

KNOWING WHAT I'M THINKING OF¹

Ruth Garrett Millikan
University of Connecticut
Storrs, CT 06268

...for it is scarcely conceivable that we can make a judgment or entertain a supposition without knowing what it is we are judging or supposing about....the meaning we attach to our words must be something with which we are acquainted...[but] Julius Caesar is not himself before our minds. (Russell, The problems of Philosophy, p. 58.)

The difficulty with Russell's Principle has always been to explain what it means. (Gareth Evans, The varieties of Reference, p.89)

Introduction

Evans believed that there should be a way of explaining 'what Russell's Principle means' that makes it come out true. To this end, he vigorously reinterpreted the notion 'acquaintance,' but his analysis of the varieties of this relation bears scant resemblance to anything in Russell. I will argue that under a very plausible interpretation which, I fancy, is considerably closer in one way to Russell and in another way to Evans than either is to the other, knowing what one is judging about turns out to be a matter of degree. The lowest degree may indeed be necessary for having thought at all, but the highest degree is never realized. As Evans saw, grasping the identity of the object of one's thought requires having a concept of that object, which requires, in turn, conforming to what Evans called the 'generality constraint' (1982, p. 100). But a concept is an ability, a knowhow, and unlike either know-thats or dispositions, knowhows come in degrees. One can know how but still fail. Indeed, it is common actually to be mistaken about the object of one's thought.

A brief remark on methodology before the plunge. I will embrace without argument the Sellarsian claim (Sellars 1956) that theories about the nature of thought are theories. Minimally, they are not mere descriptions, certainly not descriptions or 'analyses' of concepts, but constructions. Hence I will not tolerate arguments of the form, '[i]nsistence on such cases involves an overthrow of our notion of what it is to possess a concept' (Evans 1982, p. 119) or '...the suggestion subverts the very logic or grammar of the concept of knowing what it is for it to be true that...'. (p. 116).

I. Knowing That I am Thinking of Alice

What then does it mean to claim that a person 'cannot make a judgment

¹ This paper was completed while the author was a Fellow at the Center for Advanced Study in the Behavioral Sciences. I am grateful for financial support provided by the National Endowment for the Humanities #RA-20037-88 and the Andrew W. Mellon Foundation.

about something unless he knows which object his judgment is about'? First, what kind of a knowing is this, a variety of knowing that, or a variety of knowing how?

Suppose that it is a variety of knowing that: I cannot make a judgment about, say, Alice, unless I know that my judgment is about Alice. Is the claim then that knowing I am thinking of Alice is ontologically prior to or involved in thinking of Alice? Or is the connection epistemological, a sort of K-K thesis: thinking of Alice entails thinking that I am thinking of Alice? Russell espoused both of these connections. Thinking of Alice and knowing one is thinking of Alice are ontologically identical; within the mind there is no distinction between being and knowing; Russell's Cartesian mind is transparent to itself. But as soon as we depart from Russell's view it appears likely that neither of these connections holds. Knowing I am thinking of Alice is surely posterior rather than prior to thinking of Alice. I cannot know that I am thinking of Alice unless I first think of Alice, any more than I can know that I am hungry unless I am first hungry. Nor is knowing I am thinking of Alice the same thing as thinking of Alice. Knowing requires thinking, so knowing that I am thinking of Alice would require the capacity to think that I am thinking of Alice, hence the capacity to think about thoughts. But this is a capacity there is scant reason to suppose a thinker must have. For example, there is evidence that children don't have this capacity until well after they acquire fluent speech. There is scant reason to suppose then that thinking of Alice must even be accompanied by thinking that I am thinking of Alice.

That thinking of a thing cannot require knowing that I am thinking of it can be brought out in another way. Consider what it would be to know that I was thinking of Alice. Barring Russell's view of thought as direct confrontation of mind with object, this knowing could not involve directly comparing my thought with Alice. Rather, I would have to think of my thinking and I would have to think of Alice and perhaps also of the relation that made the one a thought of the other. In any event, I would surely have to think of Alice. But if thinking of Alice involves knowing that I am thinking of Alice, and this requires thinking of Alice again, we are in a regress. It is conceivable, though false, I believe, that it should be necessary to have the capacity or the disposition, whenever my thought turns to Alice, to think that I am thinking about Alice. But it is not conceivable that actualizing this capacity should be constitutive of having thoughts about Alice.

There is a second perhaps more familiar way of interpreting the notion 'knowing what one is thinking of' which is not Russellian, and which takes this knowing to be a kind of knowing that. Thinking of Alice might involve thinking that the object of one's thought was that which bore certain uniquely distinguishing properties which in fact distinguished Alice. This route is not Russellian, of course, because Russell takes a thought with this kind of structure to be not a thinking of but an existential judgment. Nor would this solve the problem at hand, for it presupposes that we can think of properties. To think of properties, if Russell's Principle is right, we must know what properties we are thinking of. And this knowing cannot be analyzed in the same way again without a regress. Must we then think of Properties in the Russellian way, placing them directly before the mind?

II. Knowing How to Think of Alice

If thinking of Alice, making judgments about her, is to require knowing what one thinks of, it seems that this cannot be a knowing that. Is it then some kind of knowing how with regard to Alice? Knowing how to do what with regard to Alice? Suppose we first ask the perfectly general question: what does one need to know how to do in order to think of Alice? And let us first explore the most general answer there is to this question: one must know how to think of Alice.

Now that, you may say, is a perfectly silly, an entirely vacuous, answer. But I think it is not a silly answer. It is a true and important one. For the answer to the question might instead have been that one need not know how to do anything at all in order to think of Alice. Consider: in order to depress the carpet under your feet do you have to know how to depress the carpet under your feet? In order to trip and fall do you have to know how to trip and fall? In order to win the State Lottery do you have to know how to win the State Lottery? In order to do anything at all one must have had, of course, a disposition, under some combination of internal and external conditions, to do that thing. But it is crucial that knowing how is not at all the same thing as just having a disposition. Know-hows reside in the order of purposes, not in the causal order bare. Knowhows are expressed only in purposeful doings. To say that thinking of Alice requires knowing how to think of Alice is to claim that this act must take place within the purposive order. One may go on then to explain how the purposive order takes its place within the causal order, but that leaves the original point intact. Thinking of does not occur in the causal order bare.

But we must be very careful here. Having claimed, in this spirit, that thinking of Alice requires knowing how to think of Alice, what we must not do is to proceed to an analysis of purposiveness that rests it on intentionality. We must not take it, for instance, that residing in the purposive order requires that thinking of Alice should rest on intending to think of Alice. Not, at least, if one supposes that intending to do a thing requires thinking of or about what is to be done. That would lead back to supposing that thinking of Alice requires knowing that we are thinking of Alice--the regress discussed above. What sticks a thought onto its object cannot be an act of intending.

This is not the place to present a full-fledged theory of purposiveness and intentionality. But I should like to advertise one. My own proposal has been that the purposive order is the order in which there exist historically fashioned 'teleo-' or 'proper' functions, of which biological purposes or functions are one variety, and that the intentionality of our thought rests on biological function (1984, 1986a, 1986b, 1989, 1990, 1991a, 1991b). Consonant with this, for an organism to know how to do x is for it to possess an intact mechanism that is biologically designed to do x, or that is designed to be tuned to do things like x and has been tuned to do x as designed. But biological design is not performance. Biological designs have, in general, a high rate of failure, not because of breakage, but because they often require quite special conditions to operate right (Millikan 1992). I will not press this particular issue forward here, though it will have to make cameo appearances. But let me point out that there does not seem to be any other proposal than the biological proposal on the horizon that makes sense of the fact that it clearly is true in general that knowing

how is not merely having a disposition (1986a, 1990).²

But to observe that thinking of Alice requires us to know how to think of Alice does not cast much light on what more specific ability, that might sensibly be called 'knowing what we are thinking of', is presupposed. Evans held that this was 'a capacity to distinguish the object of [one's] judgment from all other things' (1982, p.89)--given our example, the capacity to distinguish Alice from all other things. Having this capacity, he said, was what made the difference between being capable only of judging, say, that a person had such and such attributes and being capable of judging that Alice had them (1982, pp.127-8). And Evans was for the most part clear that this capacity was some kind of ability or know-how, not a kind of knowing that. He was also clear that this ability to discriminate Alice could not be merely the ability to call to mind an idea that was, in some manner inaccessible to the thinker, externally (e.g., causally) hooked to Alice and Alice only. Rather, Evans thought, its being hooked to Alice must 'reside in facts about what the [thinking] subject can or cannot do at that time' (1982, p.116), facts determining that the thinker has a 'concept' or 'adequate Idea' of Alice.

I will return to Evans soon. But first, I will propose my own reading of 'knowing what one is thinking about'. This will be another reading on which Russell too required us to know what our thoughts are about, and a reading on which, without doubt, we generally do know what our thoughts are about. This knowing is a sort of ability or know-how, and one that is naturally interpreted as the having of a concept. After some discussion of this notion, I will show how something very like this view of what it is to have a concept is implicit in Evans' 'generality constraint' on concepts, hence in his notion of an 'adequate Idea'.

III. Coidentifying

What seems to be yearned for in the notion that I must know which object my thought is about is a sort of confrontation of thought, on the one side, with the object bare, on the other, taking place, per impossible, within thought itself. Indeed, Russell's view is that exactly this sort of confrontation is possible--the object bare is part of the thought. But, despite contemporary hyperbole that speaks of thoughts that require real objects in order to be thoughts as 'Russellian thoughts,' no thought actually consists in part of its object--any more than a mother, though she has to have a child to be a mother, consists in part of her child. The closest thing to the yearned-for ideal that actually makes some sense, I suggest, is a confrontation of one thought of an object with another thought of that same object, taking place within thought itself, and effecting a recognition of the sameness of the object. Putting this picturesquely, if you imagine the various thoughts that you have about, say, Saul Kripke, as a sort of story that you tell yourself using various thought tokens of him

² In the austere terminology of (Millikan 1984), an ability corresponds to the proper function of a biological device when the device has normal structure, that is, when the device is intact. Most human abilities, being learned rather than hardwired, correspond to derived proper functions of our behavior-producing systems. There are for each kind of ability, normal conditions for its successful exercise, but often these conditions are not average conditions.

(including perhaps perceptual indexical thoughts of him), then knowing who you are thinking of in this story corresponds to your ability to make what Strawson called 'story-relative identifications' of the person in the story (1959, p. 18). There is no way that you can cut through the stories that you tell yourself about Saul Kripke in order to tack them inside your mind directly onto Saul, in order to know in any more direct way than that who you are thinking of.

Suppose that knowing what one is thinking of is, just, having the capacity to recognize when two of one's thought tokens are thoughts of the same. Call the acts that realize this capacity acts of 'coidentifying'. In the first instance it is thought tokens that are coidentified, but thought types may be said to be coidentified when the thinker knows to coidentify their tokens, that is, the thinker is disposed to coidentify these tokens in accordance with an ability. Next let us loosen the notion to coidentify a bit so that it is not a success verb but only a verb of trying. As believing is to knowing, so coidentifying is to recognizing real sameness between objects of thought: coidentifying can take place mistakenly. Let us further add a harmless equivocation. When a thinker coidentifies thoughts, she also coidentifies the objects of these thoughts. This will be a slightly different sense of 'coidentify', of course, but one that is closely analogically related. Last, just as thinking of an object requires knowing how to think of it, correctly coidentifying thoughts hence objects requires knowing how to coidentify them; coidentifying takes place in the purposive order.

Should it occur to you to wonder why I call what seems to be, merely, identifying, by the awkward name 'coidentify', then you are right on my track. I believe, indeed, that not only everything properly called 'identifying', but also 'reidentifying' (Strawson 1959, pp.31-8) and 're-identifying' (Evans 1982, p.126) also has the structure described.³ The point of the term 'coidentify' is to emphasize, first, that whereas this act involves only one object (when it is correctly executed), it always involves two thought tokens. Second, the point is to emphasize the symmetry of this act, for it is of considerable importance. Third, the point is to make it easy to talk of coidentifying not merely pairs but larger sets of thoughts.

Suppose, for example, that I see that that woman, the one just ahead up the block, is walking, and suppose that I take her to be my friend Alice. That is, I identify her. I identify her as Alice. In doing so I coidentify one thought, that woman, with another thought, Alice. Or if a percept is a sort of representation and can represent a person, perhaps what I do is to coidentify the object of a percept with that of a thought--the details are not important. In any event the result of coidentifying is that I take Alice to be now walking. Later I see Alice again in the market and reidentify her. In so doing I coidentify another thought, that woman, with the thought Alice, hence also with my earlier thought that woman. The next day I may hear that the city mayor is in Washington and, coidentifying my thought the city mayor with my thought Alice, hence also with my two earlier thoughts that woman, take Alice to be now in Washington. The proposal on the table is that if these acts of coidentifying are

³ Accordingly, In (Millikan 1984) I called this act "the act of identifying". See, especially, Chapter 15.

correct, and correct not by accident but as the result of a genuine ability, then I have manifested my knowledge of the identity of the object of the various coidentified thought tokens. I have manifested my knowledge that I was thinking, each time, of Alice. Knowing what I am thinking of is being capable of coidentifying my thought with other thoughts of the same. It is being able to distinguish thinking of a thing again from thinking of some different object.

Russell required that a person know the object of his thought in this manner. Why is it important for Russell that the object of thought should be 'itself before our mind'? Because since all aspects of what appears before the mind are transparent to mind, the identity or difference of objects directly before our minds cannot possibly fail to be recognized. Why, for Russell, do definite descriptions not express thoughts of the objects they denote? Since Russell takes it that two thoughts of the same object cannot fail to be grasped as of the same, but since two definite descriptions of the same certainly can fail to be grasped as of the same, Russell cannot take definite descriptions to be thoughts of objects.

IV. Coidentifying and Evans' Generality Constraint

Let me now sketch the connection between this way of 'knowing what the object of one's thought is' and Evans' view of what it is to have a concept of an object. Detailed exegesis of Evans' text is not the point, but rather its suggestiveness. Mainly I hope to make clear how 'knowing what the object of one's thought is,' when interpreted this way, can very plausibly be taken to constitute having a concept of an object.

Suppose that I think to myself Alice is slim and then I think Alice is trim. If having done this I also grasp that, despite their different sentential contexts, these two thought tokens of 'Alice' have the same object, that the same thing is both slim and trim, that is what it is for me to coidentify these two tokens of 'Alice'. Now perhaps that strikes you as an odd example, or at least as an odd way to put things. For perhaps it strikes you that thinking two tokens of the same thought type, as it were, beside one another, or in the same breath of consciousness, surely constitutes an act of coidentifying, rather than requiring to have one superimposed. I will not try to disillusion you about that here⁴. In fact, I propose that we make the simplifying assumption that tokens of the same idea type are, under specifiable and quite ordinary conditions, automatically coidentified. If we also assume that to coidentify ideas of different types disposes one, perfectly generally, to substitute one in for the other in judgments, then we can model the act of coidentifying as iterating, or as becoming generally prepared to iterate, a new token of an old idea type in the context of a new judgment. For example, each of the various cases mentioned above in which tokens of the thought Alice are coidentified with tokens of other types, can also be viewed as acts that iterate a new token of the old idea type, Alice, in a new judgment: Alice is walking; Alice is in the market; Alice is in Washington; etc..

Now Evans takes it that thinking of a thing requires having a 'concept' of it or,

⁴ I have done so in (Millikan 1991c, forthcoming). On problems with the notion that there are idea types, see (Millikan forthcoming).

in the case of objects as distinguished from properties, an 'Idea' of it. A concept or Idea is a general ability that 'makes it possible for a subject to think of an object in a series of indefinitely many thoughts, in each of which he will be thinking of it in the same way' (1982,p.104). For example, to have an Idea of Alice, I must be able to think of Alice not only, say, in the context of the thought that she is slim, but also (given appropriate predicate concepts) in the context of the thought that she is trim, that she is walking, that she is city mayor, etc.. More precisely, I must understand what it would be for Alice, as distinguished from all others, to have each of these various attributes. Evans calls this constraint on concepts 'the generality constraint' (1982 section 4.3). Evans' 'generality constraint' is not just the familiar contemporary view that thought must be compositional. The verificationist background from which Evans' thought emerged lends it quite another flavor and use. It implies, rather, a general capacity to reiterate the thought Alice in other evidenced or grounded judgments about her.

According to Evans, '[I]n order for a subject to be credited with the thought that p, he must know what it is for it to be the case that p' (1982,p.105). To be sure, this kind of knowing what 'is hard to give any substance to...when this is not to be equated with an ability to determine whether or not [p] is true' (1982,p.106). But Evans thinks we are obliged to try. He tries by unpacking 'know what it is for it to be the case that' (say) it is Alice who has this or that property, by reference, first, to possession of a 'fundamental Idea' of Alice, δ , based on the criterion of identity associated with her defining category--the criterion for same personhood, presumably. The notion of a criterion of identity is relational; it tells what constitutes being the same one again. The unpacking proceeds, next, to the requirement that one understand 'what it is for it to be the case that.. [$\delta=a$]' for various other kinds of ideas, a, such as descriptions and indexical thoughts. Thus the problem is reduced, in large part, to the question what it is to 'know what it is for it to be the case that' various kinds of identity equations hold.

Evans' discussions of these equations all exemplify a common theme. Understanding what it would be for A to equal B is always described such that it involves having the capacity to coidentify A with B, or involves having a more general capacity under which this capacity falls. For example, my concept of Alice is expressed in my ability to recognize her on sight ('recognition based identification' (Evans 1982, chapter 8)), which is a way, of course, of iterating grounded thoughts of her in new judgment contexts--a way of coidentifying her. Similarly, where P is an indexically indicated position in egocentric space and p a position in public space, '[that] in which knowledge of what it is for identity propositions of the form [$P=p$] to be true consists' is 'the capacity to discover...where in the world one is' (1982 p.162), that is, '[the] ability to locate [ones] egocentric space in the framework of a cognitive map' (p.163). Such 'locating' clearly is another act of coidentifying.

Evans returns several times to an example of a man who retains the memory of a steel ball he once saw, but retains no information as to when or where he saw it, nor concerning any other characteristic that would distinguish it from an identical ball he also once saw but forgot. Evans claims that this man has no Idea of the remembered ball, that he is not, in any theoretically interesting sense, thinking of it.

This is because 'our subject's supposed idea of that ball is completely independent not only from any possible experience, but also from everything else in his conceptual repertoire. There is no question of his recognizing the ball; and there is nothing else he can do which will show that his thought is really about one of the two balls (about that ball), rather than about the other' (p.115). The point, I take it, is that this man seems to be debarred in principle from ever making another grounded judgment about that ball--from ever reasonably coidentifying his supposed thought of it with any other thought of it. For this reason, his supposed thought does not meet the generality constraint, he has no concept of the ball, he does not know which ball his memory is of.⁵

Exegesis of Evans to one side, I propose that a foundational cognitive capacity is the ability correctly to coidentify one's thoughts, a capacity that is not a kind of know-that, but rather a capacity for a certain kind of movement in thought.⁶ And I propose that having this capacity, with regard to a thought, is what it is to have a concept of the object of that thought. Let me now spell out certain consequences of this view.

V. As Abilities, Concepts are Fallible and Rest on Alternative Means

Evans' man harboring a memory trace of the ball doesn't realize that he ever saw any other such ball. So he may wrongly take certain descriptions of it to be uniquely identifying, and may thus have a disposition, under certain circumstances, to coidentify his memory of the ball. But if he coidentifies it correctly, this will be only by accident, not in accordance with a genuine ability. Because abilities belong to the

⁵ In fact, I believe that Evans is subtly mistaken about this example. According to Evans' original story, this man fails to remember the second ball he saw because of a blow on the head. Now imagine that Evans' story truly describes the realization of a perverse philosopher's thought experiment. Years later the philosopher shows up, pulls the remembered ball out of his pocket, and explains the whole episode to our hero, who then correctly coidentifies the ball of his memory with the ball he sees. So he was not debarred in principle from ever making another grounded judgment about that ball after all. Now Evans does stipulate that the man does not think of his remembered ball as the one that caused his memory. And it is true that unless he is at least able to recognize it under some such description as "the ball you remember", the perverse philosopher will not be able to arrange for him to coidentify it. But only an animal or an infant could fail to recognize such a description as a description of the ball. Normal adult humans don't have memories of things they have no concepts of at all. For a discussion of this example and of other concepts unusable in practice, see my (forthcoming) section IX.

Evans concludes, also, that the man cannot, properly speaking, be said to have the capacity to think of that ball at all, but only of a ball. For discussion of this claim see my (forthcoming) section X.

⁶ I describe acts of identifying in (1984 chapter 15, 1991c, forthcoming). It is important that they are not, and do not rest on, judgments.

purposive order, not all dispositions are abilities. Nor are abilities merely dispositions to succeed in one's purposes, say, to always succeed when one tries. I know how to walk yet may trip this time when I try; I know how to cook, yet may burn the dinner tonight. One can have an ability to do what one is not able--at the moment--to do. Still, to have an ability does require that there be some conditions under which trying will bring success, namely, I have suggested, one will succeed under conditions required for normal correct functioning of the tuned biological mechanisms that are responsible, as so tuned, for one's ability. What having an ability does not require, however, is that one be unfailing in recognizing when these conditions obtain or even, indeed, that one understand what these conditions are. Accordingly, to have an ability (correctly) to coidentify a thought does not require that one never misidentify (the object of) that thought. It does not require that one always recognize conditions under which one's acts of coidentifying will go wrong.

Equally important is that abilities typically rest on alternative means. My ability to get from home to school rests on many alternative means. So does my ability to tie my shoes, though there is one way at which I am most practiced and best. Similarly, the capacity to coidentify a thought typically rests on a variety of alternative conceptual means. The number of ways I can coidentify thoughts of each of my daughters is nearly innumerable--through appearance of body or body parts, postures, clothes, sounds of voices and feet, characteristic activities, handwriting, various nicknames and dozens and dozens of descriptions. But although it is clear that there are many such ways at my disposal, there seems to be no way to say exactly how many. How many ways can you identify your best friend by looking? There is no clear principle by which to count these ways. Thus concepts may include numerous means of conception, without there being clear demarcations among these means.⁷

VI. Conceptual Knowhow vs. Knowing About World Structures

If the above sort of description of having a concept is right, however, we must depart from Evans' views on one very crucial point--on the role of 'fundamental Ideas of objects'. These Ideas, Evans said, are based on grasping 'criteria of identity' for objects. I am not sympathetic to any form of linguistic idealism, hence not to the notion that there are 'criteria of identity' that we employ which determine object identity. Elsewhere I have defended a thoroughly realist notion of the structure of both object and property identity (1984, chapters 16 and 17). But sanctioning 'criteria of identity' would not give help where we need it anyway. What, for example, would the relevance be of having a 'grasp of the criterion of identity for persons over time' or of 'places over time' to a practical ability to recognize the same person or place again over time, hence to iterate thoughts of this person in new judgments? We don't reidentify persons by following their space-time worms around. Besides, dogs are quite good at recognizing their masters, babies at recognizing their mothers, even though it is quite certain that neither conceives of a criterion of identity for persons over time. Research in child development suggests that children don't

⁷ In (1984) I rather confusingly called means of conception "intensions".

even acquire concepts of time until about age four, though they certainly can recognize their mothers. Just as I do not have to be able to describe or even to recognize the conditions required for exercise of other abilities of mine, for example, just as I can ride a bicycle without understanding the laws of dynamics, neither do I have to understand the ontological structure of the world upon which my (of course fallible) coidentifying abilities depend.

Nearly the whole history of philosophy to the contrary, analysis of the world structures that account for the possibility of human knowing is not the same thing as analysis of the content or structure of what is known. For example, a venerable tradition argues that the possibility of identifying or having concepts of other individuals depends upon the fact that each such individual is uniquely located relative to us in space-time. This is surely a valid point, but not because conceiving of other individuals requires us to think of their relations to us, anchoring our thoughts of them beginning with thoughts of ourselves. The valid point is that having a concept of anything at all involves the capacity to coidentify it, which in turn means interacting with it, actively collecting together various manifestations of it that impinge upon our senses, that appear in our thought over time. And obviously one cannot collect together manifestations of something not in one's space-time system. What is true and important is that the activity of collecting new truths about any individual can be accomplished only in so far as our world has a certain space-time and causal structure in which we too are ingredient and to which we are attuned. That is, for the most part we can find our way about in it. This should not be confused with the assumption that knowledge of or thoughts about this structure are required for success in this activity. The capacity to reiterate Alice in new grounded judgments is a high level skill exercised in the world. It is not something done inside one's mind.

VII. How Concepts Grow

A concept, we have noted, may have many conceptual means or 'ways of being applied'. If we use the latter familiar mode of expression, however, we must be careful not to forget the symmetry of the act of coidentifying. 'Applying a concept' strongly suggests that a thought or mental term is directly applied to the world, whereas in fact coidentifying always involves two thoughts, and involves them equally. If I coidentify this person before me with Peter, I coidentify Peter with this person, learning about Peter from my observation of this person, but at the same time, perceiving and interpreting what this person is doing in the light of his being Peter. Using the act of iterating a thought type in new judgments as a model for the act of coidentifying has a related disadvantage. To speak of iterating the thought type Peter focuses attention upon one term only of the act of coidentifying, whereas every iteration of Peter in fact involves both the thought Peter and some other thought or percept. Concepts are really best thought of as determining networks of thoughts, joined by sets of coidentifying capacities.

These specific capacities are means of the concept, and they can increase in number. Networks of coidentified thoughts, i.e., concepts, can grow, characteristically becoming more adequate over time, such that coidentifying is performed more often, under more conditions, with less chance of error. This is but

one more respect in which concepts are like other abilities, which we are continually improving, adding more means to, getting better at employing old means. And, as we often have systematic ways of improving our abilities, we have systematic ways of developing our concepts (Millikan 1984, Chapters 15, 18, and 19). For example, having met a new person in a crowd, first you coidentify by tracking with your eyes, head and feet, coidentifying various demonstrative thoughts. As you track you memorize the face or stance or, perhaps for the moment, just the clothes. You thus extend your tracking abilities, so that you can keep track of the person over temporary and then longer breaks in your perception of them. You add to your tracking ability by collecting identifying information and by learning the person's name. This enables you to keep track via less direct observations and via the information-bearing medium that is language.

Identifying information helps in the tracking, however, only in so far as you are able to coidentify the properties, relations or kinds mentioned in the identifying descriptions. Some portion of these abilities is surely innate, just as the basic ability to track with the eyes is not learned but matures. Recognition of color constancy over various lighting conditions and of shape constancy over various viewing angles are examples, recognition of phoneme constancy over speakers of different sizes and sexes is probably another, and so forth. But recognition of many constancies is learned in whole or part by employing prior tracking abilities (What do voices sound like under water? What do persimmons taste like?), and by learning names and discovering identifying descriptions.⁸ Discovery processes of this sort are never completed, surely cannot be in principle. You could never obtain such an adequate concept of anything that there would be no circumstances, no guises, under which you would fail to recognize it--in the flesh, by indirect observation, by name, or by description. Knowing the object of one's thought then is a matter of degree, with the highest degree never realized.

VIII. Identity statements: the Strawson-Lockwood View

Given this description of what a concept is, it seems clear that different people's concepts of the same object will not usually be the same. Each person will have a unique network of coidentifying abilities pertaining to each conceptualized item. Moreover, there seems to be nothing to bar a person from having several concepts of the same thing but that are not joined, the ideas within these nets not being coidentified. This accords with the view of Strawson (1974) and Lockwood (1971) that the role of identity sentences involving proper names is to effect concept joinings, to hook together isolated concept nets that are concepts of the same.⁹ Lockwood puts it this way. "[T]he hearer possess[es] a body of information, or

⁸ A discussion of concept formation, on the assumption that it works in this sort of way, is in Chapters 9, 18 and 19 of (Millikan 1984).

⁹ Lockwood says he got the general idea from Strawson's lectures at Oxford. See also (Millikan 1984, chapter 12).

mental 'file', relating to [an] individual in question, to which [a] name, as it were, gives access...In the making of an (intendedly informative) identity statement, the speaker... assume[s]...that the hearer has more than one file on the subject of his assertion...The purpose of an identity statement, which will be fulfilled if it is accepted as true, is precisely to get the hearer to merge these files or bodies of information into one' (pp.208-209).

Lockwood's analogy of concepts with file folders is good, but can perhaps be improved. For whereas one thinks of a file folder as having some one central name or designation under which it is filed, concept nets involve multiple thoughts of different types, none of which is more central, more the label of the folder, than any other. A name gives access to a whole concept net, not to any particular thought type in the net. We should note also that it is not just thoughts of individuals that have 'folders', but other denotative thoughts as well, so that the information in each of the folders is in many other folders as well. The cross referencing system required is not easy to imagine on this analogy. But Strawson's and Lockwood's basic idea is sound, I believe. The function of identity statements is to cause the joining of previously isolated concept nets.

IX. Promissory Note

I must stop now, surrounded by a chorus of tantalizing questions all shouting at once to be answered. What relation have concept nets to the notion of Fregean sense, for words, for thoughts? If a concept is an ability correctly to coidentify thought tokens it seems that these coidentified tokens must have prior objects. But in that case, won't a regress result from Evans' claim that thinking of an object requires concepts? On this model, there is a clear sense in which one might misidentify the object of one's thought. Yet isn't taking one's thought to be about a certain object at least partly constitutive of what the thought is about? These questions are addressed in (Millikan 1993) and in (Millikan forthcoming).

REFERENCES CITED

- Evans, G. 1982: The Varieties of Reference. Oxford: Clarendon Press.
Evans, G. 1985a: 'Molyneux's Question', in (Evans 1985b),pp.364-399.
Evans, G. 1985b: Collected Papers. Oxford: Clarendon Press.
Lockwood, M. 1971: 'Identity and Reference', in M. K. Munitz ed., Identity and Individuation, New York University Press,pp.199-211.
Millikan, R.G. 1984: Language, Thought, and Other Biological Categories. Cambridge: Bradford Books/MIT Press.
Millikan, R.G. 1986a: 'The Price of Correspondence Truth'. Nous 20 pp.453-68.
Millikan, R.G. 1986b: 'Thoughts Without Laws'. The Philosophical Review 95, pp. 47-80.
Millikan, R.G. 1989: 'Biosemantics'. The Journal of Philosophy 86.6, pp.281-97.
Millikan, R.G. 1990: 'Truth Rules, Hoverflies, and the Kripke-Wittgenstein Paradox'. The Philosophical Review 99.3, pp.323-53.
Millikan, R.G. 1991a: 'Compare and Contrast Dretske, Fodor and Millikan on Teleosemantics'. Philosophical Topics 18.2, pp.151-61.

- Millikan, R.G. 1991b: 'Speaking up for Darwin', in G. Rey and B. Loewer eds., Meaning in Mind; Fodor and his Critics, London: Blackwell, pp. 151-64
- Millikan, R.G. 1991c: 'Perceptual Content and Fregean Myth'. Mind 100.4, pp. 439-59.
- Millikan, R.G. 1992: 'Explanation in Biopsychology', in J. Heil and Al Mele eds, Mental Causation, Oxford: Clarendon Press, pp. .
- Millikan, R.G. 1993: 'On Mental Orthography', in Bo Dahlbom, ed. Dennett and His Critics. Oxford: Blackwells.
- Millikan, R.G. (forthcoming): 'On Unclear and Indistinct Ideas'. In James Tomberlin, ed., Philosophical Perspectives Vol VII. Atascadero, California: Ridgeview Publishing Company.
- Russell, B. 1912 The Problems of Philosophy. New York: H. Holt, Inc.
- Sellars, W. 1956: 'Empiricism and the Philosophy of Mind', in H. Feigl and M. Scriven eds., Minnesota Studies in the Philosophy of Science vol.I, Minneapolis: University of Minnesota Press, pp. 253-329.
- Strawson, P.F. 1959: Individuals. London: Methuen & Co.
- Strawson, P.F. 1974: Subject and Predicate in Logic and Grammar. London: Methuen & Co.