



## Identity, Ostension, and Hypostasis

W. V. Quine

*The Journal of Philosophy*, Vol. 47, No. 22 (Oct. 26, 1950), 621-633.

Stable URL:

<http://links.jstor.org/sici?sici=0022-362X%2819501026%2947%3A22%3C621%3AIOAH%3E2.0.CO%3B2-U>

*The Journal of Philosophy* is currently published by Journal of Philosophy, Inc..

---

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/jphil.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

---

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# THE JOURNAL OF PHILOSOPHY

---

## IDENTITY, OSTENSION, AND HYPOSTASIS <sup>1</sup>

### I

**I**DENTITY is a popular source of philosophical perplexity. Undergoing change as I do, how can I be said to continue to be myself? Considering that a complete replacement of my material substance takes place every few years, how can I be said to continue to be I for more than such a period at best?

It would be agreeable to be driven, by these or other considerations, to belief in a changeless and therefore immortal soul as the vehicle of my persisting self-identity. But we should be less eager to embrace a parallel solution of Heraclitus's parallel problem regarding a river: "You can not bathe in the same river twice, for new waters are ever flowing in upon you."

The solution of Heraclitus's problem, though familiar, will afford a convenient approach to some less familiar matters. The truth is that you *can* bathe in the same *river* twice, but not in the same river-stages. You can bathe in two river-stages which are stages of the same river, and this is what constitutes bathing in the same river twice. A river is a process through time, and the river-stages are its momentary parts. Identification of the river bathed in once with the river bathed in again is just what determines our subject-matter to be a river process as opposed to a river stage.

Let me speak of any multiplicity of water molecules as a *water*. Now a river-stage is at the same time a water-stage, but two stages of the same river are not in general stages of the same water. River stages are water stages, but rivers are not waters. You may bathe in the same river twice without bathing in the same water twice, and you may, in these days of fast transportation, bathe in the same water twice while bathing in two different rivers.

We begin, let us imagine, with momentary things and their interrelationships. One of these momentary things, called *a*, is a momentary stage of the River Cayster, in Lydia, around 400 B.C.

<sup>1</sup> Most of this paper is taken from the Theodore and Grace de Laguna Lecture, "Identity," which I gave at Bryn Mawr on December 5, 1949. Smaller portions are drawn from a lecture, "On Ontologies," given at the University of Southern California on July 21, 1949.

Another, called *b*, is a momentary stage of the Caÿster two days later. A third, *c*, is a momentary stage, at this same latter date, of the same multiplicity of water molecules which were in the river at the time of *a*. Half of *c* is in the lower Caÿster valley, and the other half is to be found at diffuse points in the Aegean Sea. Thus *a*, *b*, and *c* are three objects, variously related. We may say that *a* and *b* stand in the relation of river-kinship, and that *a* and *c* stand in the relation of water-kinship.

Now the introduction of rivers as single entities, viz., processes or time-consuming objects, consists substantially in reading identity in place of river-kinship. It would be wrong, indeed, to say that *a* and *b* are identical; they are merely river-kindred. But if we were to point to *a*, and then wait the required two days and point to *b*, and affirm identity of the objects pointed to, we should thereby show that our pointing was intended not as a pointing to two kindred river-stages but as a pointing to a single river which included them both. The imputation of identity is essential, here, to fixing the reference of the ostension.

These reflections are reminiscent of Hume's account of our idea of external objects. Hume's theory was that the idea of external objects arises from an error of identification. Various similar impressions separated in time are mistakenly treated as identical; and then, as a means of resolving this contradiction of identifying momentary events which are separated in time, we invent a new non-momentary object to serve as subject-matter of our statement of identity. Hume's charge of erroneous identification here is interesting as a psychological conjecture on origins, but there is no need for us to share that conjecture. The important point to observe is merely the direct connection between identity and the positing of processes, or time-extended objects. To impute identity rather than river-kinship is to talk of the River Caÿster rather than of *a* and *b*.

Pointing is of itself ambiguous as to the temporal spread of the indicated object. Moreover, even given that the indicated object is to be a process with considerable temporal spread, and hence a summation of momentary objects, still pointing does not tell us *which* summation of momentary objects is intended, beyond the fact that the momentary object at hand is to be in the desired summation. Pointing to *a*, if construed as referring to a time-extended process and not merely to the momentary object *a*, could be interpreted either as referring to the River Caÿster of which *a* and *b* are stages, or as referring to the water of which *a* and *c* are stages, or as referring to any one of an unlimited number of further less natural summations to which *a* also belongs.

Such ambiguity is commonly resolved by accompanying the pointing with such words as "this river," thus appealing to a prior concept of a river as one distinctive type of time-consuming process, one distinctive form of summation of momentary objects. Pointing to *a* and saying "this river"—or ὁδε ὁ ποταμός, since we are in 400 B.C.—leaves no ambiguity as to the object of reference if the word "river" itself is already intelligible. "This river" means "the riverish summation of momentary objects which contains this momentary object."

But here we have moved beyond pure ostension and have assumed conceptualization. Now suppose instead that the general term "river" is not yet understood, so that we can not specify the Caÿster by pointing and saying "This river is the Caÿster." Suppose also that we are deprived of other descriptive devices. What we may do then is point to *a* and two days later to *b* and say each time, "This is the Caÿster." The word "this" so used must have referred not to *a* nor to *b*, but beyond to something more inclusive, identical in the two cases. These two ostensions suffice to show that the Caÿster is not a water, since they associate *a* with *b* rather than with *c*. Strictly our specification of the Caÿster is not yet unique, however, for we might still mean any of a vast variety of other collections of momentary objects, related in other modes than that of river-kinship; all we know is that *a* and *b* are among its constituents. By pointing to more and more stages additional to *a* and *b*, however, we eliminate more and more alternatives, until our listener, aided by his own tendency to favor the most natural groupings, has grasped the idea of the Caÿster. His learning of this idea is an induction: from our grouping the sample momentary objects *a*, *b*, *d*, *g*, and others under the head of Caÿster, he projects a correct general hypothesis as to what further momentary objects we would also be content to include.

Actually there is in the case of the Caÿster the question of its extent in space as well as in time. Our sample pointings need to be made not only on a variety of dates, but at various points up and down stream, if our listener is to have a representative basis for his inductive generalization as to the intended spatio-temporal spread of the four-dimensional object Caÿster.

In ostension, spatial spread is not wholly separable from temporal spread; for the successive ostensions which provide samples over the spatial spread are bound to consume time. The inseparability of space and time characteristic of relativity theory is foreshadowed, if only superficially, in this simple situation of ostension.

The concept of identity, then, is seen to perform a central

function in the specifying of spatio-temporally broad objects by ostension. Without identity,  $n$  acts of ostension merely specify up to  $n$  objects, each of indeterminate spatio-temporal spread. But when we affirm identity of object from ostension to ostension, we cause our  $n$  ostensions to refer to the same large object, and so afford our listener an inductive ground from which to guess the intended reach of that object. Pure ostension plus identification conveys, with help of some induction, spatio-temporal spread.

## II

Now between what we have thus far observed and the ostensive explanation of *general* terms, such as "red" or "river," there is an evident similarity. When I point in a direction where red is visible and say "This is red," and repeat the performance at various places over a period of time, I provide an inductive basis for gauging the intended spread of the attribute of redness. The difference would seem to be merely that the spread concerned here is a conceptual spread, generality, rather than spatio-temporal spread.

And is this really a difference? Let us try shifting our point of view so far as to think of the word "red" in full analogy to "Caÿster." By pointing and saying "This is Caÿster" at various times and places, we progressively improve our listener's understanding as to what portions of space-time we intend our word "Caÿster" to cover; and by pointing and saying "This is red" at various times and places, we progressively improve our listener's understanding as to what portions of space-time we intend our word "red" to cover. The regions to which "red" applies are indeed not continuous with one another as those are to which "Caÿster" applies, but this surely is an irrelevant detail; "red" surely is not to be opposed to "Caÿster," as abstract to concrete, merely because of discontinuity in geometrical shape. The territory of the United States including Alaska is discontinuous, but it is none the less a single concrete object; and so is a bedroom suite, or a scattered deck of cards. Indeed every physical object that is not sub-atomic is, according to physics, made up of spatially separated parts. So why not view "red" quite on a par with "Caÿster," as naming a single concrete object extended in space and time? From this point of view, to say that a certain book is red is to affirm a simple spatio-temporal relationship between two concrete objects: the one object, the book, is a spatio-temporal part of the other, red, just as a certain waterfall is a spatio-temporal part of Caÿster.

Before proceeding to consider how it is that a general equating of universals to particulars breaks down, I want to go back and examine more closely the ground we have already been over. We have seen how identity and ostension are combined in conceptualizing extended objects, but we have not asked why. What is the survival value of this practice? Identity is more convenient than river-kinship or other relations, because the objects related do not have to be kept apart as a multiplicity. As long as what we may propose to say about the river Caÿster does not in itself involve distinctions between momentary stages *a*, *b*, etc., we gain formal simplicity of subject-matter by representing our subject-matter as a single object, Caÿster, instead of a multiplicity of objects *a*, *b*, etc., in river-kinship. The expedient is an application, in a local or relative way, of Occam's razor: the entities concerned in a particular discourse are reduced from many, *a*, *b*, etc., to one, the Caÿster. Note, however, that from an over-all or absolute point of view the expedient is quite opposite to Occam's razor, for the multiple entities *a*, *b*, etc., have not been dropped from the universe; the Caÿster has simply been added. There are contexts in which we shall still need to speak differentially of *a*, *b*, and others rather than speaking indiscriminately of the Caÿster. Still the Caÿster remains a convenient addition to our ontology because of the contexts in which it does effect economy.

Consider, somewhat more generally, a discourse about momentary objects all of which happen still to be river-stages, but not entirely river-kindred. If it happens in this particular discourse that whatever is affirmed of any momentary object is affirmed also of every other which is river-kindred to it, so that no distinctions between stages of the same river are relevant, then clearly we can gain simplicity by representing our subject-matter as comprising a few rivers rather than the many river-stages. Diversities remain among our new objects, the rivers, but no diversities remain beyond the needs of the discourse with which we are occupied.

I have been speaking just now of integration of momentary objects into time-consuming wholes, but it is clear that similar remarks apply to integration of individually indicable localities into spatially extensive wholes. Where what we want to say about certain broad surfaces does not concern distinctions between their parts, we simplify our discourse by making its objects as few and large as we can: taking the various broad surfaces as single objects.

Analogous remarks hold, and very conspicuously, for conceptual integration: the integrating of particulars into a universal. Suppose a discourse about person stages, and suppose that whatever is said about any person stage, in this particular discourse,

applies equally to all person stages which make the same amount of money. Our discourse is simplified, then, by shifting its subject-matter from person stages to income groups. Distinctions immaterial to the discourse at hand are thus extruded from the subject-matter.

In general we might propound this maxim of the *identification of indiscernibles*: Objects indistinguishable from one another within the terms of a given discourse should be construed as identical for that discourse. More accurately: the references to the original objects should be reconstrued for purposes of the discourse as referring to other and fewer objects, in such a way that indistinguishable originals give way each to the same new object.

For a striking example of the application of this maxim, consider the familiar so-called propositional calculus. To begin with, let us follow the lead of some modern literature by thinking of the “*p*,” “*q*,” etc. of this calculus as referring to propositional concepts, whatever they may be. But we know that propositional concepts alike in truth value are indistinguishable within the terms of this calculus; interchangeable so far as anything expressible in this calculus is concerned. Then the canon of identification of indiscernibles directs us to reconstrue “*p*,” “*q*,” etc., as referring merely to truth values—which, by the way, was Frege’s interpretation of this calculus.<sup>2</sup>

For my own part, I prefer to think of “*p*,” “*q*,” etc., as schematic letters standing in place of statements but not referring at all. But if they are to be treated as referring, the maxim is in order.

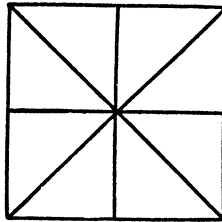
Our maxim of identification of indiscernibles is relative to a discourse, and hence vague in so far as the cleavage between discourses is vague. It applies best when the discourse is neatly closed, like the propositional calculus; but discourse generally departmentalizes itself to some degree, and this degree will tend to determine where and to what degree it may prove convenient to invoke the maxim of identification of indiscernibles.

### III

Now let us return to our reflections on the nature of universals. Earlier we represented this category by the example “red,” and found this example to admit of treatment as an ordinary spatio-temporally extended particular on a par with the Caÿster. Red

<sup>2</sup> G. Frege, “Ueber Sinn und Bedeutung,” *Zeitschrift für Philosophie und philosophische Kritik*, 1892. Translated in Feigl and Sellars, *Readings in Philosophical Analysis*, New York, 1949.

was the largest red thing in the universe: the scattered total thing whose parts are all the red things. Similarly, in the recent example of income groups, each income group can be thought of simply as the scattered total spatio-temporal thing which is made up of the appropriate person stages, various stages of various persons. An income group is just as concrete as a river or person, and, like a person, it is a summation of person stages. It differs from a person merely in that the person stages which go together to make up an income group are another assortment than those which go together to make up a person. Income groups are related to persons much as waters are related to rivers; for it will be recalled that the momentary object *a* was part (spatio-temporally) both of a river and of a water, while *b* was a part of the same river but not of the same water, and *c* was a part of the same water but not of the same river. Up to now, therefore, the distinction between spatio-temporal integration and conceptual integration appears idle; all is spatio-temporal integration.



Now let me switch to a more artificial example. Suppose our subject-matter consists of the visibly outlined convex regions, small and large, in this figure. There are 33 such regions. Suppose further that we undertake a discourse relatively to which any geometrically similar regions are interchangeable. Then our maxim of identification of indiscernibles directs us for purposes of this discourse to speak not of similarity but of identity; to say not that *x* and *y* are similar but that  $x = y$ , thus reconstruing the objects *x* and *y* as no longer regions but shapes. The subject-matter then shrinks in multiplicity from 33 to 5: the isosceles right triangle, the square, the two-to-one rectangle, and two forms of trapezoid.

Each of these five is a universal. Now just as we have reconstrued the color "red" as the total spatio-temporal thing made up of all the red things, so suppose we construe the shape square as the total region made up by pooling all the five square regions. Suppose also we construe the shape isosceles right triangle as the total region made up by pooling all the 16 triangular regions.



Similarly suppose we construe the shape two-to-one rectangle as the total region made up by pooling the four two-to-one rectangular regions; and similarly for the two trapezoidal shapes. Clearly this leads to trouble, for our five shapes then all reduce to one, the total region. Pooling all the triangular regions gives simply the total square region; pooling all the square regions gives the same; and similarly for the other three shapes. We should end up, intolerably, by concluding identity among the five shapes.

So the theory of universals as concrete, which happened to work for red, breaks down in general.<sup>3</sup> We can imagine that universals in general, as entities, insinuated themselves into our ontology in the following way. First we formed the habit of introducing spatio-temporally extended concrete things, according to the pattern considered earlier. Red entered with Cayster and the others as a concrete thing. Finally triangle, square, and other universals were swept in on a faulty analogy with red and its ilk.

Purely as philosophical sport, without supposing there to be any serious psychological or anthropological import in our reflections, let us now go back to Hume's theory of external objects and carry it a step further. Momentary impressions, according to Hume, are wrongly identified with one another on the basis of resemblance. Then, to resolve the paradox of identity among temporally disparate entities, we invent time-consuming objects as objects of the identity. Spatial spread, beyond what is given momentarily in an impression, may be supposed introduced in similar fashion. The entity "red," call it a universal or a wide-spread particular as you please, may be viewed as entering by the same process (though we are now beyond Hume). Momentary localized red impressions are identified one with another, and then a single entity "red" is appealed to as vehicle of these otherwise untenable identities. Similarly for the entity square, and the entity triangle. Square impressions are identified with one another, and then the single entity square is imported as vehicle for the identity; and correspondingly for triangle.

So far, no difference is noted between the introduction of particulars and universals. But in retrospect we have to recognize a difference. If square and triangle were related to the original square and triangular particulars in the way in which concrete objects are related to their momentary stages and spatial fragments, then square and triangle would turn out to be identical with each other—as lately observed in terms of our artificial little universe of regions.

<sup>3</sup> For a closer examination of this point see Nelson Goodman's forthcoming book, *The Structure of Appearance*.

Therefore we come to recognize two different types of association: that of concrete parts in a concrete whole, and that of concrete instances in an abstract universal. We come to recognize a divergence between two senses of "is": "This is the Caÿster" versus "This is square."

## IV

Interrupting this speculative psychology, let us return to our analysis of ostension of spatio-temporally extended objects, and see how it differs from what may be called the ostension of irreducible universals such as square and triangle. In ostensively explaining the Caÿster we point to *a*, *b*, and other stages, and say each time "This is the Caÿster," identity of indicated object being understood from each occasion to the next. In ostensively explaining "square," on the other hand, we point to various particulars and say each time "This is square," *without* imputing identity of indicated object from one occasion to the next. These various latter pointings give our listener the basis for a reasonable induction as to what we might in general be willing to point out as square, just as our various former pointings gave him the basis for a reasonable induction as to what we might willingly point to as the Caÿster. The difference in the two cases is merely that in the one case an identical indicated object is supposed, and in the other case not. In the second case what is supposed to be identical from pointing to pointing is not the indicated object, but, at best, an attribute squareness which is *shared by* the indicated objects.

Actually there is no need, up to this point, to suppose such entities as attributes at all in our ostensive clarification of "square." We are clarifying, by our various pointings, our use of the words "is square"; but neither is an object squareness supposed as object pointed to, nor need it be supposed available as reference of the word "square." No more need be demanded, in explication of "is square" or any other phrase, than that our listener learn when to expect us to apply it to an object and when not; there is no need for the phrase itself to be a name in turn of a separate object of any kind.

These contrasts, then, have emerged between general terms and singular terms. First, the ostensions which introduce a general term differ from those which introduce a singular term in that the former do not impute identity of indicated object between occasions of pointing. Second, the general term does not, or need not, purport to be a name in turn of a separate entity of any sort, whereas the singular term does.

These two observations are not independent of each other. The accessibility of a term to identity contexts was urged by Frege

(*op. cit.*) as the standard by which to judge whether that term is being used as a name. Whether or not a term is being used as naming an entity is to be decided, in any given context, by whether or not the term is viewed as subject in that context to the algorithm of identity: the law of putting equals for equals.<sup>4</sup>

It is not to be supposed that this doctrine of Frege's is connected with a repudiation of abstract entities. On the contrary, we remain free to admit names of abstract entities; and, according to Frege's criterion, such admission will consist precisely in admitting abstract terms to identity contexts subject to the regular laws of identity. Frege himself, incidentally, was rather a Platonist in his own philosophy.

It is clearest, I think, to view this step of hypostasis of abstract entities as an additional step which follows after the introduction of the corresponding general terms. First we may suppose the idiom "This is square," or " $x$  is square," introduced—perhaps by ostension as previously considered, or perhaps by other channels, such as the usual geometrical definition in terms of prior general terms. Then as a separate step we derive the attribute *squareness*, or what comes to much the same thing, *the class of squares*. A new fundamental operator "class of," or "-ness," is appealed to in this step.

I attach much importance to the traditional distinction between general terms and abstract singular terms, "square" versus "squareness," because of the ontological point: use of the general term does not of itself commit us to the admission of a corresponding abstract entity into our ontology; on the other hand the use of an abstract singular term, subject to the standard behavior of singular terms such as the law of putting equals for equals, flatly commits us to an abstract entity named by the term.

It is readily conceivable that it was precisely because of failure to observe this distinction that abstract entities gained their hold upon our imaginations in the first place. Ostensive explanation of general terms such as "square" is, we have seen, much like that of concrete singular terms such as "Cajster," and indeed there are cases such as "red" where no difference need be made at all. Hence the natural tendency not only to introduce general terms along with singular ones, but to treat them on a par as names each of a single entity. This tendency is no doubt encouraged by the fact that it is often convenient for purely syntactical reasons, reasons, e.g., of word order or cross-reference, to handle a general term like a proper name.

<sup>4</sup> For another criterion to the same purpose see my "Designation and Existence," this JOURNAL, Vol. XXXVI (1939), pp. 701-709.

## V

The conceptual scheme in which we grew up is an eclectic heritage, and the forces which conditioned its evolution from the days of Java man onward<sup>5</sup> are a matter of conjecture. Expressions for physical objects must have occupied a focal position from the earliest linguistic periods, because such objects provided relatively fixed points of reference for language as a social development. General terms also must have appeared at an early stage, because similar stimuli tend psychologically to induce similar responses; similar objects tend to be called by the same word. We have seen, indeed, that the ostensive acquisition of a concrete general term proceeds in much the same way as that of a concrete singular term. The adoption of abstract singular terms, carrying with it the positing of abstract entities, is a further step and a philosophically revolutionary one; yet we have seen how this step in turn could have been made without conscious invention.

There is every reason to rejoice that general terms are with us, whatever the cause. Clearly language would be impossible without them, and thought would come to very little. On the admission of abstract entities, however, as named by abstract singular terms, there is room for divergent value judgments. For clarity it is important in any case to recognize in their introduction an additional operator, "class of" or "-ness." Perhaps, as just now suggested, it was failure to appreciate the intrusion of such an additional unexplained operator that engendered belief in abstract entities. But this genetic point is independent of the question whether abstract entities, once with us, are not a good thing from the point of view of conceptual convenience after all—happy accident though their adoption may have been.

Anyway, once abstract entities are admitted, our conceptual mechanism goes on and generates an unending hierarchy of further abstractions as a matter of course. For, it must be noted to begin with that the ostensive processes which we have been studying are not the only way of introducing terms, singular or general. Most of us will agree that such introduction is fundamental; but once a fund of ostensively acquired terms is at hand there is no difficulty in explaining additional terms discursively, through paraphrase into complexes of the terms already at hand. Now discursive explanation, unlike ostension, is just as available for defining new

<sup>5</sup> The unrefined and sluggish mind  
Of *homo javanensis*  
Could only treat of things concrete  
And present to the senses.

general terms applicable to abstract entities, e.g., "shape" or "zoölogical species," as for defining general terms applicable to concrete entities. Applying then the operator "-ness" or "class of" to such abstract general terms, we get second-level abstract singular terms, purporting to name such entities as the attribute of being a shape or zoölogical species, or the class of all shapes or zoölogical species. The same procedure can be repeated for the next level, and so on, theoretically without end. It is in these higher levels that mathematical entities such as numbers, functions of numbers, etc., find their place, according to the analyses of the foundations of mathematics which have been usual from Frege onward through Whitehead and Russell.

The fundamental-seeming philosophical question, How much of our science is merely contributed by language and how much is a genuine reflection of reality? is perhaps a spurious question which itself arises wholly from a certain particular type of language. Certainly we are in a predicament if we try to answer the question; for to answer the question we must talk about the world as well as about language, and to talk about the world we must already impose upon the world some conceptual scheme peculiar to our own special language.

Yet we must not leap to the fatalistic conclusion that we are stuck with the conceptual scheme that we grew up in. We can change it bit by bit, plank by plank, though meanwhile there is nothing to carry us along but the evolving conceptual scheme itself. The philosopher's task was well compared by Neurath to that of a mariner who must rebuild his ship on the open sea.

We can improve our conceptual scheme, our philosophy, bit by bit while continuing to depend on it for support; but we can not detach ourselves from it and compare it objectively with an un-conceptualized reality. Hence it is meaningless, I suggest, to inquire into the absolute correctness of a conceptual scheme as a mirror of reality. Our standard for appraising basic changes of conceptual scheme must be, not a realistic standard of correspondence to reality, but a pragmatic standard. Concepts are language, and the purpose of concepts and of language is efficacy in communication and in prediction. Such is the ultimate duty of language, science, and philosophy, and it is in relation to that duty that a conceptual scheme has finally to be appraised.

Elegance, conceptual economy, also enters as an objective. But this virtue, engaging though it is, is secondary—sometimes in one way and sometimes in another. Elegance can make the difference between a psychologically manageable conceptual scheme and one that is too unwieldy for our poor minds to cope with effectively.

Where this happens, elegance is simply a means to the end of a pragmatically acceptable conceptual scheme. But elegance also enters as an end in itself—and quite properly so as long as it remains secondary in another respect; namely, as long as it is appealed to only in choices where the pragmatic standard prescribes no contrary decision. Where elegance doesn't matter, we may and shall, as poets, pursue elegance for elegance's sake.

W. V. QUINE

HARVARD UNIVERSITY

---

## COMMENTS AND CRITICISM

### GÖDEL AND THE SYNTHETIC *A PRIORI*: A REJOINDER

In a previous contribution<sup>1</sup> it was argued that the Gödel incompleteness theorems refute the theory that all *a priori* truths are analytic. A defender of the analytic theory, Atwell R. Turquette, has since published a criticism of that note.<sup>2</sup> It seems to me that the critic has not quite caught the point of my remarks, and so has attributed to me views which I do not wish to maintain. To clear up any such misunderstandings, it has seemed worth while to request space from the editors to point them out.

(1) Twice within the compass of his brief criticism, Turquette wrote that "it is admitted" that the Gödel theorems "are very little concerned" with ("... are radically different from ...") "... issues in the history of philosophy ..."<sup>3</sup> Twice: "it is admitted." But by whom? Certainly the article being criticized contains no such admissions! The Gödel formulas express propositions of pure mathematics, and it is precisely the propositions of pure mathematics that have been central in discussions of the *a priori* from Plato through Kant to the present day. Turquette's reference to Kant (footnote 6) is curious, because in Kant's philosophy the paradigms of synthetic *a priori* truths are the propositions of pure mathematics. (Of course agreement with Kant that there is a synthetic *a priori* does not commit one to accepting Kant's explanation of how we come to know it.)

(2) In his criticism, Turquette seems not to be entirely clear about what was claimed in the original article. He wrote: "... it is difficult to imagine just what kind of philosophical edifice

<sup>1</sup> "Modern Logic and the Synthetic *A Priori*," this JOURNAL, Vol. XLVI (1949), pp. 243-245.

<sup>2</sup> "Gödel and the Synthetic *A Priori*," *Ibid.*, Vol. XLVII (1950), pp. 125-129.

<sup>3</sup> Turquette, *op. cit.*, p. 125, and again on p. 126.