (i.e., both cumulative and distributive), but nonatomic (i.e., uncommitted as between the properties of atomicity and full-fledged atomlessness). And where there are no atoms, so it has seemed to many writers, these set-theoretic operations and the associated approaches to quantification can take no hold; instead, nonatomic, algebraically characterizable systems (such as Boolean algebra or lattice theory) have seemed more appropriate in light of the semantic peculiarities of mass-nouns (see especially Cartwright 1963, for the first fully developed, but unpublished, algebraic account; later analyses in the same style include Bunt 1979, 1985, Roeper 1983, Link 1983, Simons 1987, Landman 1991, and Higginbotham 1994).

Despite the popularity of this style of approach, however, it is at least debatable, first, whether mass-nouns in fact are homogeneous, given the problem of minimal parts; and, secondly, whether the question of atomicity can in fact carry the semantic weight ascribed to it, given that, for example, we can without difficulty refer to something as a building, even when the object in question has proper parts that are themselves buildings (see Koslicki 1999 for a skeptical voice). Also relevant in this connection is the debate in contemporary metaphysics concerning the so-called “problem of the many” (see, e.g., Unger 1981), which concerns the question of whether each region of space-time occupied by something we would ordinarily refer to as, say, “one person” is in fact occupied by indefinitely many numerically distinct, but largely overlapping, persons: however exactly this debate in metaphysics ought to be resolved, at the very least we cannot accuse the philosophers involved in it of not being competent speakers of English!

3. OTHER PURPORTED DIFFERENCES

In addition to the apparent mereological differences as well as the purported differences in semantic role just cited, the following considerations are frequently also thought to bear some relevance to the mass/count-distinction.

CONSTITUTION AND THE (ALLEGED) “STUFF”/“THING” DICHOTOMY. Exaggerated emphasis on a relatively small class of examples, such as “mud” versus “chair,” has led to the idea that the linguistic mass/count-distinction maps straightforwardly onto an alleged metaphysical distinction between “stuff” and “things.” A related misconception is that the denotations of mass-nouns constitute the denotations of count-nouns, because it is thought that mass-nouns denote “stuff” and count-nouns denote “things,” and that the former constitutes the latter. Whatever exactly the notion of “stuff” comes to, however, it is simply not true that the constitution-relation connects mass- and count-noun denotations in this one-directional way (because, for example, particular virtues may constitute someone’s virtue and particular pieces of furniture constitute furniture).

Moreover, as it stands, allusions to the notion of “stuff” are, in the absence of further elucidation, not particularly helpful. According to our ordinary usage, the term, “stuff,” is employed in an extremely wide and varied range of contexts and is, in fact, often intersubstitutable with the term, “thing,” as in “the stuff/things you’ve written,” “the stuff/things in your attic,” and so on. Thus,

unless it can be clarified, for example, whether such mass-noun denotations as asparagus, trash, jewelry or traffic should be considered “stuff,” and whether such count-noun denotations as clouds, bacteria or viruses should not be considered “stuff,” and, if so, why, this notion is simply too hazy to be of much theoretical use. Moreover, given the heterogeneity of the class of expressions at issue, the flexibility of current usage and the cross-linguistic variation noted in considerations (b) through (e) of Section 1, it is highly questionable whether any single metaphysical distinction can be found to underlie this linguistic contrast.

SHAPE-, STRUCTURE- AND SPACE-OCCUPANCY PROPERTIES. Relatedly, one often finds the mass/count-distinction described as involving a contrast between “units” that are “discrete,” “delineated,” and “definite,” have a “certain shape” or “precise limits,” on the one hand, and something that is more “undifferentiated,” “continuous,” “nondelineated,” or “unstructured,” on the other hand (see for example Pelletier 1991, Jespersen 1924 for representative formulations). It is difficult to tease apart how much of this vocabulary is intended to be understood epistemically (as terms such as “definite” and “precise” intimate) and how much of it is to be understood metaphysically; in either case, however, it is difficult to discern here anything more than what is already contained in either consideration (a) above or consideration (c) below.

DIVIDED REFERENCE/CRITERIA OF IDENTITY AND INDIVIDUATION. The mass/count-distinction is almost universally conceived of as involving a contrast between expressions that “carry within themselves” criteria of identity and individuation and ones that fail to supply at least one or possibly both sorts of criteria. Thus, Quine famously remarks that, while “shoe,” “pair of shoes,” and “footwear” all range over the same “scattered stuff,” they differ in that the first two “divide their reference” in different ways and the third not at all (1960, p. 91); and P. F. Strawson comments, equally notoriously, that “the general question of the criteria of distinctness and identity of individual instances of snow or gold cannot be raised or, if raised, be satisfactorily answered,” because, in his view, “we have to wait until we know whether we are talking of veins, pieces or quantities of gold, or of falls, drifts or expanses of snow” (Strawson 1953–1954, p. 242; see also Laycock 1972, pp. 31–32).

However, as Helen Cartwright has argued forcefully in a series of early papers (especially Cartwright 1965, 1970), if “individuation” is what goes on when a noun has a paradigmatically predicative occurrence (e.g., one that

appears next to such determiners such as “all,” “some,” “most,” “the,” “this,” “much,” and “little”), then the mass/count-distinction does not point to a general contrast in whether an expression “individuates,” only arguably in how it does so; moreover, the question of identity is an equally moot point, because, as Cartwright points out, there are as many clear or tricky cases on the count-side as on the mass-side (e.g., compare “word” with “work,” to use Cartwright’s example). Finally, considerations that turn on the phenomenon of change over time, as when we speak for example of something’s being the same water from one time to another, even while the water in question is slowly evaporating, also fail to isolate a feature that is peculiar to the denotations of any one class of expressions (see Laycock 1972, 1975, 1989, 1998).

COUNTING AND MEASURING. Finally, we come to a more promising area to explore in connection with the mass/count-distinction, namely the distinction between counting and measuring, that is, the distinction, on the one hand, between the practice of counting and measuring, and that between what we count and what we measure, that is, the subject-matter to which these practice are directed, on the other hand (see for example Parsons [1970] and Cartwright [1975a] for discussion of amounts and measures of amounts). Simply put, the contrast in this area is taken to be the following: whereas mass-noun denotations can only be measured, count-noun denotations can also be counted: thus, in the former case, only the vocabulary of amounts and measures of amount is appropriate, whereas the latter also admits of the apparatus of number and cardinality.

However, even in this area, matters are less clear than is often supposed. For, as it stands, the contrast between what we can and cannot measure really only marks off the sorts of magnitudes discussed by the physicist (e.g., temperature, mass, velocity, distance, and the like) from those entities which, in some way, exhibit these magnitudes; and while it is true that such magnitudes tend to be referred to by means of mass-nouns, the class of mass-nouns is of course thought to be much wider than simply what is encompassed by these magnitude-denoting terms. The area of counting as well is still radically underexplored, at least from the point of view of philosophy, though much interesting work has been done on the subject by psychologists (see for example Carey [1985, 1994] and the references cited therein). If counting involves, as Frege would put it, an association between a concept and a cardinal number, then the key question that arises in this context is just the question G. Frege himself was concerned to answer in Section 54 of the *Grundlagen*, namely

what sorts of requirements must be met by a concept to admit association with number (for discussion, see for example Geach 1962, Dummett 1973, Koslicki 1997, Blanchette 1999). If what has been suggested in the previous paragraph is correct and no general contrast exists between mass- and count-nouns at least in whether they provide criteria of individuation and identity, then the answer to Frege’s question concerning counting must lie elsewhere; and what this answer is, it is fair to say, is still an open question.

IV. CONCLUSION

As sobering as we might find this outcome to be, it may be that, at the end of the day, the only absolutely general and incontestable truism that can be stated in connection with the mass/count-distinction is that a true statement containing a singular or plural count-noun, as in “There is a hair in my soup” or “There are hairs in my soup,” insures the presence of either exactly one whole hair, or exactly two whole hairs, and so forth, whatever precisely this comes to in metaphysical terms; whereas a true statement of the form “There is hair in my soup” is compatible with there not being exactly one whole hair, or exactly two whole hairs, and so forth, because what is present may be parts of hairs or sums of parts of hairs or sums of hairs. And while this truth-conditional difference, stated in this stark and austere form, without the usual accompaniment of highly metaphorical and generally unhelpful vocabulary, might at first glance strike us as entirely trivial, its semantic and ontological significance, as can be gleaned among other things from the sorts of inferences that are licensed by it, should not be underestimated. Even if hair, perhaps, is no more “stufflike” than hairs, there is still an interesting story to be told as to what makes something one whole hair, or, for that matter, one whole anything (see Fine 1994, 1999, Harte 2002).

See also Aristotle; Frege, Gottlob; Plato; Pre-Socratic Philosophy; Proper Names and Descriptions; Properties; Quine, Willard Van Orman; Semantics; Strawson, Peter Frederick.

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Kathrin Koslicki (2005)

NOUS

Nous is most likely derived from the root *smu*, meaning "to sniff." Homer uses *nous* to mark the realization or understanding of a situation or state of affairs. *Nous* penetrates beyond the surface features of a situation and reveals the underlying truth of the matter. It is not divorced from perception and its most primitive function is that of apprehending or "smelling" danger. In Homer *nous* is also linked to the visualization of a plan of action that is immediately prompted by the awareness of a situation possessing emotional impact.

In Parmenides *nous* maintains its Homeric function as that which reveals ultimate truth. However, it also serves as the source of logical reasoning. In Parmenides *nous* is divorced from perception and it is best understood to mean "thought" or "intellect." In accordance with his rather austere ontology, Parmenides may well hold that that which exists is also that which thinks (i.e., no thing that exists fails to be a thing that thinks).

Anaxagoras treats *nous* as a mass term, like water or air (as opposed to a count term, like man or leaf). He appears to treat *nous*, not as "intellect," but as "reason" or "the virtue of rationality." *Nous*, for Anaxagoras, is the ultimate source of order and motion in the cosmos. By both initiating and governing a vortex, *nous* brings order to an otherwise static primordial chaos. Anaxagoras

asserts that *nous* is the lightest and purest thing. In so doing, he may well be attempting to articulate the idea that *nous* is an immaterial substance.

Plato incorporates elements from Parmenides, Homer, and Anaxagoras into his treatment of *nous*. First, following Parmenides, Plato considers *nous* to be an intellectual faculty that is wholly divorced from perception. Second, following Homer, Plato considers *nous* to be a source of insight or intuition. Still, for Plato, intuition is a nonempirically based grasp of unchanging and eternal truth. Finally, following Anaxagoras, Plato considers *nous* to be the source of order and motion in the cosmos. *Nous*, as rationality itself, is the substance that orders the heavens for the sake of the best. It is the cause of regular celestial motion and it is the cause of rationality in humans.

Aristotle, in his treatment of *nous*, displays acute awareness of views advanced by his predecessors. First, Aristotle takes *nous* to be a source of insight. *Nous* is a grasp of the salient features of a situation, but it is also a grasp of universal scientific principles. *Nous*, even in its later role, is not divorced from perception. It is the grasp of principles that are acquired by induction from perceived cases. Second, Aristotle uses *nous* to mean "intellect." He asserts that one's *nous* is separate from the body. In so doing, Aristotle is likely to be advancing the view that human intellect is an immaterial faculty. Finally, Aristotle's God, the Prime Mover, is *nous*. It is a separately existing and fully actualized rationality. This *nous* is the chief cause of motion, order, and goodness in the cosmos.

See also Anaxagoras of Clazomenae; Aristotle; Homer; Parmenides of Elea; Perception; Plato; Thinking.

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John E. Sisko (2005)

NOVALIS

(1772–1801)

Novalis was the pseudonym of Friedrich Leopold Freiherr von Hardenberg, the lyric poet and leader of the