

CHAPTER X

RESEMBLANCE, UNIVERSALS, AND CONCEPTS

THE remark that the term universal has been, and still is used in widely diverse senses is, of course, a commonplace. In the course of some of the foregoing chapters, an attempt has been made to indicate that, as well as the reasons why, the present work is concerned not at all with the "concrete universal"; or with any variation on that conception.

It may be well to notice that, as a matter of fact, the term universal has been used (over and over again) to refer to an alleged common nature; or, again, as referring to a form common to two or more particulars, or instances, or substances.

And it is said in this regard (and no less often) that these common natures or forms are common to individuals (or particulars or instances) that *resemble* each other in respect of the common nature—the universal—they have "in common".

For that reason alone, it may be suggested that any inquiry whatever into the nature of universals must perforce derive from a prior analysis of resemblance.

If we mean by a universal any being repeated in two cases of itself, it would seem that any resemblance, in the first one of the two primary senses of resemblance made out above, is a universal. Thus, for example, r^1 and r^2 constitute a universal. This would be true of resemblances in our first derivative sense of the term; namely that of complexes of repeated qualitative identities or resemblances.

Even so, it may be urged, this view of the matter does not even touch upon those universals designated by abstract nouns and abstract adjectives. In order to do so we shall have to retrace our steps a few paces.

It has been indicated above that there may be no common nature or form properly and uniquely designated "resemblance", or "resemblance as such". It is urged, we have noticed, that things (or qualities, or relations) called by the same name must, therefore, have something in common. One fallacy in the specious same-name argument has been examined above,⁽¹⁾ and, perhaps, need not be entered into again.

Moreover, as we have seen above, the nature or form assumed to be common to all resemblances whatever could be no determinate resemblance, such as that of two hues of the same chroma, intensity, and saturation. No more could this alleged common nature be any range of determinate resemblances, no matter how extensive or comprehensive in scope. Therefore, the alleged common nature in question could only be something or other that were distinct from any determinate resemblance whatever.

As distinct from any determinate resemblance, *such as* two medallions drawn from the same mould, resemblance *as such* would be distinct both from any determinate resemblance, such as r^1 , r^2 , and any range or ranges of determinate resemblances. For that reason alone, resemblance-as-such — abstract resemblance — would be resemblance—indeterminate. And the alleged being that were indeterminate could not be distinct from nothing.

As has been pointed out above, if we accept the tautology, *to be* is to be *determinate*, then, we accept the consequence that *to be is to be determinate* means what is meant by *to be distinct from anything whatever*. If an asserted being were not distinct from at least one other being of some sort, it would be distinct from nothing at all. Therefore, "it" would be nothing.

Let us now revert to the two senses of the term universal indicated above. It may be plain that *mutatis mutandis*, the considerations advanced in the foregoing paragraphs apply to universals.

There could be no abstract universal of universals—no

⁽¹⁾ Chapter IX.

abstract universal, or abstract resemblance—common to all determinate universals.

No more could there be a universal being that were designated by an abstract noun or adjective, such as “redness”.

Either “redness” designates any two cases of a red hue of the same chroma, intensity, and saturation, or it refers to some range or other of reds. On the first alternative, the universal (or resemblance) evinced is not abstract, in any one of the four senses indicated above.

On the second alternative we are again back on no less familiar ground.

The referent of “redness” could hardly be any one red hue repeated in two cases of itself. No more could that referent be any range of reds. Any red hue repeated in two cases of itself is not abstract. And in any range of reds (or in any range of any beings whatever) there may be no common nature or form—no resemblance—that might be properly designated by “redness”; or by any other abstract noun or adjective.

Yet it is clear that we do make sensible statements that employ abstract nouns and adjectives. It has been indicated above that the referent of these terms verbal may be neither a single universal, such as a shade of orpiment repeated in at least two cases of itself, nor any range of universals. What, then, is the referent of an abstract noun or adjective?

Here again we must retrace our steps. We have noticed that neither the term resemblance nor, *mutatis mutandis*, the term “universal”, may have a single referent. And, therefore, we have seen that neither resemblance nor its correlative term universal may have a connotation proper and peculiar to either one of the two terms.

Yet to find either or both of those abstract terms to be without a referent that would be proper and peculiar to it, is not to conclude that either term is meaningless.

The term resemblance (and, differences in detail allowed for, the term universal) is not a qualifying predicate. In

any case of the use of an abstract noun or adjective—whether it be resemblance, universal, or, for example, colour—the abstract noun or adjective thus in use is *per se* a term verbal. In any case of the use of such terms, the term will derive its connotation from its context. Thus to say that my copy of *Riders to the Sea* resembles your copy in various respects is to use the term resemblance (or the term universal) to refer to the qualitative identities, and the analogous resemblances, however complex and diffused, of which that factual resemblance consists. And a resemblance, in any one of the four senses of the term we have noticed above, is a universal. Thus the referent in question is a described matter of any such contents of perception, imagination or judgment.

The meaning of the term resemblance (and, *mutatis mutandis*, that of the term universal) thus derives from the connotation of the context in which it is used. That context may be comparatively simple, as in the description of two cases of azurite. Or, again, that context may be rather elaborate; as in the comparison of two Ionic Capitols. In any case, the term resemblance, or the term universal, will neither mean nor even designate more than is meant by the connotation of its context.

The second one of the two primary senses of resemblance, together with its derivative sense, remain to be considered. The following pages will be concerned in part with resemblances that are diverse, yet analogous.

It has been pointed out above that comparing individuals or substances as more or less resembling in point of their several qualities is not the same as comparing different-qualities in point of degrees of resemblance.

Thus two postage stamps of the same issue and denomination may be compared as having more in common with each other than with some other stamp of a different issue and denomination. In this (and any other) comparison of individuals as more or less resembling, the phrase “more resembling” means that *numerically* more resemblances (whether exact or analogical) are repeated in the two stamps

of the same issue and denomination than are repeated in either (or both) of those individuals, or in a stamp of any other issue. The meaning of "less resembling" in statements about individuals thus compared is the converse of this. Any pair of twins might have in common with each other more enumerable characteristics than either (or both) of them would have in common with their closest friend. And statements to that effect about those twins and their friend would have a referent in the enumerable (because discriminated) characteristics that would be repeated in the twins.

Yet, to compare individuals in point of the *number* of characteristics repeated in them is not to compare single qualities or relations as being more or less resembling. A comparison of two moths as being the same in the nerve structure of their ferned antennæ is a comparison of the two insects in point of those two characteristics in respect of which those qualities or relations are either analogous or the same: it is not a comparison of the nerve-structure of a wing with the structure of the ferned antennæ.

Thus, in the comparison of S_1 and S_2 with S_3 , we are comparing those individuals in point of the number of the repeated or analogous characteristics that may be repeated in those three individuals. But in the comparison of single qualities, such as orange and a yellow, we are not comparing individuals in point of the number of qualities repeated in them; rather, we are comparing the single qualities themselves.

Before going on to this latter form of comparison, however, it may be well to notice that, in comparing individuals of whatever character, in respect of their complexes of qualities and relations, we may speak of them as "more or less" resembling, in point of quality or relation without contradicting ourselves.

Thus, two individuals may resemble each other wholly in all respects that are wholly the same. That is to say, simply, that they have more respects in common with each other than they have in common with anything else.

Consequently, when a substance S_1 (or an individual I_1) is said to resemble S_2 more than S_1 resembles S_3 , this will be true on the basis of a number of resemblances or qualitative identities found in S_1 and in S_2 that is superior to the number of resemblances found in S_1 and S_3 . In any such context, wherein substances are compared in respect of self-identical resemblances common to them, the phrase "more resembling", or an equivalent phrase, will refer to the set of resemblances whose number, in the case of S_1 and S_2 , is superior to the number of resemblances that are found in S_1 and S_3 .

By the same token, where a quality Q is said to resemble another quality L more than Q resembles quality J , and Q , L , and J are respectively complexes of discriminated qualities, we may compare those complexes on a discriminated basis closely analogous to that on which several substances may be compared as more or less resembling. Let Q consist of qualities c, d, e, f, g ; let L consist of b, d, e, x, g , and let J consist of a, n, o, p, g . Then the complex Q and the complex L will have three qualities, d, e, g , in common; whereas with J they will have in common only the one quality, g . The statement, "Q resembles L more than it resembles J", will have as its referent a discriminated matter of fact; viz., the qualities which complex Q has in common with complex L , as well as the single quality that Q and L have in common with the complex J .

We have seen that this form of comparison does not take account of the comparison of degrees of quality or relation. The fact of such comparisons thus remains to be considered. It is sometimes held that comparisons of single qualities as resembling each other more or less are comparisons of them in point of degrees of some resemblance or other. Thus, a certain hue will be said to be more like red than yellow, because it is red to a degree higher than the degree to which it is yellow.

Yet, on a logic of contradictories, a quality may not be itself more or less. For A is A absolutely, not A is A to this or that degree. Whenever we are comparing either

substances or complexes or qualities, we may speak of a superior number or common qualities as a superior degree of resemblance, if it be convenient to do so. But to refer to a shade of orange as either being or resembling redness to a degree would be to forget that (on a logic of absolute identity) any shade of orange is intrinsically itself; it would be to overlook the absolute self-identity of that hue. The referent of "more resembling", in propositions which state comparisons of qualities or relations, will be the repeated qualities compared in point of superior or inferior number.

But in statements which express comparisons of diverse qualities as resembling each other more or less—as orange may be said to resemble red more than blue—the case is quite different. For in this case *repeated* qualities are not in question. Therefore, no comparison of repeated qualities could be the referent of a statement of a comparison of different single qualities. What then, we may ask again, may be that referent?

Let us again take the example of hues. It is frequently said that no hue is definable. And there is a sense in which this position in that regard is well assured. But to infer from this that there is no sense in which a hue may be defined, would be to infer too much. Any hue may be defined in the sense that a statement may be formulated that identifies that hue and no other one.

Hues which are close to each other on the colour circle are sometimes called *analogous* hues. This seems a good name for hues. For it may remind us that orange is to yellow and red, as red is to orange and purple, and so on.

Thus, the statement, "orange stands between yellow and red in the order of analogous hues", identifies *any* orange hue and no other hue. For it is of the nature of an orange hue that it is to yellow and red, as red is to orange and purple. And it is of the nature *only* of an orange hue that this is true. All hues which are to yellow and red as red is to orange and purple are orange. To say that orange is not to yellow and red as red is to orange and purple is to say that an orange hue is not orange.

Any hue may be defined, or identified, by a statement of its position in the order of analogous hues. With this in mind, we may go on to ask what is meant by the statement that this order or that order is intrinsic.

Let us consider, first of all, a point that is so simple that it may seem laughably simple-minded. This point is that a green hue (say) is between yellow and blue in the analogous order of hues because it is a green. The logic of the "because" here is apagogic. To say that a green is not between yellow and blue, in the analogous order of hues, is to say that a green is not a green. This is true, *mutatis mutandis*, of any hue in that order. The reason why blue is to purple and green as orange is to yellow and red is that blue is blue.

Let us consider, next, that the blue character of a blue is intrinsic to it. That is to say, if we like, that the existence of a blue requires an efficient cause, but that the being of a blue, is its formal cause. Any blue is what it is. And so with any quality or relation. The reason for this is apagogic. To say that any blue is not what it is, is to say that a blue is not blue.

Now whenever we consider these two points together, we may find that they bring out what is meant by the statement that the order of hues is intrinsic to any and all hues. We have noticed that any hue will stand where it stands in the order of hues because it is that hue. This is to say that nothing intrinsic to (say) orange is requisite for an understanding of why it is that orange stands between yellow and red. It is of the nature of any orange hue that this should be so. This is to say simply that it is of the nature of any hue whatever that it should stand where it stands in the order of hues. In no case is anything extrinsic to the order of hues involved. Red, orange, yellow, green, blue, and purple, *are* in that order because they *are* respectively purple, blue, green, yellow and red.

This, then, is at least part of what it means to say that the order of hues is intrinsic to them. That order is in and of those hues. It is in and of them because it consists of them,

and of nothing extrinsic to them. They are in that order, and in no other one, because they are the hues that they are. And any hue is what it is for the best reason possible; the reason, namely, that it may not be otherwise than it is.

It may be well to point out the difference between an intrinsic order and an arrangement. It is fairly plain that there is nothing strictly ineluctable about any arrangement of hues. Let us take a set of coloured papers and spread them out haphazard fashion. The orange paper, we shall assume, is farthest away from the red in space. Yet it is true that orange *qua* orange is nearer red than blue.

Arrangements of hues may be arbitrary: they are never strictly ineluctable. For we can always choose to disregard this or that rule of composition, or any dictate of taste. But before the intrinsic order of hues, our position is strictly ineluctable. We have no choice in the matter. Wherever and whenever there may be an orange hue it is true of it that it is to yellow and red as blue is to green and purple in the order of hues.

The referent of statements expressing "degrees of resemblance" may now be more than plain. The statement, "orange resembles red more than purple," means that orange is nearer red than purple in the intrinsic order of hues. In any such context as this one, where single qualities are compared as more or less resembling, "more resembling" and "less resembling" will refer to the distance between the hues compared. The distance consists of the hues which lie between the hues that are in question.

Thus there are more hues between blue and red than there are between yellow and red. And, in this sense, blue is further from red than yellow. Or, conversely, yellow is nearer red than blue. Thus, "yellow resembles red more than blue", means what is meant by, "yellow is nearer red than blue", in the intrinsic order of hues. And in this there is nothing incompatible with the absolute identity of a yellow.

And so we may notice again that there are two distinct senses of "degrees of resemblance". Two individuals, A

and B, resemble each other more than they resemble a third individual C when there are more qualities repeated in A and B than in either of them and in C. And A and B resemble each other less than one of them resembles C when there are fewer qualities repeated in A and B than are repeated in one of them and C. This holds also of complexes of qualities.

But single analogous qualities or relations are more or less resembling as they are nearer to, or further from, a selected quality in the orders which those respective qualities and relations wholly constitute. Thus comparable positions in an order will be the referents of statements about degrees of resemblance in the qualities and relations thus ordered. Taken and used in this sense, "degrees of resemblance" refers not at all to a relation of comparison; rather as so used, that phrase is the name of neither of a qualitative identity that requires at least two cases of itself for its illustration, nor of any range of analogous resemblances or universals.

For, in the present sense, "degrees of resemblance" is the name not of a quality or relation of any sort whatever, but rather, of an order of this or that quality or relation. It is this intrinsic range of any quality or any relation that affords a referent for "degrees of resemblance" in point of the intrinsic positions of the items thus ordered; items which may be compared not in themselves alone, but as nearer to or further from one another in their respective orders.

The main difference between these two modes of comparison is that the one may be dyadic, whereas the other is at least triadic. Thus Spqr and Saqb may be compared in point of q^1 and q^2 ; and that comparison is dyadic. But we cannot properly say merely that "orange is nearer red". Orange is nearer red than (say) blue. And this sentence is the statement of a triadic comparison. This is not to forget that, "orange is next to red", is the statement of a dyadic relation. It is only to remember that such sentences are not statements of comparison. Any comparison of two qualities A and B as being more or less like a third quality C will require the third term of the comparison.

Yet for what reason, one may ask, would our adverse critic discover that the examples in question are in one order, rather than another? Now, more often than not, when we ask for the reason why such and such is the case, we are asking about the premises, or the ground from which the matter in question might be inferred. Then again, we may ask about the cause of a thing, when we ask about the reason or "ground" for it.

The "ground" of any intrinsic order whether of qualities or relations lies in the respective qualities or relations thus ordered. This means that the ground in question consists of those items themselves.

The reason in question is a tautology. Certain qualities are in this logical order, rather than in that one, for the reason that those qualities are what they are. The validity of a tautology is demonstrable by apagogic reasoning. For the contradictory of a tautology contradicts itself. To say that orange might not be nearer red than blue is to say that orange might not be orange.

This is not to say that whatever hue a man may perceive when he looks at a grapefruit is demonstrable by apagogic or any form of *a priori* reasoning. Presumably most of us are aware of a yellow hue when we look at a grapefruit. But if (the fruit were green in colour (as it would be in its infancy) the point would remain unaltered. For this perceived hue would be nearer yellow or blue than red or orange. To say that this might not be the case is to say that this green hue of a grapefruit might not be green.

But from the tautology that any quality or relation will stand where it stands in an intrinsic order because those qualities or relations are what they are, nothing in particular may be inferred.

That is to say at least two things. First, that what a man will be aware of in this, or in that situation, is something that is not demonstrable before the fact. For example, where most men will see red and green, a man who is colour-blind will see shades of grey. Yet, it remains true that red

is to violet as violet is to blue; that green is to yellow as yellow is to orange. And the darker shades of grey are to middle dark as that shade is to light grey. Second, that the *arrangement* in which intrinsically ordered qualities *exist* is independent of the intrinsic order in which those qualities are. Various hues may be placed in any arrangement one may prefer. Yet, it remains true that, in the intrinsic order of hues, green is to blue as blue is to violet.

Thus we may notice again that, whereas the *existence* and *arrangement* of intrinsically ordered qualities and relations is contingent, their intrinsic order is necessary. Where and when a red may exist, for example, and what may be the hues surrounding it, are contingent matters. Yet the order in which the hues are to one another is not contingent, but intrinsic. Any one arrangement of any hues whatever might have been any other arrangement of them. Yet the intrinsic order of hues may not be otherwise than it is. To say that red might not be to violet as violet is to blue is to say that red might not be red.

Let us now revert to a major point that has been laboured all along. We have noticed that there are two radically different senses of resemblance. There are resemblances (whether simple or complex) that are qualitative identities repeated in at least two cases of themselves, and there are analogous resemblances, no matter how wide or narrow in range.

As an example of the sort of confusion that may result from a failure to distinguish between the two basic senses of resemblance, or universals, indicated above, let us consider briefly the practice of taxonomy in botany.

Within that subdivision of biology, the term "taxonomy" may be used to designate any method of classification that seems enlightening. The subsequent paragraphs will be concerned mainly with flowering plants.

Almost any classification of flowering plants may be based upon characteristics within widely varied ranges of the vegetable kingdom. For example, such bases of classification as environmental conditions, methods of

obtaining food, uses in daily life, geographic distribution, etc., are relied upon.

It is on such diverse and analogous grounds that groups such as land plants and water plants; simple plants and complex plants, are classified.

Any such cases of analogous resemblance may be close or distant; or, be quite distantly related to their main ancestors. This is what some botanists say they mean by near or remote relationships among plants.

As in zoology, botanists try to classify organisms in accordance with what is understood about their family relationships. What may be called "blood relationship", is the basis, it would seem, commonly used for the classifications of the organisms constituting the vegetable kingdom.

This is known as "phylogenetic" or natural classification, in contrast with "artificial" classification which may be based upon almost any other characteristics of the plants, even to the point of ignoring the fact of family relationship.

In using any such conceptions as a basis for any systematic classification of flowering plants, we may well bear in mind that close similarity usually indicates relatively close relationships while dissimilarity indicates relatively distant relationships. That would be the case in any field of existence.

Within this view of the matter, a species is regarded as a group containing all of the individuals of a certain group of plants that exist now or that existed in the past. The French botanist, de Jussieu, defined a species as: The perennial succession of similar individuals perpetuated by generation. Mere differences in size, shape, colour of body, etc., may not suffice to constitute different species. Some species are represented by many individuals, such as the western yellow pine, *Pinus ponderosa*, whereas, in other cases there may be comparatively few individuals in a species as it is known to-day, such as the Monterey cypress, *Cupressus macrocarpa*. Thus we may notice that the number of individuals of a group that exist now or in the past is

not necessarily a basic consideration in arriving at the dominant characteristics of a species.

Individual plants within near ranges of variations are grouped together to constitute a species. And, of course, different species may be grouped together to form a range of higher rank. Such ranges of different species will be regarded as being of higher rank because they exhibit wider ranges of variation. A genus is a range of species as a species is a range of individuals.

There are, perhaps, endless contexts available for an illustration of the point that frequently botanists write as though they classified flowering plants (for example) mainly in respect of characteristics repeated, or strictly the same, in the individuals under consideration. Taxonomy can hardly be called upon to sanction any such single-minded devotion.

Often enough flowering plants are classified as members of a certain species on the basis of analogous resemblances of a close or narrow range. Conventional preoccupation with resemblances that are qualitative identities repeated in at least two cases of themselves tends to make us overlook analogous resemblances as a far broader basis of classification. The result of this convenient oversight is unfortunate. It issues in the bemusing assumption that the usual classification of flowering plants is based on resemblances that are the same. This ignores (at least by suggestion) the wide ranges for classification of resemblances that are at once closely diverse and analogous. The resulting confusion is in some contexts of bewildering scope.

We have noticed above some of the reasons why abstract nouns and adjectives are terms verbal that derive their respective connotations from their respective contexts.

We have noticed also that these respective contexts are in each case conceived by virtue of a description of the resemblances this or that term verbal is thus made to designate.

Presumably it is rather plain that any description of

resemblances in our first sense of the term (whether those resemblances be relatively simple or complex) is a description of universals. Presumably it is no less plain that, *mutatis mutandis*, this applies without reservation to any description of resemblances in our second sense of the term, in which resemblances are diverse, yet more or less closely analogous.

Usually, the descriptions of universals that determine the context (and, thereby, the connotation) of abstract nouns and adjectives will consist of descriptions of universals in both of the radically different senses that have been indicated.

Since the descriptions in question are conceived, they are properly called concepts.

Concepts engender the contexts in thought and speech that make terms verbal into designations.

The referents of concepts are in part universals. Thus we may realize that abstract nouns and adjectives, though without any proper and peculiar referent, nevertheless derive their significance from their respective contexts. Any such context will arise (in part, at least) from a description of universals, in any one or all of the four senses of resemblance that have been considered in the course of this essay.