ARRAY OF DEFINITIONS

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One need peruse no more than a few samples of the lite-
rature of analytic writers, of existentialists, or even of the
classical philosophers to assure onself that a disquietude
pervades their writings over the degree of looseness of dis-
course allowable in philosophic reasoning, and the value
of the means suggested for reaching greater precision. The
many distinctions between common speech and expert, bet-
ween words and terms, between equivocal and univocal, bet-
wen literal and metaphorical, between ordinary and ideal
languages —these and a host of others have in their diverse
ways pointed up the difficulties consequent to any use of
words, and have been used to alleviate these difficulties by
setting up boundaries not heed lessly to be crossed. But in
practice the boundaries break down as often as erected,
and what is therefore most needed seems not to be some new
dichotomy to replace the old ones, but a map of the entire
range of linguistic usages, a map such that even though no
special prohibitions are set up, we can mark out the chief
sorts of relations that a name may conceivably bear to what
is named, hence can at least be sure of the ground we are
on, even if our right to stand on this particular plot be dis-
puted.

In working this out I set myself against any attempt to
match all names with individual things as if they were for
some reason merely proper names; I do not hold to an
atomic theory of meaning, yet would like to do justice to
the manifest advantages of such a theory, which finds one-
one correspondence between name and thing. In the same

way, I oppose the notion that the search for exactitude, for unique designations, is a wholly fruitles one, that the best one can do is adumbrate a multiplicity of names interlocked in meaning so as to give hints of a system of truths in spite of our being stuck from the beginnnig with a misleading language. But this notion, too, has strong claims, and should not be wholly dismissed, for some of the most appealing, provocative, and fruitful work of the past few decades has been carried out by men to whom this way of thinking about language is second nature.

To try to save both sides is a large order, even if we are permitted to alter them both. We need to make a number of assumptions here which were we not within the confines of a brief essay could further argued and justified: (1) That there is a world of individual things whose existences and careers in some degree rest upon what they are, their natures; (2) that a thing is what it is, no more and no less, even when we are considering it in relation to other things; (3) a thing can always be shown to have likeness to certain other things, thus allowing us to say that a thing belongs to a class of things essentially the same. This does not commit us to asserting that species and genera "exist," but only that a thing bears relations of similarity to and difference from other things: (4) that in the long run things, their natures, and their classifications are discoverable through inquiry; (5) that the principal way in which discoveries of this sort can be registered and communicated is through definitions; (6) that in consequence at least some definitions are of things, not of mere names; (7) that some definitions purporting to be of things directly (rather than psychological crutches or typographical conveniences) are more adequante to the natures of the things themselves than are others, and can be judged on that basis; (8) that a definition, as opposed to a proposition purports to be a formula of the essence of a thing or things, by which is meant that the constituent terms of the definiens collectively

name what traits the thing must possess in order to be that thing at all. These assumptions, each of which would take many pages to justify, are explantory, no more, and can now be waved to one side.

Let us now run through an account of an ordinary proposition, later to contrast it with a definition.

(1) The verbal subject of a proposition has what I shall call a *nominative function* relative to the thing it names: In "The cat is black," "The cat" is an expression which names an animal, or kind of animal, and in turn imposes a degree of individuation upon the meaning of the entire proposition, depending upon how we read the article "the," and upon whether we interpret the noun "cat" as singular or plural.

(2) The predicate "is black" has as its chief office, which relates to the actual blackness of the cat or the putative blackness (in case the proposition happens to be false), a *denotative function* rather than a nominative one —it points out, but in a way different from naming, because what it denotes is not a thing having its own edges, its own degree of individuation, but is instead something represented, so to speak, in this cat and also in other objects, tables, purses, or whatever.

(3) For purposes of logic, we may treat each adjective or verb found in the predicate as a separate notion, and we should even go so far as to say that "The cat is black and lazy" is two propositons in spite of the singleness of the sentence. The proposition does not fall apart because of this, but the merits of each predicative adjective or noun must be judged separately, and to do so ultimately requires their being put in separate propositons. We cannot go from "A squirrel is a mammal," to "A large squirrel is a large mammal," because the predicates are at bottom two, not one, and have a coincidental relation one to another.

(4) The predicate has a second function, this one as it relates to the verbal subject, not to what inheres in the real

subject: I call this simply the *predicative function* (appropriating that expression to my own use here), and it is an extremely difficult one to seize upon and explicate; although the predicate determines, delimits the character though not the extension of what is named by the verbal subject, the predicate is in a way *broader* than the subject, not narrower, as we see in noticing that a middle term must be broader than the minor in a syllogism in barbara.

(5) The existence of *a* real subject is assumed by the time we get to the predicate of a proposition, but neither the uniqueness nor the identity of that subject are determined by the predicate; if we were to say "The cat is black" and in uttering this did not decide to which of a roomful of felines we were referring, but had to wait until some one cat came along which by its blackness "verified" this proposition, this would indeed beg the question.

(6) The actual cat, which was specified in the proposition by the nominative function of the verbal subject, is *individuative* while the blackness inhering in his fur is *determinative* —it helps mark him out from others of his breed, but does not give him his owness or separateness.

Now to definitions, which are the center of gravity in this essay.

First, then, a such a definition the grammatical predicate is in any context interchangeable with the subject —everyone seems pretty well agreed on this point— and hence from a logical standpoint must not be considered a logical predicate at all. If it shares functions with the predicate of a proposition this will be only through a happy chance. Briefly, the grammatical predicate of a definition is not a logical one, and the distinction between nominative and denotative functions therefore breaks down.

In the same way, the distinction between parts of what is represented breaks down —there is no longer a difference between the individuative and the determinative, and so the definition is indifferently universal or individual in

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character. Incidentally, my remarks can be said also hold for terms serving as subjects for a term is, in effect, a defined word and implicit in any term is its definition. But not all definitions are of the same sort, nor do they have equal value, as we shall see.

Thirdly, in a proposition we may run from a singular to a partial class to a total or universal class, needing only quantifying expressions to indicate our choice. But in a definition, no matter what the verbal formulation, we are basically tied to a species or *type*, which is in certain respects one, or is at least treated as one, and in certain other respects is a plurality. On the other hand, if we expect to look through the literature and discover that all definitions are related in exactly the same way to specific types, we shall be disappointed, for definitions as they are written up become, until reform belatedly sets in, more figurative and looser as time goes on, hence definitions less and less in the strict sense that I have proposed. Hence short of taking arms against this sea of misformulations is simply to discriminate kinds of definition, as they relate more closely or more remotely to a central literal statement of the nature of a thing's type, and by this means to show that even in the remoter ones we are not wholly away from what a definition is supposed to formulate. I find five passable sorts of definition spread out in this array, and one that is not passable.

(1) Primarly and properly, a definition relates directly to a type, and so far as our weak and crotchety human unders tanding is able to formulate it, states the single quality or character essential for the type to be that particular type and no other. I call this the *archetypal definition* —the most authoritative, the narrowest that can be given, the most literal.

(2) More broadly in the meaning of "definition," though not more broadly in what is referred to, a definition can relate to a species with many essential qualities and

perhaps some other important traits less essential to it thrown in, and I call this the *proper defintion,* but withhold the designation primary. This proper one could also be called the typal definition, but certainly not the archetypal. The formula "The cat is a domesticated carnivorous clawed whiskered mammal" is one of this sort, for the "clawed" and "whiskered" while included in the type are still rather extraneous, and "clawed" may even follow directly from the fact that the cat is a carnivore. In a fuller taxonomy, I am certain that so many of these qualifiers would not be necessary.

(3) There is an *extended definition,* or if you prefer, a definition in the extended sense of the term, and this arises, I suggest, out of the attempt to rope in the full generic class containing our type, together with some one or more other types within that containing class. Confusion usually ensues here because the actual verbal formulation looks much like the stricter kinds: if there these additions are kept carefully hidden, and a loose definition is made to look like a strict one. In such an extension, the real purpose of a definition is upset, but not wholly so, through allowing the grammatical subject to be equated with a collection of terms in the grammatical predicate which are not collectively narrower than the generic class but likely to be co-extensive with it rather than with the species.

(4) There is a *participative* sense in which a definition can be defined and therefore used: this is one in which we cover not only the generic class which is first to contain the type to be defined, but also some neighboring genus, together with its subordinate species. This is popularly called a definition by *analogy,* for between genera there can be nothing more than likeness, no literal inherence. It is a measure of the looseness of this sort of "definition" —I now have to put that word in quotation marks— that I have used the word "neighboring" of the second generic class.

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At this juncture we see that my treatment of definition is selfreflexive almost throughout, for a definition serving as an example of the archetypal sort can itself be properly defined in an archetypal way, and any of the other so-called definitions in the array are defined in a looser way. Were it otherwise, this list would have a symmetry that it does not possess, for then all boxes would be of the same sort. As it is, the areas become more and more vaguely circumscribed.

(5) There is a *restricted* meaning to "definition." If the primary and proper definition of a term attaches to the essence of a type, then the restricted attaches to an individual, or at best a group of individuals, within that type. Very frequently this sort of expression is applied in an honorific sense, as when we call Picasso the only real artist of the 20th century because to be an artist means to be a Picasso. The restricted sense takes the nominative application of a propositional subject and makes it over into a cognominative, that is, it applies a typal name as if it were a proper name. "Mr. Efficiency" is another instance. I have at present no interest in saying whether this is illegitimate, but I am trying only to show that it fits into a scheme of usages. Incidentally, description and perhaps pointing have to accompany this kind of discourse, for if our earlier assumption is correct, we cannot properly define a singular thing so that its nature will be known. Only the phrasing of a strict definition can appear as if the subject is singular, but this does not even so leave room for using proper names.

(6) The last sort of definition I call *improper*, to cover any definitory phrase falling outside of all of the foregoing, that runs counter to them, that negates correctly applied definitions. Thus the word "light" is improperly defined by expressions that customarily relate to darkness or the opacity of objects, even though it has a series of usages running from a light source through different kinds of transmission and reflection.

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To illustrate this array further: We may think of rhythm in an archetypal sense as differentially stressed beats of sounds which are not fixed by convention in pitch (music) or separate signification (words); this is the narrowest and most literal statement. Properly, still, as having to do with the kind of thing defined but including more or its charac- ters, we may define rhythm as differential beats in words or musical sequences or in physical events. An extended meaning would then be, irregular or regular beats in time and stresses of movement in space —a new notion and carrying us outside of the type already accounted for. Dancing is an example. A participative definition would, of course, be the placement of painterly or other desing elements in space, as when we say that a colonnade has rhythm. A contracted meaning of the word would apply to some man, say a musician or other performer.

Here I must reiterate that most of these definitions look much the same, and it is necessary to examine each defin- ition carefully to discover how far it may deviate from the archetypal. Again, I must forestall the objection that this array gives no help in determining what is *really* the type —of animal, instrument, value, or whatever. Of course it does not, and that for the simple reason that such inquiry is within the special sciences, and that they, rather than logic, can give information about the real nature of cats and rhythms.

In spite of the evident cumbersomeness of this array, it has some few advantages, I think, making it worthy of consideration. For one thing, I believe that historical pre- cedents can be found for this in the impressive numbers of definitions which Plato offers for many of his important terms, in the broad and narrow senses and the univocal and equivocal senses allowed by Aristotle, in the broad and strict and very strict senses which William of Ockham discriminated, in the many modern studies of kinds of

metaphor. Not all these parallel my array but at least suggest parts of it.

For another thing, what I have had to say holds in a duplicative way for definitions and terms. The possibilities that terms can "contradict" one another, or that definitions can "falsify" one another are interesting, and should be dealt with painstakingly. All that can be said now is that if two terms are put into the same proposition, that propoisition as a whole will take its character from the broader and looser of the two constituents, and therefore we should not mix typal usages with generic or analogical ones if what is wanted is serious literal speech. When a term within a generic class is matched with one describing what falls oustide that class, then the result is of course an expression compounded of two differently-based expressions anyway, no matter what meaning we would like to retain for the subject term.

Thirdly, we can take two terms that have traditionally been hard to relate to each other by identification, differentiation, or opposition, and lay their definitional arrays side by side, showing that some of the meanings of the first term coincides exactly with some one meaning of the second. Among such pairs whose literature is confused by vacillation or dogmatism I would include body and mind, poetry and prose, individual and common good, utility and beauty, science and philosophy, becoming and being, and the like. These are but samples. Although the problems connected with them cannot be promptly solved with the array, at least we might know better where the problems lie through comprehending clearly the relations that the defining formulas bear to the things defined.

My theory of the array retains precision and literalness at the core of scientific discourse, yet at the fringes it allows for, in fact encourages, more informality, and then relates the two extremes by showing their common ontic ground and origin. Any fixed division between common

language and ideal seems to me to break down, simply because so much of the ordinary can be precise, and so much of the ideal still contains —by design of its inventors, though not by their professions of faith. Common speech in other instances can be dismally vague —we all know that— and the cure needed will also remould the more exact speech of scientific inquiry, for there, too, we find necessary the purging from ambiguities, the ridding of metonymies, the circumscribing of hyperboles. A formal language usually pleases none but the formalizer and a few followers, for the range of agreement concerning what is unambiguous is usually narrow. Even the oft-vaunted language of mathematics turns out to be no consistent language at all but a meteor shower of tongues, in which points, lines, and planes and the rest take on new characters by the dozen through the use of analogy. If we could identify our definitions, regarding their kinds and purposes —and hence the relations their terms bear to what is defined— and use the terms newly defined in ways dictated by these manifold definitions, then at least philosophic thinking would become less exclusive, less forbidding to all those outside the terminology of a particular thinker, and would make communication between philosophers, or between philosophers and the rest of the intellectual world, less difficult than it has become. Retaining the precision of high scientific discourse, and at the same time admitting the flexibility of its many appendages and surrogates, we could I think make a better advance on questions relating to localization of brain functions, to causal factors in race relationes, to sources of power and authority in democratic society. None of the problems arising from the sets of facts grouped about these terms are wholly solvable by simple appeal to definitions of terms, but none of them are solvable without that appeal.

RESUMEN

Un somero examen de la literatura filosófica nos revela que ésta se encuentra invadida por una desazón respecto al grado de laxitud permisible en el discurso filosófico y sobre el valor de los medios que se han sugerido para lograr una mayor precisión. Para hacer frente a las dificultades que todo uso de palabras acarrea, se han ideado múltiples distinciones: lenguaje ordinario y lenguaje de expertos, etc. Dichas distinciones señalan límites que deben cruzarse con cuidado. Pero prácticamente tales límites se derrumban tan pronto como se erigen. Lo que más se necesita, pues, no es una nueva dicotomía que reemplace a las anteriores, sino un mapa de todos los usos lingüísticos, que nos señale las principales clases de relaciones que un nombre puede tener con lo nombrado. En este intento no he querido relacionar a todos los nombres con cosas individuales, como si aquéllos fuesen sólo nombres propios. No sostengo una teoría atómica del significado, aunque ésta tiene manifiestas ventajas al establecer una correspondencia uno a uno entre nombres y cosas. Me opongo también a la opinión de que la búsqueda de exactitud y de designaciones únicas es infructuosa, y de lo más que podemos hacer es el esbozo de una multiplicidad de nombres entrelazados en cuanto a su significado y que nos dan pistas de un sistema de verdades, a pesar de que desde un principio nos enfrentemos a un lenguaje engañoso.

En este ensayo haremos las siguientes asunciones, sin justificarlas: (1) hay un mundo de cosas individuales cuyas existencias y desarrollos descansan, hasta cierto punto, en lo que ellas son, o sea, en sus naturalezas; (2) una cosa es, ni más ni menos, lo que es, aunque la consideremos en relación con otras cosas; (3) siempre puede mostrarse que una cosa tiene parecidos con otras cosas, lo cual nos permite decir que una cosa pertenece a una clase de cosas esencialmente iguales; (4) las cosas, sus naturalezas y su clasificaciones se pueden descubrir mediante la investigación; (5) la forma de reportar y comunicar estos descubrimientos está constituida por las definiciones; (6) por tanto, al menos algunas definiciones lo son de cosas, no de simples nombres; (7) algunas definiciones que se refieren directamente a cosas se adecúan más que otras a las naturalezas de las cosas mismas, y sobre esta base pueden juzgarse; (8) una definición, en oposición a una proposición, intenta ser una fórmula de la esencia de una cosa o cosas, o sea, que los términos constituyentes del *definiens*

nombran colectivamente los rasgos que una cosa debe poseer para
ser tal. Examinemos ahora la noción de proposición ordinaria, para
luego contrastarla con la de definición.

(1) El sujeto verbal de una proposición tiene una *función no-
minativa* respecto a la cosa que nombra. Nombra a un individuo
e impone un grado de individuación al significado de toda la pro-
posición.

(2) El predicado tiene como papel principal una *función deno-
tativa,* más bien que nominativa. Lo que el predicado denota no
es una cosa, sino algo representado en varios objetos.

(3) Por razones de lógica, podemos tratar a los adjetivos y
verbos del predicado como nociones aparte. Así, "el gato es negro
y perezoso" forma dos proposiciones, no obstante la unicidad de
la oración.

(4) El predicado tiene una segunda función, en cuanto se re-
fiere al sujeto verbal y no a lo que inhiere en el sujeto real.
Llamaré a ésta una *función predicativa.* Aunque el predicado de-
termina, no delimita la extensión sino el carácter de lo nombrado
por el sujeto verbal.

(5) Si en una proposición tenemos un predicado, asumimos
la existencia de un sujeto real, pero ni la unicidad ni la identidad
de tal sujeto son determinadas por el predicado.

(6) El individuo real, especificado mediante la función nomi-
nativa del sujeto verbal, es indicativo, en tanto que aquello que
inhiere en él es *determinativo*; esto ayuda a distinguirlo de otros
individuos del mismo tipo, pero no le da su unicidad ni su sepa-
ratividad.

En cuanto a las definiciones, el predicado gramatical de una
definición se puede intercambiar con el sujeto en cualquier con-
texto. No debe, por tanto, ser considerado como predicado lógico.
Aquí no funciona la distinción entre lo nominativo y lo denota-
tivo. Igualmente, no hay aquí distinción entre lo nominativo y lo
determinativo; la definición puede ser, tanto de carácter universal
como individual. Además, en una proposición podemos pasar de
una clase singular a una clase parcial y a una clase total o uni-
versal; lo único que necesitamos son expresiones cuantificadoras
que indiquen la elección hecha. Pero en una definición nos en-
contramos atados a una especie o *tipo* que en ciertos respectos
es, o es tratado como, uno y en otros respectos es una pluralidad.
Podemos distinguir clases de definición en cuanto se relacionan
más o menos remotamente con un enunciado literal y fundamen-
tal sobre la naturaleza de un tipo de cosa, mostrando así que en
cualquier caso no nos hallamos muy lejos de lo que se supone

que una definición formula. Yo encuentro cinco clases de definiciones admisibles y una que no lo es.

(1) *Definición arquetípica.* Se relaciona directamente con un tipo, y enuncia la única cualidad que hace que ese tipo sea ése y no otro.

(2) *Definición propia* o *definición típica.* Se refiere a una especie que tiene muchas cualidades esenciales y quizás algunos otros rasgos menos esenciales, pero impide la designación principal.

(3) *Definición amplia.* Se da al tratar de juntar la clase genérica que contiene a un tipo con uno o más tipos dentro de esa clase genérica.

(4) Definición en sentido *participativo.* Conocida como definición por *analogía.* Abarca no sólo a la clase genérica que contiene al tipo que se ha de definir, sino también a algunos géneros próximos junto con sus especies subordinadas.

(5) "Definición" en sentido *restringido.* Se refiere a un individuo o grupo de individuos de un tipo. Esta definición usa un nombre típico como si fuese un nombre propio.

(6) *Definición impropia.* Es toda frase definitoria que no pertenezca a ninguna de las anteriores clasificaciones, que vaya contra ellas, o que niegue definiciones correctamente aplicadas. La mayor parte de estas definiciones son muy semejantes entre sí, y se necesita examinar cada una de ellas cuidadosamente para ver cuánto pueden diferir de la arquetípica. Por otra parte, puede objetarse que esta clasificación no sirve para determinar *realmente* el tipo (de animal, de instrumento, de valor, o de lo que sea). No sirve, en efecto, por la sencilla razón de que dicha investigación concierne a las ciencias especiales. Lo que he dicho hasta aquí vale para las definiciones y para los términos. Deben considerarse atentamente las posibilidades de "contradicción" entre términos y de "falsificación" mutua de definiciones. Podemos decir que si dos términos se hallan en la misma proposición, ésta recibirá su caracterización de aquel de los dos constituyentes que sea más amplio e indefinido, y no debemos, por tanto, mezclar usos típicos con usos genéricos o analógicos si lo que se desea es un lenguaje literal serio. Podemos tomar dos términos que tradicionalmente haya sido difícil relacionar por identificación, diferenciación u oposición, y comparar sus clasificaciones definicionales mostrando que uno de los significados del primero coincide exactamente con uno de los significados del segundo. Entre tales pares de términos incluiría cuerpo y mente, poesía y prosa, bien común y bien individual, utilidad y belleza, ciencia y filosofía, ser y devenir, etcétera.

Mi teoría mantiene la precisión y literalidad en el centro del

discurso científico, pero permite y alienta en la periferia del mismo una mayor informalidad, relacionando luego los dos extremos al mostrar su mutua base y origen ónticos. Cualquier división establecida entre lenguaje común e ideal parece desvanecerse debido a que gran parte de lo ordinario puede ser preciso, y gran parte de lo ideal contiene aún a lo ordinario. En otros casos el lenguaje común puede ser tristemente vago; lo que entonces se necesita es remodelar también el lenguaje más exacto de la investigación científica, pues también se necesita liberar a éste de ambigüedades y metonimias, y circunscribir las hipérboles. Si pudiéramos identificar nuestras definiciones considerando sus clases y propósitos, y si pudiéramos usar los términos recientemente definidos en la forma dictada por estas múltiples definiciones, entonces el pensamiento filosófico podría al menos ser menos exclusivo y menos prohibitivo para aquellos que son ajenos a la terminología de algún pensador en particular; así, la comunicación entre filósofos, o entre éstos y el resto del mundo intelectual, sería menos difícil. Creo que conservando la precisión del discurso científico de alto nivel, y admitiendo a la vez la flexibilidad de sus muchos apéndices, podríamos avanzar más en las cuestiones relativas a la localización de las funciones cerebrales, los factores causales en las relaciones raciales, las fuentes de poder y autoridad en la sociedad democrática. Los problemas surgidos de los conjuntos de hechos agrupados en torno a estos términos no pueden resolverse apelando simplemente a definiciones de términos, pero ninguno de ellos puede resolverse sin tal apelación.