that all difference is difference in quality, so that "numerical difference" would be "nonsense", is open to denial. And any honest man who finds in his experience any two respects that are strictly the same will be constrained to deny that assumption and with it the dialectical consequence that identity implies qualitative difference.

CHAPTER V

RUSSELL'S PUZZLE

IN order to illustrate the contention that at times two sense-data must be really different even though the percipient finds no difference between them, Mr. Bertrand Russell has adduced a state of affairs which is used in some quarters to support arguments to conclusions that exact resemblance is a delusion or, at least, a very doubtful question. "It would be easy to find three stuffs of such closely similar shades that no difference could be perceived between the first and second, nor yet between the second and third, while yet the first and third would be distinguishable. In such a case, the second shade cannot be the same as the first, or it would be distinguishable from the third; nor the same as the third, or it would be distinguishable from the first. It must therefore, though indistiguishable from both, be really intermediate between them."[1]

If we remind ourselves of the distinction between exact resemblances and analogous resemblances which we noticed above in Chapter I, we may feel inclined to raise certain questions about this puzzle.

First of all, it is to be observed that in his first sentence Mr. Russell takes account of "three stuffs *of such closely* similar shades that no difference could be perceived between the first and second, nor yet between the second and third——". In this statement Mr. Russell says at least two things: (1) that the three shades in question are "closely similar", and (2) that "no difference could be perceived between the first and the second, nor yet between the second and third——".

Now consider that shades which are said to be (and are) "closely similar" are not said to be exactly similar—as

[1] *Our Knowledge of the External World*, pp. 141, 142.

would be two cases of the same red. Mr. Russell does not set out with three stuffs of the same shade (of red, say); rather he posits three shades that are "closely similar".

Presumably perceived shades that are "closely similar" are not shades that are indiscernible. A persimmon orange will be close to an intense orange-red, but though "closely similar" still not quite the same. Yet in the same sentence Mr. Russell says that "no difference could be perceived between the first and second, nor yet between the second and the third——". Thus after he has described the three perceived colours as "closely similar", Mr. Russell says there is no perceived difference between the first and second, on the one hand, and the second and third, on the other.

Let H_1, H_2, H_3 stand for the three perceived shades in question. Mr. Russell first describes H_1, H_2, and H_3 as being "closely similar", and then goes on to say in the same sentence that H_1 and H_2 are indiscernible. Now percepts that are indiscernible are not appositely described as "closely similar"; for, as indiscernible, perception H_1 and H_2 are the same quality or character, as are H_2 and H_3.

Yet Mr. Russell points it out that "the second shade (H_2) cannot be the same as the first (H_1), or it would be distinguishable from the third; nor the same as the third, or it would be distinguishable from the first." And Mr. Russell goes directly on to draw a conclusion from this that is consistent with his initial description of the three shades—as being "closely similar".

Now shades that are appositely designated as "closely similar" are not accurately described as being the same. Mr. Russell can hardly have it both ways. The three shades are, he says, "closely similar". Then no one of the shades can be the same as either of the other two. As closely similar, they would be diverse; three nuances of the same shade of ultramarine, let us say. Thus the three shades would indeed be closely similar in the analogous order of hues. But they would be still "closely similar", not indistinguishably the same.

Mr. Russell would seem to have overstated his case. "It would be easy," he writes "to find three stuffs of such closely similar shades that no difference could be perceived between the first and second, nor yet between the second and third, while yet the first and third would be distinguishable." Now if the first and the second perceived shades are correctly described as "closely similar", then it is inconsistent with that description to say that there is no perceived difference between them. If there is no perceived difference between two shades, then those perceived shades are not closely similar, they are the same.

Yet Mr. Russell describes the shades in question as being "closely similar", not as being the same. Now either H_1 and H_2 and H_3 are "so closely similar" that actually they are the same, and in no wise properly described as being closely similar, or H_1 and H_2 and H_3 are not so closely similar that they are the same, but are actually closely similar, or slightly diverse nuances of a hue.

On either alternative, there is no puzzle. On the first, H_1 and H_2 and H_3 are the same, and not closely similar. On the second they actually are closely similar, or slightly diverse. The puzzle arises out of a failure to bear in mind the difference between perceived shades that are closely similar (or very close to each other in the analogous order of hues), and three perceived shades that are the same. On the first available alternative the three perceived shades are "so closely similar" that actually they are three cases of the same shade, and not "closely" similar at all. On the second of the alternatives, H_1 and H_2 and H_3 actually are closely similar; they are slightly diverse nuances of a hue.

On the first alternative, H_1 and H_2 and H_3 would be strictly the same. Therefore it would be incorrect to describe them as closely similar. It would also be false to say that H_1 and H_3 are different. On the second alternative, H_1 and H_2 and H_3 would be diverse though closely similar. But it would be false to say that H_1 and H_2 are the same, and false to say that H^2 and H^3 are the same. For H_1 and H_2 and H_3 are diverse. The puzzle as to how H_1 and H_3 can

be different while H_2 is the same as H_1, and the same as H_3 arises out of a failure to distinguish between resemblance in the sense in which resemblances are the same, and the sense in which resemblances are diverse.

If you begin with three shades that are closely similar, then you have three shades that are closely resembling but still diverse. If you begin with three shades that are the same, then you have three shades that are incorrectly described as closely similar. Mr. Russell attempts to institute three shades that would be closely similar or diverse while at the same time H_1 and H_2 would be the same and H_2 and H_3 would be the same. In this hypothetical and preposterous state of affairs, H_1 and H_2 and H_3 would be at once diverse or closely similar and H^1 and H^2 would be the same. Since to say that H_1 and H_2 are the same (and that H_2 and H_3 are the same) contradicts the statement that H_1 and H_2 and H_3 are closely similar, Mr. Russell is constrained to conclude of H_2 that, "It must therefore, though indistinguishable from both, be *really* intermediate between them".[1] Thus Mr. Russell, in consistency with his description of the three shades as closely similar is constrained to conclude that they really are diverse. His puzzle arises because he mistakenly asserts that diverse though closely analogous or similar hues could be "so closely similar" as to be indiscernible. Yet if H_1 and H_2 were indiscernible they would not be very closely similar, they would be the same. As long as we adhere to Mr. Russell's description of the shades as closely similar, no puzzle arises; it is only when we try to make it out that H_1 and H_2 and H_3 are resembling in the sense of being diverse though closely similar, while at the same time H_1 is said to resemble H_2 in being the same (and as much is said of H_2 and H_3), that the puzzle arises out of a failure to distinguish two basic senses of resemblance.

Presumably it will be objected that the foregoing is dialectical and unrealistic. The facts are as Mr. Russell says they are. Two shades, H_1 and H_2 are "so closely similar"

[1] *Our Knowledge of the External World*, pp. 141, 142. My italics.

as to be indiscernible. Yet H_1 and H_3 are not indiscernible; they are different.

Now consider that H_1 and H_2 are in fact indiscernible; if, in fact, there is no difference to be perceived between them; then in fact they are indiscernible, or the same in hue, intensity, and saturation. And if in fact H_1 and H_2 are the same, then in fact they are not "closely similar" (however much so), for no matter how close to each other two nuances may be in the analogous order of hues, they are (however slightly) diverse, not exactly the same.

Mr. Russell posits three shades that are closely similar, but so closely similar that H_1 and H_2 are indiscernible, as are H^2 and H^3. And the root of his puzzle lies in the equivocal assumption that of three shades that are properly described as closely similar, even two of them H_1 and H_2 could be the same. The assumption is equivocal because it would combine in one assumption resemblances that are radically distinct. It assumes that three percepts could be "so closely similar" that, although they are closely similar, H^1 and H^2 (not to mention H_2 and H_3) could be indiscernible or the same.

This would seem to be confused and confusing—confused because it fails to distinguish between two radically different senses of the term resemblance, and confusing because of the equivocal assumption which that failure permits. Two nuances of a hue may be very closely similar, but still they are not indiscernible or exactly the same. The notion that two nuances of hue could be at once closely similar (or slightly diverse) and exactly the same is a notion that does indeed generate a puzzle; but a puzzle that derives from a confusion. For no two percepts properly described as closely similar could be at once closely similar and exactly the same.

It may be urged that in point of fact two orange nuances could be closely similar for one man, while at the same time they were exactly the same for another. This sort of argument seems rather feckless. Presumably no one would advisedly deny that where one man perceives two shades of

orange, another man might find not two shades but rather an expanse of one of the two shades of orange. Any such familiar facts would hardly be denied or overlooked by anyone familiar at all with the relativity of sense-proportion.

If the facts in question were as described above, there would be no puzzle. Percipient$_1$ finds Mr. Russell's fabrics to be of very closely similar shades. Percipient$_2$ finds the shades of the three stuffs not closely similar, but rather exactly the same. In this state of affairs there is no one percipient who is assumed to find at once that any of the three shades are closely similar and also exactly the same.

In order to make the puzzle stand it would be necessary to show how a single percipient could undergo a perceptual experience of three shades that were at once closely similar (and therefore slightly diverse) and yet exactly the same. But three hues which were alleged to be at once closely similar and yet exactly the same would be a mere contradiction in terms.

It may be well to point out also that the resemblance of three hues that are exactly the same is symmetrical, whereas the resemblance of three hues that are analogous or closely similar is not symmetrical. Anyone who, like Mr. Russell, fails to distinguish these two senses of resemblance, and assumes that three "closely similar" shades could be "so closely similar" that H_1 and H_2 are not closely similar but actually indiscernible, will naturally wonder why the resemblance between three closely similar shades is not symmetrical and transitive. If you fail to distinguish between resemblances that are exactly the same, and resemblances that are closely analogous or closely similar, you naturally expect of resemblances that are analogous what you know to be the case in resemblances that are exactly the same. Yet it is even obvious that the resemblance of orange to red is not symmetrical.

Mr. Russell, having injected into his conception of three closely similar shades the notion that H_1 and H_2 could be so closely similar that they are indiscernible or the same, naturally, asks why the resemblance between H_1 and H_2 and H_3 is not symmetrical. And the reason for that he himself brings out partially in the concluding sentence of his argument. He there writes that, "It (H_2) must therefore, though indistinguishable from both, be really intermediate between them"; i.e., H_1 and H_3. This is to say that right through his argument Mr. Russell is dealing with a range of three closely analogous shades; shades so closely analogous that Mr. Russell mistakenly assumes that H_1 and H_2 could be exactly the same. And because he fails to distinguish between exact resemblances, on the one hand, and analogous resemblances on the other, he creates a specious puzzle by demanding that the resemblances of shades that are closely similar be on all fours with the resemblance of hues that are the same. Yet, just as it is of the nature of the case that exact resemblances are symmetrical, so it is of the nature of the case that resemblances that are resembling though diverse are not symmetrical.

The root of Russell's puzzle is two-fold. On the one hand, there is the failure to distinguish between two radically distinct senses of resemblance; namely, between resemblances that are exact and resemblances that are analogous. On the other hand, there is the false notion that any resemblances correctly described as "closely similar" could be so closely similar as to be the same. Since that notion would hardly occur to anyone who had recognized the difference in principle between resemblances that are the same, and resemblances that are diverse, the failure to recognize that difference is perhaps the most germane root of a specious puzzle.