

COGNITION AND IDENTIFYING REFERENCE

Gary Rosenkrantz

An examination of the relevant literature indicates that few attempts have been made to provide a comprehensive cognitive account of identifying reference. Much of the work on the subject has taken a decidedly linguistic turn. There have been numerous studies of the semantic character of singular terms, i.e., definite descriptions, proper names, and indexical indicators. But many philosophers who pursue such a linguistic approach to the theory of reference have not attempted to determine the cognitive content of items of knowledge which a particular person can express by making use of these kinds of singular terms. In this paper I shall attempt to fill this gap by developing a cognitive approach to the theory of identifying reference. According to a cognitive account, identification is a thoroughly conceptual process. Consequently, such an account implies that whenever a person individuates or recognizes an item, he identifies this item by means of subsuming it under some concept or group of concepts.

I

In current discussions of identifying reference, one finds that the following sorts of terms are frequently employed: "to individuate x," "to identify x," "to pick out x," etc. I shall utilize each of these terms to elucidate a specific epistemic concept, i.e., the concept of a person's having knowledge about a particular. Basically, there seem to be three types of knowledge which a person may have about a particular. One may identify a particular by means of knowing some descriptive fact which uniquely applies to it. For example, if I know that the largest pyramid in Egypt is thousands of years old, then I have knowledge about the great pyramid Cheops. In cases of this sort, a person has what may be called descriptive knowledge about a particular. On the other hand, a person may pick out an item which is an object or component of one of his experiences as this or that. In these circumstances, a person may use an indexical term to indicate an item of which he has had an experience. This is experiential

knowledge about a particular. Lastly, if I know statements such as "Joan of Arc was a saint," "Hieronymus Bosch was a painter," etc., then I have knowledge about the particulars designated by the proper names "Joan of Arc" and "Hieronymus Bosch." In these cases, and similar ones, a person has what I shall call nominative knowledge about a particular.

Since we do not name every item which we have experienced, and do not experience every item for which we have a name, it is clear that some items of nominative knowledge are distinct from items of experiential knowledge. The distinction between experiential knowledge and descriptive knowledge is reminiscent of the distinction between knowledge by acquaintance and knowledge by description.¹ If a person is "acquainted" with certain items he experiences, then some pieces of experiential knowledge are not identical with pieces of descriptive knowledge. On the other hand, epistemologists who reject the "myth of the given" may deny that there are pieces of experiential knowledge which are irreducibly nondescriptive in character. Some philosophers have argued that typical proper names are concealed definite descriptions (Russell, pp. 50-57). These theorists are committed to the thesis that typical items of nominative knowledge are identical with items of descriptive knowledge. Others have argued that typical proper names are not concealed definite descriptions.² If they are right, then the view that typical items of nominative knowledge are identical with items of descriptive knowledge is problematic.

A theory of identifying reference should provide a vehicle for clarifying the cognitive issues involved in the controversies described above. A theory of this kind is adequate only if it provides solutions to the following puzzles. Suppose Mr. Jones is in the house of mirrors at a circus, and he thinks that he sees two similar looking bulgy red tomatoes in front of him. But suppose that in fact Jones is perceiving a single tomato: he is perceiving a tomato which is literally in front of his eyes, and he also perceives that very same tomato by means of one of its reflections in a mirror. However, Jones then realizes that he is in the house of mirrors, and that he may be seeing reflections of a single tomato. It dawns on Jones that he does not know that he is seeing two tomatoes. Thus Jones is unable to tell whether he sees two tomatoes or one tomato. He can express his bafflement by pointing to each tomato and asserting:

- (a) "I am unable to tell whether or not this tomato is that tomato."

Of course, Jones might express his puzzlement in other ways. For example, he may be in a position to assert that:

- (b) "I am unable to tell whether or not the tomato that looks like it's on my right is the same tomato which looks like it's on my left."

Or perhaps Jones decides to name the tomatoes. He calls the one which appears to be on his right "Arrenzo," and he calls the one which appears to be on his left "Allenzo." In these circumstances, Jones may have the following thought:

- (c) "I am unable to tell whether or not Arrenzo is Allenzo."

On the assumption that Jones is perceiving one tomato, how can we account for the truth of (a), (b), and (c)?

The second sort of puzzle which an adequate theory of identifying reference must handle runs something like the following. Jones hears the radio broadcaster say that "Lew Alcindor is a basketball player." Jones then knows that Lew Alcindor is a basketball player. Similarly, suppose that when Jones reads the newspaper he finds it stated on the sports page that "Kareem Abdul Jabbar is a basketball player." He then knows that Kareem Abdul Jabbar is a basketball player. But suppose that Jones is unaware of the fact that Alcindor = Jabbar. Jones is in a position to correctly assert that:

- (d) "I am unable to tell whether or not Alcindor is Jabbar."

On the assumption that Alcindor = Jabbar, how can we explain the truth of (d)?

I propose the following answers to our questions. In each of (a), (b), and (c), Jones uses two individual concepts to identify a single tomato, e.g., being the tomato which looks like it is on his right, and being the tomato which looks like it is on his left, but lacks the requisite information for knowing that the two individual concepts are instantiated by a single tomato. Similarly, in (d), Jones uses two individual concepts to identify a single basketball player, e.g., being the basketball player he heard about on the radio today, and being the basketball player he read about in the newspaper today, but does not possess the information necessary for knowing that these two individual concepts are instantiated by a single basketball player.³

Each of the three types of identifying reference are illustrated in cases (a) - (d). Furthermore, the character of Jones's knowledge in these cases does not differ in any important respect from the character of typical items of knowledge which a person has about various particular objects in his environment. Thus answering our questions in this manner implies that if a person has knowledge about an item, x , then he subsumes x under some individual concept.⁴ Chisholm has provided the following account of the notion of an individual concept (Chisholm, pp. 23-46).

D1: F is an individual concept = df. F is a property such that: (i) it is possible that something has F , and (ii) it is not possible that more than one thing has F at a time.

For example, the property of being the oldest man is an individual concept. D1 implies that an individual concept is an identifying characteristic or individuating property. Another view is that an individual concept is a mode of presentation which is conceptual or quasi-linguistic in character. The following modified version of D1 elucidates the thesis that individual concepts are quasi-linguistic or conceptual entities.

D1': F is an individual concept = df. F is a concept such that: (i) it is possible that something falls within the extension of F , and (ii) it is not possible that more than one thing fall within the extension of F at a time.

I shall presuppose that an individual concept (IC) either satisfies D1 or D1'.

Consider the following items of knowledge about particulars: I know that the desk three feet in front of me is brown; I know that Hieronymus Bosch was a painter; I know that this tomato is red; I know that I feel pain. In each of these four cases I attribute an individual concept to some particular. The individual concepts attributed in these cases are, respectively, being the desk three feet in front of me, being Hieronymus Bosch, being this, and being me.⁵

Suppose that being F , and being G , are individual concepts. If it's possible for a person to consider the proposition that $(\exists x)(x \text{ is } \underline{F})$, and fail to consider the proposition that $(\exists x)(x \text{ is } \underline{G})$, then the cognitive content of being F differs from the cognitive content of being G (cf. Quine, pp. 139-57, Frege, and Ackerman).

Here is an example which illustrates this principle. A person may have learned enough arithmetic to know that $2 + 2 = 4$, but not have acquired the concept of a prime number. Hence, a person can consider the proposition that $(\text{Ex})(x \text{ is the number } 2)$, and yet fail to consider the proposition that $(\text{Ex})(x \text{ is the even prime number})$. The cognitive content of the individual concept, being the number 2, differs from the cognitive content of the individual concept, being the even prime number.

According to the theory of identifying reference I am proposing, an individual concept may be individuated according to its cognitive content. In the following definition I formulate a criterion which individuates IC's in this manner.

D2: The IC, being F, is identical with the IC, being G = df. (i) being F is necessarily such that it is instantiated if and only if being G is instantiated, and (ii) being F is necessarily such that, for any person S, S considers the proposition that something is F if and only if S considers the proposition that something is G.⁶

In D2, the letters "F" and "G" are schematic and may be replaced by any appropriate linguistic expression. If we substitute "the tallest man" for both "F" and "G," then D2 is satisfied. Whenever we substitute an appropriate term for "F," and substitute the same term for "G," D2 is satisfied. Thus D2 has the desirable implication that every IC is identical with itself. If we substitute "the number 2" for "F" and "the even prime" for "G," then clause (i) of D2 is satisfied but clause (ii) is not. D2 implies that the IC, being the number 2, is distinct from the IC, being the even prime. If we substitute "the tallest man" for "F" and "the shortest woman" for "G," then neither clause (i) nor clause (ii) of D2 is satisfied. Hence, D2 implies that the IC, being the tallest man, is distinct from the IC, being the shortest woman. Finally, suppose we substitute "the prettiest vixen" for "F" and "the prettiest female fox" for "G." Evidently, clause (i) of D2 is satisfied. But there might be disagreement over whether or not clause (ii) of D2 is satisfied. Consequently, a controversy could arise over whether or not the IC, being the prettiest vixen, is identical with the IC, being the prettiest female fox. I will not attempt to settle such a possible controversy in the present paper. This example, and similar ones, show that an appeal to D2 may not always suffice to resolve a dispute concerning the individuation of IC's.

There seem to be three types of IC's. This three-fold classification of IC's is roughly analogous to the traditional distinction of singular terms into definite descriptions, indexical indicators, and proper names. As we shall see, such a typology of IC's corresponds to the three kinds of knowledge about particulars distinguished earlier.

I shall call IC's of the first type descriptive IC's (D-IC's). Here are some examples of D-IC's: being the tallest woman; being the largest city in China; being the tallest man in this room; being the desk three feet in front of me; being the even prime number. If definite descriptions have connotation, then a D-IC is connoted by a term *d* just in case "*d*" functions as a definite description.

Thus descriptive knowledge (D-knowledge) can be characterized as any item of knowledge about a particular, *x*, in which the IC attributed to *x* is a D-IC. For instance: I know that the largest monument in Egypt is ancient, where *a* = the largest monument in Egypt, + I have D-knowledge about *a*; I know that the desk three feet in front of me is brown, where *b* = the desk three feet in front of me, + I have D-knowledge about *b*.

I call IC's of the second type experiential IC's (E-IC's). Examples of E-IC's include the following: being this; being that; being myself. If indexical terms have connotation, then an E-IC is connoted by a term *d* just in case *d* functions as an indexical term which a person uses to indicate a particular which is an object or component of one of his experiences.

Thus experiential knowledge (E-knowledge) can be characterized as any item of knowledge about a particular, *x*, in which the IC attributed to *x* is an E-IC. For instance: I perceive a tomato *o*, and I know that this is red, where *o* = this, + I have E-knowledge about *o*; I introspect, and I know that I'm feeling pain + I have E-knowledge about myself. It is customary to distinguish three kinds of E-knowledge: perceptual knowledge of physical objects, introspective knowledge of oneself or one's own mental processes, and memory knowledge of particulars known previously by means of perception or introspection. If a person knows a singular perceptual observation statement of the form "This is F," where the property of being F is a sensible characteristic, then he has an item of perceptual E-knowledge. Similarly, if a person knows a first-person statement of the form "I am F," where the property of being F is a psychological characteristic, then he has an item of introspective E-knowledge.

I call IC's of the third type nominative IC's (N-IC's). Here are some examples of N-IC's: being China; being Hieronymus Bosch; being Joan of Arc. If proper names have connotation, then an N-IC is connoted by a term "d" just in case "d" functions as a proper name.

Thus nominative knowledge (N-knowledge) can be characterized as any item of knowledge about a particular, x, in which the IC attributed to x is a N-IC. For example: I know that Hieronymus Bosch was a painter → I have N-knowledge about Bosch; I know that China is a nation → I have N-knowledge about China.

The general notion of a person's having knowledge about an item in virtue of attributing an IC to that item can now be defined as follows.

- D3: S has knowledge about x in virtue of S attributing the IC of being F to s = df.
 (i) being F is an IC, and (ii) x is F, and
 (iii) S knows that something is F.⁷

II

I shall now discuss some of the questions which can be raised concerning the character of N-IC's and E-IC's. The following Fregean argument implies that more than one N-IC can be instantiated by a single item. Reconsider the case of Mr. Jones and Lew Alcindor described earlier. If the cognitive content (c.c.) of Jones's knowledge that Alcindor exists, is the same as the c.c. of Jones's knowledge that Jabbar exists, then if Jones were to assert that Alcindor is Jabbar, then his assertion would have the same c.c. as his assertion that Jabbar is Jabbar. But while Jones knows the trifling proposition that Jabbar is Jabbar, he does not know the proposition that Alcindor is Jabbar. Thus the c.c. of Jones's assertion that Alcindor is Jabbar, differs from the c.c. of Jones's assertion that Jabbar is Jabbar. Therefore, the c.c. of Jones's knowledge that Alcindor exists, is different from the c.c. of Jones's knowledge that Jabbar exists. Consequently, the N-IC which Jones attributes to Jabbar when Jones knows that Jabbar exists, differs from the N-IC which Jones attributes to Jabbar when Jones knows that Alcindor exists.

In this case, what is the c.c. of each of these two coinstantiated N-IC's? We know, first, that Jones acquired the knowledge that Jabbar exists, while reading a newspaper article about him and, second, that Jones

acquired the knowledge that Alcindor exists, while listening to a radio report about him. One possibility is that the N-IC which Jones attributes to Jabbar when Jones knows that Jabbar exists, is identical with a D-IC, i.e., being the basketball player he read about in the newspaper today; and that the N-IC which Jones attributes to Jabbar when Jones knows that Alcindor exists, is identical with a D-IC, i.e. being the basketball player he heard about on the radio today. Evidently, these two D-IC's differ in their cognitive content. Consequently, if the N-IC's in question are identical with these D-IC's, or similar ones, then the differing c.c. of Jones's knowledge that Jabbar exists, and Jones's knowledge that Alcindor exists, is due to the differing cognitive content of these D-IC's.

On the other hand, it may be argued that Jones can know that Jabbar is a basketball player, and yet be unable to produce any nontrivial descriptive fact which uniquely applies to Jabbar.⁸ Jones acquired the knowledge that Jabbar is a basketball player by means of learning it from a reliable authority or accredited source of knowledge, i.e., the newspaper. But suppose that Jones has forgotten much of what he knows about Jabbar, including how he originally acquired his knowledge about Jabbar. It can be argued that under circumstances of this kind, Jones might know that Jabbar is a basketball player, and yet be unable to produce any nontrivial descriptive fact which uniquely applies to Jabbar. If this argument is correct, then the N-IC which Jones attributes to Jabbar when Jones knows that Jabbar exists, is not identical with a D-IC.

Thus there are two conflicting views concerning the character of a given N-IC, \emptyset ,

(V1) \emptyset is identical with some D-IC;

(V2) \emptyset is not identical with some D-IC, i.e.,
 \emptyset is a nondescriptive IC.

However, (V2) is consistent with the claim that \emptyset stands in a significant logical relationship to some D-IC, e.g., \emptyset is necessarily coinstantiated with a D-IC, or the analysis of \emptyset is a D-IC (cf. Ackerman). Thus the claim that the D-IC, being the basketball player I heard about on the radio yesterday, is the analysis of a N-IC, \emptyset , is consistent with the claim that this D-IC is not identical with \emptyset .

The cognitive content of an IC and its analysis may differ. The analysis of the IC of being the number 2 is the IC of being the class of all couples. Jones can

know that the number 2 is the number 2, and yet not know that the number 2 is the class of all couples. Thus the IC of being the number 2 and the IC of being the class of all couples differ in their cognitive content. Hence, the claim that the analysis of a given IC, \emptyset , is a D-IC is consistent with the claim that a person who knows that \emptyset is instantiated is unable to produce the analysis of \emptyset , i.e., does not know that the D-IC in question is instantiated. The following two claims are consistent with one another: (1) the D-IC of being the basketball player I read about in the newspaper yesterday is the analysis of an N-IC, \emptyset , and (2) I know that \emptyset is instantiated, and yet do not know that (Ex)(x is the basketball player I read about in the newspaper yesterday).

It is hard to believe that the N-IC which Jones attributes to Jabbar when Jones knows that Jabbar exists, does not stand in some significant logical relation to an appropriate D-IC, e.g., being the basketball player he read about in the newspaper today. But the character of Jones's N-knowledge about Jabbar does not differ in any significant respect from the character of other typical items of N-knowledge which a person has about physical objects or persons other than himself. Consequently, if this N-IC is either identical with, or analyzable as, a D-IC, then all of a person's N-knowledge about physical objects or persons other than himself is either identical with, or analyzable as, D-knowledge.

It is at least initially plausible to suppose that in some cases, if a person has experiential knowledge about an item, x, then he need not make use of any unique descriptive fact in order to identify x. For example, if I have amnesia, or if I am in a state of sensory deprivation, then I may identify myself as me or I, and yet be unable to produce any nontrivial descriptive fact which uniquely applies to me. Similarly, perhaps a young child identifies the bulgy red tomato he is looking at as this, and yet is unable to produce any nontrivial descriptive fact which uniquely applies to the tomato. Thus if I have a perceptual experience, and I identify some item which is an object or component of that experience as this, then we may assume prima facie that the E-IC I am attributing to the item in question is nondescriptive. Similarly, if I have an inner experience, e.g., the experience of being conscious, and I identify the subject of that experience as me, then we are prima facie justified in supposing that the E-IC I am attributing to myself is not identical with a descriptive IC.

When Jones was in the house of mirrors he was unable to tell whether or not this red bulgy tomato is that red bulgy tomato (although this tomato = that tomato). Similar cases can be constructed which do not involve the use of mirrors or similar devices. Case 1: On Monday Jones perceptually identifies a tomato as this. On Tuesday he perceptually identifies the very same tomato as this. On Tuesday he remembers completely all the experiential knowledge he had about tomatoes on Monday. In these circumstances, on Tuesday Jones may be unable to tell whether or not this tomato (the tomato he sees on Tuesday) is that tomato (the tomato he saw on Monday). Perhaps the tomato in question has altered its appearance beyond all recognition in the time that has elapsed since Monday. Or perhaps on Tuesday Jones perceives a number of tomatoes which exactly resemble one another in appearance, and Jones cannot tell which of them is the tomato he perceived on Monday.

In case 1 a person perceives a given physical object at different times. A person can also (i) perceive a given physical object by means of more than one sense at a time (e.g., he can simultaneously see and touch an object), and (ii) perceive an object more than once by means of a single sense at a time (e.g., he can simultaneously touch an object with his right and left hand), and (iii) perceive an object more than once by means of a single sense-organ at a time (e.g., he can simultaneously see an object a number of times by means of several reflections of that object in mirrors). I shall refer to situations of the kinds described in (i), (ii), and (iii) as instances of a person's perceiving an object by means of more than one mode of representation at a time. If a person perceives an object o at time t by means of more than one mode of representation m_1, m_2, \dots, m_n , then at t he may be unable to tell that the thing he experiences by means of m_1 at t is identical with the thing he experiences by means of m_2 at t , \dots is identical with the thing he experiences by means of m_n at t . Jones was in such a situation when he visited the house of mirrors. An even more striking example of this sort is found in case 2: Suppose that each of my eyes is attached to a long hollow cylindrical tube in such a way that each eye sees only through its respective tube. Imagine that I am staring at a tomato x at time t with my right eye focused on x , through its cylinder, and my left eye focused on x , through its cylinder. If things are set up properly, I will be seeing x twice at t , i.e., I will have two distinct visual experiences of x at t . In these circumstances, I may find myself in a position where I do not know that I am not seeing two tomatoes which exactly resemble one another in appearance. If I am in this sort of position,

then I cannot tell that the tomato I identify as this (by means of seeing it with my left eye) is the tomato I identify as that (by means of seeing it with my right eye), although in fact I am perceiving a single tomato. Similar cases can be constructed for all of our senses. If at time *t* one's eyes are closed, then at *t* one may be touching a physical object with both one's right and left hand, and yet at *t* be unable to tell that this (the thing one is touching with one's right hand at *t*) is that (the thing one is touching with one's left hand at *t*). If at time *t* one's hands or arms are hidden from one's sight, then at *t* one may be both seeing and touching a physical object and yet at *t* be unable to tell that this (the thing one is seeing at *t*) is that (the thing one is touching at *t*). Such cases are constructable for any combinations of the senses of sight, touch, hearing, taste, and smell.

If we apply the Fregean argument presented earlier to these cases, then it can be proven that more than one E-IC can be instantiated by a single item. If the c.c. of Jones' knowledge that this tomato exists, is the same as the c.c. of his knowledge that that tomato exists, then if Jones were to assert that this tomato is that tomato, then his assertion would have the same cognitive content as his assertion that this tomato is this tomato. But while Jones knows the trifling proposition that this tomato is this tomato, he does not know that this tomato is that tomato. Thus the c.c. of Jones' assertion that this tomato is that tomato, differs from the c.c. of Jones' assertion that this tomato is this tomato. Therefore, the c.c. of Jones' knowledge that this tomato exists, is different from the c.c. of his knowledge that that tomato exists. Consequently, the E-IC which Jones attributes to the tomato when he knows that this tomato exists, is different from the E-IC which Jones attributes to the tomato when he knows that that tomato exists. A distinct E-IC corresponds to each of the various modes of representation by means of which an object can be perceived.

Despite the presumption in favor of the nondescriptive character of E-IC's, it is tempting to suppose that each of the E-IC's which Jones attributes to the tomato is identical with a different D-IC, e.g., being the tomato that looks like it is on his left, and being the tomato that looks like it is on his right. These two D-IC's differ in their cognitive content. Thus if the E-IC's in question are identical with these D-IC's, or similar ones, then the differing c.c. of Jones's knowledge that this tomato exists, and Jones' knowledge that that tomato exists, is due to the differing cognitive content of these D-IC's.

Thus there are two conflicting views concerning the character of a given E-IC, \emptyset ,

(V3) \emptyset is identical with a D-IC;

(V4) \emptyset is not identical with a D-IC, i.e., \emptyset is a nondescriptive IC.

However, (V4) is consistent with the claim that \emptyset stands in a significant logical relationship to some D-IC, e.g., \emptyset is necessarily coinstantiated with a D-IC, or the analysis of \emptyset is a D-IC.

Thus the claim that the D-IC of being the tomato that looks like it is on my right is the analysis of an E-IC, \emptyset , is consistent with the claim that \emptyset is non-descriptive. Furthermore, the thesis that the analysis of \emptyset is a D-IC is consistent with the thesis that a person who knows that \emptyset is instantiated is unable to produce the D-IC which is the analysis of \emptyset . The following two claims are consistent with one another: (1) the D-IC of being the tomato which looks like it is on my right is the analysis of an E-IC, \emptyset , and (2) I know that \emptyset is instantiated, and yet do not know that (Ex)(x is the tomato which looks like it is on my right).

It is hard to believe that the E-IC which Jones attributes to the tomato when he knows that this tomato exists, does not stand in some significant logical relation to an appropriate D-IC, e.g., being the tomato that looks like it's on his right. But the character of Jones' perceptual E-knowledge about the tomato in these cases does not differ in any important respect from the character of other typical items of perceptual E-knowledge which a person has about objects in his environment. Therefore, if the E-IC which Jones attributes to the tomato when he knows that this tomato exists, is either identical with, or analyzable as, a D-IC, then all of a person's perceptual knowledge about objects in his environment is either identical with, or analyzable as, D-knowledge.⁹

University of North Carolina, Greensboro

NOTES

¹Bertrand Russell, The Problems of Philosophy (London: Oxford University Press, 1950), pp. 46-59.

²Saul Kripke, "Naming and Necessity" in Semantics of Natural Languages, ed. Davidson and Harman, (Dordrecht: Reidel, 1972).

³See the literature on "opaque contexts" and Frege's "two names argument": Willard V. O. Quine, From a Logical Point of View (New York: Harper and Row, 1961), pp. 139-57; Gottlob Frege, "On Sense and Reference" in Translations from the Philosophical Writings of Gottlob Frege, eds. Geach and Black (Oxford: Blackwell, 1952); Diana Ackerman, "Proper Names, Propositional Attitudes, and Non-Descriptive Connotations," Philosophical Studies, forthcoming. Also compare Aristotle, Posterior Analytics in The Basic Works of Aristotle, ed. Richard McKeon (New York: Random House, 1941), Bk. I: Ch. 19-23. Aristotle would have said that in cases (a) - (d) Jones does not know the middle term.

⁴Roderick Chisholm, Person and Object: A Metaphysical Study (La Salle: Open Court, 1976), pp. 23-46. Compare Rudolph Carnap, Meaning and Necessity (Chicago: The University of Chicago Press, 1947), pp. 40-41.

⁵IC's might also be interpreted in terms of the identity relation, e.g., being identical with Mozart, and being identical with me.

⁶In D2, "being F is necessarily such that . . ." expresses a logical necessity which is de re with respect to the IC of being F. By instantiation I mean either an item's exemplifying a property or an item's being an instance of a concept. Being coinstantiated is being either coexemplified or coextensive.

⁷The letter "F" is schematic and may be replaced by any appropriate linguistic expression.

⁸See Kripke, and Ackerman, IC's such as being the thing identical with Jabbar, and being the thing identical with me, are at best trivial or degenerate cases of D-IC's. We may prefer to classify IC's of these sorts as N-IC's and E-IC's, respectively.

⁹Cf., Russell, pp. 46-59. Russell argues that all of a person's knowledge about particular physical objects or persons other than himself is descriptive knowledge. But there are three conflicting views concerning the character of a given E-IC or N-IC, \emptyset , either (i) is identical with a D-IC; or (ii) \emptyset is a nondescriptive IC and the analysis of \emptyset is a D-IC; or (iii) is a non-descriptive IC and \emptyset is not analyzable as D-IC. However, Russell's views imply that a person may have non-descriptive knowledge with respect to items with which he is "acquainted," i.e., his own mental states, abstract entities, and himself. For an application of the notion of an IC to the theory of acquaintance see Gary Rosenkrantz, "Haecceities and Perceptual Identification," Grazer Philosophische Studien, forthcoming; and Gary Rosenkrantz, "Acquaintance," unpublished manuscript.