Peirce on Proper Names

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Abstract. This paper offers a developmental account of Peirce's theory of proper names. It identifies two main dimensions of Peirce's thinking on proper names, a "taxonomic dimension," concerning the place of proper names within the taxonomy of signs, and a "maturational dimension," concerning the different "stages of maturity" a proper name goes through when interpreted. These two dimensions also constitute distinct phases of Peirce's (continuously evolving) theory of proper names. The chronological reconstruction offered in the paper is also shown to solve some apparent inconsistencies in what Peirce wrote about proper names.

Introduction

It is a common view today, even though it was scarcely so in the 1940s and 1950s, that Charles S. Peirce was a thinker in continuous evolution. Some early attempts at a "static" interpretation of his thought have been definitely overcome by Murray Murphey's 1961 unsurpassed *The Development of Peirce's Thought*, in which Peirce's philosophy is described as "a house which is continually rebuilt from within."[1] Murphey's book was the first to offer a developmental or genetic account of Peirce's philosophy. By so doing, Murphey showed that many of the flagrant contradictions and inconsistencies with which Peirce's philosophy was supposed to abound were due to the conscious or unconscious combination, on the part

of Peirce's interpreters and commentators, of passages and papers belonging to different phases of his intellectual development.[2]

Murphey was particularly interested in Peirce's architectonic project, namely, in the manner his various systems of metaphysics depended on an underlying theory of logic, which in turn depended on his ideas about mathematics. Comparatively little attention was paid by Murphey to the many details of Peirce's philosophy of language, which Peirce identified with the first branch of logic, that is, speculative grammar, whose task is to provide an analysis and classification of signs. This area of Peirce's thought has been at the center of a renewed interest in recent years, because philosophers have recognized that he was seeking something very akin to an analytical philosophy of language, especially with reference to reference, meaning, truth, propositional structure, logical form, quantification theory, and, of course, proper names.[3]

This paper offers a developmental account of Peirce's theory of proper names. Though this theory has received a fair bit of scholarly attention,[4] no one has attempted to give a developmental explanation of it.[5] However, as in many areas of Peirce's thought, there are apparent inconsistencies in what he says about proper names that can only be resolved by taking into account the manner in which that theory developed. Just to give few examples, in some places Peirce says that a proper name is an index (R 787, R 485); in other places he says or implies that a proper name is a symbol acting like an index (EP 2:307); in still other places he suggests that proper names are "nearly pure" indices (W 5:163, R 409); in a couple of places he says that a proper name is an indexical rhematic legisign (EP 2:294, RL 463); sometimes he says that the object of an index is an individual (EP 2:307); at other times he denies this and claims that the object of an index is a general term (W 2:181).[6] One of the aims of the present paper is to show that these are not claims made by a confused thinker, but the symptoms of the fact that that thinker's ideas on proper names were subject to development and refinement.

The developmental account offered in the sequel shows that there are two main dimensions of Peirce's theory of proper names. Up to 1903, he seems to have been interested in the place of proper names within his general classification of signs. I will call this the

'taxonomic dimension' of Peirce's theory of proper names. Many of the apparently conflicting statements that Peirce made about proper names can be reconciled if the development of this dimension of the theory is accurately reconstructed. This is the task of the first part of the paper.

The other dimension of Peirce's theory of proper names emerges clearly after 1903, especially in unpublished works from 1905, and concerns what at one point he calls the "ideal normal course" of the interpretation of a proper name: a proper name, according to Peirce, has three stages of "maturity," and really functions as a proper name (that is, according to its taxonomic dimension) in the second stage. I will call this the 'maturational dimension' of the theory. The maturational dimension is the topic of the second part of the paper.

Peirce scholars have usually focused on either the taxonomic or the maturational dimension, sometimes simply conflating the two. But if the chronology of Peirce's thinking about proper names is precisely reconstructed, as I attempt to do here, each dimension appears as a distinct *phase* of the theory. The theory was in continuous evolution, and the taxonomic dimension is itself divisible into sub-phases. The maturational dimension, by contrast, is a relatively stable component of Peirce's post-1903 work, even though its statements differ, sometimes even dramatically, from draft to draft. It is in describing the maturational aspects of proper names that Peirce come closer to the "causal theorists," and especially to Saul Kripke, as many commentators have observed and as I will also show in due course.

1. The Taxonomic Dimension

In his early works on logic, Peirce divides signs in general into three classes, which he calls 'icons,' 'indices,' and 'symbols.' The definitions that he gives of these three classes of signs depend on a reformulation of the traditional doctrine of the quantity of terms, which Peirce took from John Stuart Mill.

For Mill, the denotation of a name is the objects it signifies or is applicable to, while its connotation is the characters or attributes it signifies. A Millian name has either only a denotation, only a connotation, or it has both. If it has either only a denotation or only a connotation, it is a "non-connotative" name; if it has both a connotation and a denotation, it is "connotative."[7] A proper name, like 'John' or 'London,' since it signifies an object only without signifying any character of it, is non-connotative. Mill's theory of proper names as non-connotative was dismissed by Bertrand Russell at the beginning of the twentieth century, only to be resurrected by Kripke in the 1970s. I will return to Kripke's theory in the second part of this paper.

In the 1865–1866 Harvard Lectures, Peirce presents a division of signs that depends heavily upon Mill:

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A term has comprehension in virtue of having a meaning and has extension in virtue of being applicable to objects. The meaning of a term is called its *connotation*; its applicability to things its *denotation*. Every symbol *denotes* by *connoting*. A representation which *denotes* without connoting is a mere *sign*. If it *connotes* without thereby *denoting*, it is a mere copy. (W 1:272)

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'Copy' and 'sign' (this latter used in a narrow sense) are labels for what he later calls 'icon' and 'index,' respectively. (As we shall see, however, what Peirce calls 'sign' in 1865 does not have all of the same properties as what he calls 'index' later.) Thus, the doctrine is that a sign (in the wider sense in which it is equivalent to 'representation') that connotes without denoting is an icon, a sign that denotes without connoting is an index, a sign that both denotes and connotes is a symbol. Icons and indices correspond to Mill's non-connotative names, symbols correspond to Mill's connotative names.

A proper name is an index. In the 1865 "An Unpsychological View of Logic," Peirce offers a different terminology. Indices (called 'signs' in the narrow sense in the Harvard

Lectures) are here labeled 'marks,' while icons (called 'copies' in the Harvard Lectures) are here labeled 'analogues.' The definitions have not changed: marks are representations (that is, signs in the wider sense) that denote without connoting, analogues are representations that connote without denoting, symbols are representations that denote by connoting. Proper names are marks:

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Marks, by which I mean such representations as denote without connoting. If the applicability of a representation to a thing depends upon a convention which established precisely what it should denote, it would be a *mark*. A proper name is an instance. (W 1:308)
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Reference to a "convention" governing the use and applicability of proper names was already made in the first Harvard Lecture, where the division of signs was framed in terms of the kind of "truth" each sign possesses:

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The second kind of truth, is the denotation of a sign, according to a previous convention. A child's name, for example, by a convention made at baptism, denotes that person. Signs may be plural but they cannot have genuine generality because each of the objects to which they refer must have been fixed upon by convention. (W 1:170)
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I am called Francesco, but I could have been named Paolo if my parents had reached a different onomasiological agreement. It is only a "convention made at baptism" that constitutes the denotation of a proper name, not its connotation.

Peirce's appeal to the convention governing the denotation of proper names may disconcert those who have been accustomed to think that it is the symbol that Peirce defines or otherwise characterizes in terms of conventionality.[8] Let me attempt to clarify this point.

The crucial property of symbols is that they denote *general* objects, and this is so because they denote by connoting, and therefore denote *whatever* satisfies the characters or attributes connoted. Now symbols, qua signs whose object is general, are for Peirce of two species: already in the 1867 "On a New List of Categories" Peirce distinguishes between "concepts" and "external symbols," but classifies both species under the genus of "symbols" (W 2:56–57). In presenting his notion of symbol, Peirce very often refers to both its species, the "natural," based on natural or innate habits, and the "conventional," based on acquired or artificial habits.[9] When in *How to Reason* he says that "It seems certainly the truest statement for most languages to say that a *symbol* is a conventional sign which being attached to an object signifies that that object has certain characters" (R 409:95), this should not be taken to mean that symbols are conventional signs *simpliciter*, but that in the majority of languages there exist conventional signs that function as *predicates* (that is, as general terms), and that these are symbols. That not all symbols are conventional is said very clearly in the 1903 Lowell Lectures:

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besides conventional symbols there are signs of the same nature except that instead of being based on express conventions they depend on natural dispositions. They are natural symbols. All thought takes place by means of natural symbols and of conventional symbols that have become naturalized. (R 450:6)

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Some symbols are certainly conventional (external symbols, like words and the like, typically are), but some are not (concepts are not conventional). At the same time, while some indices are conventional (proper names being a case in point), not all of them are: a footprint is an index but not a conventional index. Conventionality is a defining or characteristic property of neither symbols nor indices. In fact, nowhere else and never again did Peirce associate conventionality with indices as such, as we shall see.

The essential difference between the three kinds of signs is efficiently captured by the

definitions given by Peirce in the Harvard Lectures of 1865: icons connote without denoting, indices denote without connoting, symbols denote by connoting. Though expressed in different, and to some extent more obscure terms, these are the definitions given at the end of the "New List" (cf. W 2:56): an icon (here termed 'likeness') is a sign whose relation to its object consists in a "quality," that is, it only connotes some character of its object; an index is a sign whose relation to its object "consists in a correspondence in fact," that is, it de facto denotes its object; a symbol is a sign whose relation to its object consists in an "imputed character," that is, it denotes its object in virtue of a character.

A sign that denotes an object without connoting any character of it does so by virtue of a "correspondence of fact" or "blind compulsion." Many of Peirce's later descriptions of the index seem to emphasize this aspect at the expense of the denotation/connotation relationship. Yet the two conceptions are strictly connected. To say that an index denotes without connoting is to say that the denotation of an index is determined in a non-predicative and non-conceptual manner. An index denotes the object that it de facto denotes, and no reason can be given for its denotation. A symbol, by contrast, denotes the objects it denotes in virtue of a character. If we ask why 'bachelor' denotes the things it denotes, the answer is that those things possess certain characters, say 'adult,' 'unmarried,' and 'male,' and that 'bachelor' denotes whatever possesses them. But if we ask why 'Napoleon' denotes the man it denotes the answer cannot be that the man possessed certain characters and that the name denotes whomever possesses them. With symbols the denotation is determined *via* the connotation; with indices the denotation is direct and "blind," requiring no mediation and no explanation. In this sense, a sign that denotes without connoting has a "correspondence in fact," as opposed to a "correspondence of reason," with its *denotatum*. The affinity of Peirce's theory of proper names with the "causal theories" depends precisely on this, as we shall see in the second part of this study.

That proper names are to be classed as indices, that is, as signs that denote without connoting, remains a relatively constant idea of Peirce's. Yet, it is not until about the mid-1890s, as we shall see, that Peirce returns to explicitly mention proper names as examples of indices. In the meanwhile, while continuing to hold that an index is a sign that denotes

without connoting, Peirce comes to the conclusion that an index is a sign of an *individual* object.[10] Murphey argued that a significant change in both Peirce's logical theory of the index and his metaphysical theory of the individual occurs in the 1880s.[11] Let us take a closer look at this issue.

In the 1870 "Logic of Relatives," Peirce writes that an individual, in the sense of a term not capable of logical division, cannot be realized either in thought or in sense, and, properly speaking, does not exist (W 2:390–91n). Even the referent of a proper name, like 'Philip of Macedon,' is capable of logical division, for instance into Philip drunk and Philip sober. Yet, there are contexts in which differences of place and time, as well as the differences that accompany them, are disregarded. In those contexts we may talk of an individual as that which can be in but one place at one time: "there are certain general terms whose objects can only be in one place at one time, and these are called individuals" (W 2:181). In this perspective, a proper name is a general term denoting something that can be in only one place at one time but that is susceptible of logical division.

Brock contrasts this early "collective view" of proper names with the later "indexical view," namely, the view that proper names are signs that denote without connoting.[12] But the indexical view was not a later theory: it was already affirmed in 1865. Likewise, Murphey thought that before 1885 Peirce was using the term 'index' in the sense of a *concept*.[13] Yet a concept, for Peirce, is a symbol, and qua symbol it has both a connotation and a denotation. The index, by contrast, was *defined* in 1865 as a sign with denotation but without connotation, which implies that no index can be a concept. If a proper name is a general term that denotes a (spatio-temporally) individual object, then it cannot be an index according to the definition of 1865. Did Peirce notice these inconsistencies?

It is possible that Peirce was somewhat aware of the tension between his definition of the index and his theory of individuals, and it is possible that this tension brought him to revise the latter. In the 1888 "A Guess at the Riddle," he refers to Duns Scotus's notion of *haecceitas*, "thisness," as something ultimate, that is, indivisible and inexplicable: "What Scotus calls the haecceities of things, the hereness and nowness of them, are indeed ultimate" (W 6:205). According to Scotus, what gives *haecceitas* to an object cannot be a general

concept or predicate; it must be a particular. But since the mind can only understand general concepts, the haecceity of things cannot be understood by means of concepts; it can only be experienced.[14] The notion of haecceity that Peirce takes from Scotus is the notion of an ultimate individual that cannot be grasped intellectually. Unlike his earlier notion of individual, haecceity is completely anti-general.

This change in the metaphysics of the *individuum* was probably the origin of the change in his conception of the index that I have mentioned. The index is still defined as a sign that denotes without connoting. In the 1885 "On the Algebra of Logic," it is said to be a sign that "signifies its object solely by virtue of being really connected with it" (W 5:163). That 'being really connected' with an object actually means denoting that object without connoting it is shown by what Peirce says few lines below about pronouns: "Demonstrative and relative pronouns are nearly pure indices, because they denote things without describing them" (W 5:163). Anything that denotes an object without describing it is an index. (I shall return to the qualification 'nearly pure' in a moment.) But now an index is further explicitly qualified as a sign of an individual object, and not just as a general term incapable of logical division.

That an index is now considered as a sign of an individual object is evident from Peirce's new analysis of the proposition.[15] According to his earlier analysis, any proposition is composed of a subject term and a predicate term, which are both symbols (for all terms are symbols). He now realizes that a proposition always refers to a "universe of discourse," which is always individual. In consonance with the Scotistic notion of haecceity that he has now adopted as his metaphysics of the *individuum*, then, Peirce claims that the universe of discourse to which any proposition refers cannot be described, that is, represented by means of symbols only: it must be indicated: "tokens [symbols] alone do not state what is the subject of discourse; and this can, in fact, not be described in general terms; it can only be indicated" (W 5:164); "no proposition whatever can be completely and fully expressed in general terms [symbols] alone" (W 4:249). According to the earlier analysis, in 'All men are mortal' we have two symbols ('man' and 'mortal'), the first of which is universally quantified. According to the new analysis, it is composed of a quantifying component ('For

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every $x, \ldots x \ldots$') and a predicative component ('x is either not a man or is mortal'), where the variable x ranges over the universe of discourse. The quantifier indicates the universe of discourse and prescribes to select any element at will from that universe. Peirce's Scotistic metaphysics of the *individuum* has now a perfect parallel in his logical theory: just as the haecceity of things cannot be understood conceptually or predicatively, so the universe of discourse in logic cannot be represented by means of symbols: it must be *indicated*, that is, denoted by means of indices. As Murphey noticed, even though Peirce's first substantive mention of Scotus's *haecceitas* is slightly posterior (1888) to the new analysis of the proposition (1885), yet "there is little doubt that the concept of *haecceity* influenced his formulation in 1885."[16]

That an individual thing cannot be represented conceptually or predicatively (that is, symbolically) but can only be indicated, implies that the relation between an index and its object is what Peirce now calls "genuine and external secondness" (W 5:307), namely, the dynamical and existential relation between two individuals. As he would put it in the Harvard Lectures of 1903, "In pure Secondness, the reacting correlates are . . . Singulars, and as such are Individuals, not capable of further division" (EP 2:161). Since an index is a sign of an individual object, the index itself, qua sign, must be an individual object. This idea is precisely what triggers Peirce to take the next move in his analysis of proper names.

In 1894 Peirce completed a treatise on logic whose title was *How to Reason*, also known as the "Grand Logic." In Chapter VI of that treatise he writes:

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The words called "pronouns," that is to say, indicative words, are of peculiar interest to logicians. Of course, the use of every word depends somewhat upon the association of ideas; so that no word is a pure *index*. But the *personal* and *demonstrative* pronouns are nearly so. (R 409:100)

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Even though no mention is made here of proper names, yet Peirce uses the same qualification

used in the "Algebra of Logic": pronouns are not "pure" indices but are "nearly" so. The reason of this is explained in another passage of the same Chapter:

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That a word cannot in strictness of speech be an index is evident from this, that a word is general,—it occurs often, and every time it occurs, it is the same word, and if it has any meaning *as a word*, it has the same meaning every time it occurs; while an index is essentially an affair of here and now, its office being to bring the thought to a particular experience, or series of experiences connected by dynamical relations. (R 409:95–96)
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A word is a general kind of object; using a later terminology, it is a "type" that occurs in "replicas." A pure index, Peirce now realizes, is *itself* an individual object whose object is in turn an individual. With 'dynamical relation' Peirce always means a relation between two individual objects, that is, a secondness. Proper names and pronouns, being words, are not individual things, and therefore their relation to their objects is not a secondness: they cannot be pure indices. As we shall see, this idea becomes central in the *Syllabus* of 1903.

In other papers and drafts from the second half of the 1890s, Peirce says explicitly that proper names are indices: "all proper names are of this kind [of the indexical kind]" (R 787:21); "A proper name of an individual object is the best example of an index" (R 485:2); "A proper name of a known individual object is an index" (R 485:1); "Any proper name is of the same nature [of indexical nature]" (R 441). Pronouns and proper names alike are indices, because they denote without connoting:

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not only "this" and "that," but all proper names, including such words as "yard" and "metre" (which are strictly the names of individual prototype standards), and even "I" and "you," together with various other words, are equally devoid of what Stuart Mill calls "connotation." (CP 4.155)
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However, in 1898 (R 484) further doubts as to the indexical nature of proper names and pronouns are raised:

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A pure index would present a pure sense-reaction. But again there is no such thing. Every index is considered as an individual sign; but this individuality will not bear cross-examination, but betrays more or less generality, because there is no pure index. Still we may call a proper name or demonstrative or personal pronoun an index. (R 484:5)
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The claim made here that there is no pure index has to be taken *cum grano salis*. A similar claim is found in the entry "Index" that Peirce wrote for Baldwin's *Dictionary* in roughly the same years: "it would be difficult, if not impossible, to instance an absolutely pure index, or to find any sign absolutely devoid of the indexical quality" (CP 2.305). What does 'pure index' mean, and what does the claim that there is no pure index amount to?

Peirce seems to have used the phrase 'pure index' in two main senses in the period 1894–1901. In one sense, a pure index is an individual object that denotes another individual object. In this sense, "pure" indices are opposed to "nearly pure" indices, which are general kinds of things ("types") that denote individual objects. Interpreted in this sense, the claim that "every index is considered as an individual sign" would mean not simply that an index denotes an individual object, but that it is itself an individual object. To use one of Peirce's favorite examples, a pointing finger is an individual object that denotes another individual object (the object pointed to). In "pure" indices the relationship between sign and object is a secondness, that is, a dyadic relation between two individuals. But pronouns and proper names are not "individual signs" in this sense: they do denote individual objects, but are not themselves individual. Interpreted in this way, Peirce's claim that their "individuality . . . betrays more or less generality" would be a reference to the generality of the sign itself and

of its object. Peirce's hesitancy in the 1885 "Algebra of Logic" to call pronouns 'pure indices' can be explained along these lines.

In another sense, a pure index is an index that is not a proposition. Evidence of this sense is found in Καινὰ στοιχεῖα, a long article that the Peirce Edition Project has dated "early 1904" (EP 2:300), but which internal and external evidence suggests was probably composed in 1901. Here Peirce says:

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A weathercock conveys information; but this it does because in facing the very quarter from which the wind blows, it resembles the wind in this respect, and thus has an icon connected with it. In this respect it is not a pure index. A pure index simply forces attention to the object with which it reacts and puts the interpreter into mediate reaction with that object, but conveys no information. As an example, take an exclamation "Oh!" The letters attached to a geometrical figure are another case. (EP 2:306)
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When an index has an icon attached to it, so that it signifies that the object denoted has the characters represented by the icon, it is not pure. A weathercock is such an "impure" index. Any such index functions as a proposition: "an index which forces something to be an *icon*, as a weathercock does, or which forces us to regard it as an *icon*, as the legend under a portrait does, does make an assertion, and forms a *proposition*" (EP 2:307). A pure index, by contrast, is one that denotes an object without having an icon attached to it, that is, without making assertions and without conveying information. Proper names, personal pronouns, the letters attached to a geometrical diagram, are such pure indices. Interpreted in this second sense, Peirce's claim in R 484 that "a pure index would present a pure sense-reaction" would mean that a pure index denotes an object (an item of "sense-reaction") without asserting anything. Likewise, the idea that the index's "individuality . . . betrays more or less generality" could be taken to mean that a pure index *in this sense* has an icon attached to it that adds to it an element of generality.

Which of these two interpretations of the passage in R 484 is the more likely may remain undetermined. It is certain that both interpretations find support in Peirce's subsequent writings on indices and proper names, as we shall see. In the first sense, a pure index is an individual object that denotes an individual object, and as such it contrasts with the "nearly pure" indices mentioned elsewhere that are general signs that denote individual objects. In the second sense, a pure index is an index that has no icon attached to it, and as such contrasts with "impure" indices that have some such icon attached to them. In the first sense, the claim that there are no pure indices means that all signs are more or less general in themselves qua signs. In the second sense, it means that all signs are more or less assertive and informative.

Another passage from Καινὰ στοιχεῖα sheds further light on the first sense of 'pure index':

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There are words, which, although symbols, act very much like indices. Such are personal, demonstrative, and relative pronouns, for which *A*, *B*, *C*, etc., are often substituted. A *Proper Name*, also, which denotes a single individual well known to exist by the utterer and interpreter, differs from an index only in that it is a conventional sign. (EP 2:307)
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According to Καινὰ στοιχεῖα, proper names and pronouns are conventional symbols that function very much like indices. Now a conventional sign is not an individual thing, but a type occurring in replicas. Proper names and pronouns, like the majority of words (which are conventional symbols), are types occurring in replicas. But unlike symbols, each of their replicas denotes an individual object, as indices do. Peirce is hesitating: even though he knows that not all conventional signs are symbols, yet given his limited semiotic model he feels himself forced to class proper names and pronouns with symbols because, like conventional symbols, they are types occurring in replicas. This is the only possibility open to him, because at this time he thinks that the relationship type/replica is peculiar to symbols,

while he would later realize that it also applies to non-symbolic signs.[17]

In either of the senses outlined above, the category of "pure index" (and the complementary categories of "nearly pure index" and "impure index") is not a taxonomic category. According to the taxonomy that Peirce has developed so far, a sign is either an icon, an index, or a symbol. Pure, nearly pure, and impure indices are just indices, being simply ad hoc sub-categories that Peirce has informally introduced to accommodate the facts that some indices are individual objects while others are not (first sense) and that some indices assert while others do not (second sense). Some reform of the taxonomy is therefore in order if these two sub-categories are to become proper taxonomic categories, that is, if they are to be directly obtained by means of the taxonomy. This is done in Peirce's writings of the beginning of the century.

A weathercock is an index, because it denotes an individual object (the direction of the wind in a certain portion of the space-time). It is a pure index in the first sense, because it is itself an individual thing, and an impure index in the second sense, because it asserts something of its object. Now, the sign that can make an assertion is the proposition,[18] but propositions are symbols, not indices. This taxonomic problem is parallel to the one concerning proper names, which are nearly pure indices in the first sense, because they are in themselves general kinds of things, and pure indices in the second sense, because they assert nothing. Both problems will be fixed by two successive "reforms" of the classificatory scheme in 1902 and in 1903, respectively.

Before 1902, Peirce was happy to consider the division of signs into terms, propositions, and arguments as a subdivision of symbols. With the *Minute Logic*—a treatise on logic to which Peirce works intensely in 1902—an important reform of speculative grammar is introduced which consists in considering the members of the two divisions—that into icons, indices, and symbols, and that into "rhemes" (a new label for 'term'[19]), propositions, and arguments—not as *classes* of signs, but as ways of classifying signs, that is, as *semiotic parameters* by the combination of which the classes of signs are obtained. This reform makes it necessary to determine the compossibility of parameters. The principles for the determination of the compossibility of parameters are quite general,[20] but here it is only

necessary to see how they apply to the two divisions of the *Minute Logic*: an icon cannot be a proposition (and thus iconic propositions are excluded), and an argument can only be a symbol (and thus iconic and indexical arguments are excluded). Six classes of signs are allowed by the rules: iconic rhemes, indexical rhemes, symbolic rhemes, indexical propositions, symbolic propositions, and symbolic arguments. The new taxonomy allows Peirce to solve the problem of the weathercock: a weathercock is an index, because it denotes an individual object, but is also a proposition, because it asserts something of that object; it is an indexical proposition, a category that was impossible in the earlier theory. (In the earlier theory, as we have seen, an index that has an icon attached to it and that can thus make an assertion was described as an "impure" index, according to the second sense of 'pure' I have proposed for R 484). Indexical propositions are thus distinguished from other kinds of indices, which for the moment are all gathered under the class of indexical rhemes ("pure" indices in the second sense in R 484). Peirce is not explicit on this point, but a proper name is likely to be classed, together with pronouns, with indexical rhemes.[21] The only thing that Peirce says about proper names in the *Minute Logic* is that they denote without connoting. Yet in what he says we can still detect the old hesitation: "in so far as a proper name has not reason for denoting the man it denotes, but simply forces the mind to him by a quasi-mechanical association, it so closely resembles an Index, that for almost all purposes it may be regarded as really such" (R 425:127). A proper name "closely resembles" an index, but is it so, taxonomically speaking?

In what follows, unless otherwise specified, with 'pure index' I shall mean an index that is an individual thing (first sense), not an index that makes no assertion (second sense). An index that does make an assertion, that is, an impure index in the second sense, is what the *Minute Logic* calls an 'indexical proposition.' Indexical propositions need not concern us any longer, but it was appropriate to treat of them not only because it has helped to understand in what senses an index can be "pure" in Peirce's pre-*Syllabus* theory, but also because the method by which Peirce arrives at a taxonomic definition of impure indices (in the second sense) perfectly exemplifies the *kind* of work that Peirce thought was needed in order to solve some of the problems that the earlier framework could not solve. A parallel

enlargement of the taxonomy and consequently of the classes of possible signs is effected in the *Syllabus* of 1903, a document that Peirce prepared for his Lowell Lectures (November and December 1903). Such taxonomic enlargement is the basis for a new phase of Peirce's thinking about proper names.

Before entering into the complex taxonomic edifice of the *Syllabus*, a few other remarks on Peirce's hesitation to class proper names as indices are in order. Before writing the *Syllabus*, during the summer of 1903 Peirce wrote a comprehensive treatise on Existential Graphs titled *Logical Tracts*. Two successive versions of this treatise exist: *Logical Tracts. No. 1. On Existential Graphs* (R 491) and *Logical Tracts. No. 2. On Existential Graphs, Euler's Diagrams, and Logical Algebra* (R 492). In both versions of the *Logical Tracts*, Peirce inaugurates a new dimension of his analysis of proper names, which I have called the 'maturational dimension' and which in these works runs parallel to the taxonomic dimension.

In the first version (*Logical Tracts. No. 1*), Peirce says:

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Not only is "man" a "general sign" *formaliter*, or in its signification, but it is also general *materialiter*, in its mode of being as a sign. It is certainly not an existent individual. (R 491:6)

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This idea belongs to the taxonomic dimension of the analysis. A symbol is a general sign "formaliter," that is, it denotes a general object. But it is also general "materialiter," that is, in its "mode of being as a sign." This terminology derives from the medieval theory of *suppositio*: a term in its *suppositio materialis* stands (*supposit*) for itself as a word, while in its *suppositio formalis* it stands for its meaning or denotation.[22] This distinction, initially applied to symbols only, will soon become applicable to non-symbolic signs, too, and constitutes Peirce's final solution to the problem of the indexical nature of proper names that had emerged in previous writings.

In the second version (*Logical Tracts. No. 2*), he writes:

The first time we hear a proper name mentioned, say "the Chersonese," we perceive that it denotes an individual; but we get no idea what individual it denotes except from what is said about it: it is a mere something. The next time we hear the name, we identify the something it denotes with the individual we heard mentioned before, and attribute to the present something all that we then learned was true of that individual. (R 492)

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This idea is completely new. Peirce is thinking of the ideal normal course of the interpretation of a proper name and proposes to analyze it into "steps" or "stages of maturity." The same idea is expressed more fully in one of the drafts of the second Lowell Lecture of 1903:

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at the first mention of a proper name, apart from any special information about its subject that may then be conveyed, the name merely tells us that *something exists*, that is, is a factor of the entire complexus of forces that we partly have known by experience. But at any *subsequent* mention of the proper name, though this assertion of existence is reiterated, yet that being known already is of no importance. The importance of the name at all occurrences after the first is that it *identifies* what is mentioned with something we had heard of before. (R 455–456)

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The maturational dimension of the analysis of proper names will occupy Peirce after 1903. In the *Syllabus* of 1903, it is the taxonomic dimension that he is mostly concerned with.

The *Syllabus* for the Lowell Lectures of 1903 was composed of four chapters: 1. "An Outline Classification of the Sciences"; 2. "The Ethics of Terminology"; 3. "Speculative Grammar"; 4. "Existential Graphs." Of the third chapter there exist two complete versions: "Sundry Logical Conceptions" (hereafter *SLC*), contained in R 478 (EP 2:267–88), and

"Nomenclature and Divisions of Triadic Relations" (hereafter *NDTR*), contained in R 540 (EP 2:289–99). There is both textual and thematic evidence that *SLC* was composed before *NDTR*. Now in *SLC*, as in the *Minute Logic*, Peirce considers two main divisions of signs, while in *NDTR* he adds a third division according to a sign's *suppositio materialis* (the new dimension of analysis that had surfaced in the *Logical Tracts*). It is therefore necessary that we understand the reasons behind the transition from *SLC* to *NDTR*, with a special focus on how proper names are treated before and after the transition.

In *SLC* signs are considered according to two main divisions, one into icons, indices, and symbols, and another into "rhemes" (terms), "dicisigns" (a generalization of the notion of proposition that covers both indexical and symbolic propositions[23]), and arguments. We saw that in 1885 and 1894 Peirce says that proper names are "nearly pure" indices, and that in the *Minute Logic* of 1902 he says that a proper name "closely resembles" an index. We also saw that in Καινὰ στοιχεῖα (c. 1901) Peirce claims that a proper name is a symbol acting like an index, because while it denotes an individual object (like indices), yet it is a type that occurs in replicas (like symbols). The distinction between a type and its replicas was adumbrated in the *Logical Tract. No. 1*, even though it was applied to symbols only. One obvious move in the direction of a theory of proper names that would take all these facts into account would be to apply the distinction between a type and its replicas to indices as well. This is precisely what Peirce does in *NDTR* by means of the addition of a third division of signs along the old divisions. In *SLC*, however, he opts for a less taxonomically demanding solution and simply proposes a sub-division of indices. These are called 'subindices' or 'hyposemes':[24]

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Subindices or *Hyposemes* are signs which are rendered such principally by an actual connection with their objects. Thus, a proper name, [a] personal, demonstrative, or relative pronoun, or a letter attached to a diagram, denotes what it does owing to a real connection with its object, but none of these is an Index, since it is not an individual. (EP 2:274)

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A subindex is "nearly" an index because it denotes an individual object but is not itself an individual object. It is not only symbols (general signs *formaliter*) that are types (general signs *materialiter*) that occur in replicas (individual signs *materialiter*); also indices (individual signs *formaliter*) may be types that occur in replicas. These special indices, which are not "pure" indices but are "nearly so," form that sub-category or special variety of indices that Peirce in *SLC* calls 'subindices.' A pointing finger is a genuine index; proper names and pronouns are subindices (EP 2:286).[25]

NDTR takes this idea to its most extreme taxonomic consequences: rather than having the class of subindices as a sub-division of the class of indices, Peirce so modifies and enlarges the taxonomic edifice as to directly obtain that class by the combinatory mechanism. In *NDTR* the dimension of analysis corresponding to the medieval *suppositio materialis* is erected into an independent taxonomic level in the division of signs "according to their modes of being, as objects" into "qualisigns," "sinsigns," and "legisigns" (EP 2:291). A legisign is a general, abstract, and unique kind of entity; a sinsign is a concrete and individual one. Later Peirce would use the terms 'type' and 'tokens,' and this terminology is still current today in linguistic and logical theory.[26] There are two varieties of sinsigns. One is the "normal" variety: an individual object functioning as a sign without being the replica of a legisign. For example, Botticelli's *Venus* is an individual object that signifies something, but is not the replica of a legisign and does not signify what it does by reference to it. The other variety is the sinsign that is a replica of a legisign. When an editor asks an author to write a paper of 8,000 words, what she means is 8,000 word-replicas. When a corpus linguist says that Dante's *Divina Commedia* contains 12,831 words, what she means is 12,831 word-legisigns. A replica is a sinsign that instantiates a legisign, and that derives its significant character from this instantiation.

In *NDTR* signs are further divided "according to the modes of their references to their objects" into icons, indices, and symbols, and "according to the modes of their references to their interpretants" into "rhemes" (terms), "dicisigns" (propositions) and arguments. Like in the *Minute Logic*, these divisions specify not classes of signs but semiotic parameters by the combination of which the classes of signs are obtained. The rules of compossibility of the

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parameters are an extension of those of the *Minute Logic*: a qualisign can only be an icon (which excludes indexical and symbolic qualisigns); an icon can only be a rheme (which excludes iconic dicisigns and arguments); a symbol can only be a legisign (which excludes symbolic sinsigns and qualisigns); an argument a symbol (which excludes iconic and indexical arguments). The rules thus give rise to ten classes of signs (EP 2:294–96): rhematic iconic qualisigns, rhematic iconic sinsigns, rhematic iconic legisigns, rhematic indexical sinsigns, rhematic indexical legisigns, rhematic symbolic legisigns, dicent indexical sinsigns, dicent indexical legisigns, dicent symbolic legisigns, argumentative symbolic legisigns. We need not pass in review all of these classes; we just need to see how Peirce describes the class of rhematic indexical legisigns:

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a Rhematic Indexical Legisign is any general type or law, however established, which requires each instance of it to be really affected by its Object in such a manner as merely to draw attention to that Object. Each Replica of it will be a Rhematic Indexical Sinsign of a peculiar kind. (EP 2:294)
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A rhematic indexical legisign is rhematic because it presents an object without asserting anything about it (that is, it is not a dicisign); it is indexical because it represents an individual object; it is a legisign because it is a type that occurs in replicas; these replicas are rhematic indexical sinsigns "of a peculiar kind," that is, are not the ordinary variety of sinsigns. Peirce then adds:

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the demonstrative pronoun "that" is a Legisign, being a general type; but it is not a Symbol, since it does not signify a general concept. Its Replica draws attention to a single Object, and is a Rhematic Indexical Sinsign. (EP 2:295)
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A demonstrative pronoun does not denote a general object, like a symbol does. Yet, like symbols, a pronoun is itself a general sign *materialiter*, that is, is a legisign that occurs in replicas, and each replica of it denotes an individual object. It should be evident that the notion of rhematic indexical legisign corresponds to the subindex of *SLC*. But while a subindex was simply a sub-kind of the kind index, the rhematic indexical legisign is a kind of index whose difference from other indices is obtained taxonomically: indices are either sinsigns (earlier considered "pure" indices) or legisigns (earlier considered subindices).

What about proper names, then, taxonomically speaking? In *NDTR* Peirce is silent about proper names, but there are at least two other places that reveal where he thought proper name would fit in the tenfold scheme of *NDTR*. The first of these places is a 1904 letter to his former student Christine Ladd-Franklin.[27] In this letter, Peirce passes under review his three divisions and ten classes of signs, and offers new labels for the ten classes. While discussing the division of signs into icons, indices, and symbols, he notes in passing: "a proper name is not a symbol. The first time you hear it, it is an Index. Afterward habit makes it a legisign but it always remains an Index." This assertion almost perfectly matches what Peirce says of demonstrative pronouns in *NDTR*, which entails that proper names are also to be classed as rhematic indexical legisigns.[28]

The second place is of epistolary character, too. In a letter written to his English correspondent Lady Victoria Welby on October 12, 1904, Peirce presents an enlarged scheme of sign classification, which is based on *six* (rather than three) basic semiotic divisions. The six-fold scheme does not concern us here. In the appendix of the letter, however, Peirce lists the ten classes of signs of *NDTR*; the fifth class, only mentioned by name, is that of "*Proper names*, or Rhematic Indexical Legisigns" (RL 463). Not only proper names are classed with rhematic indexical legisigns; they also figure as the *label* of this class of signs: proper names are the prototypical rhematic indexical legisigns, they are the rhematic indexical legisigns par excellence.

Peirce has thus come to the conclusion that a proper name is not simply an index. This is a simplified doctrine that was only due to the simplified semiotic model of the 1890s.

In the enlarged model of the *Syllabus* of 1903, a proper name is more precisely a rhematic indexical legisign, that is, an index that does not assert (is a rheme) and that is general *materialiter* (is a legisign that occurs in replicas). This is Peirce's mature theory of proper names as regards the taxonomic dimension of the theory.

I said above that besides the taxonomic issue, definitely settled with the *Syllabus*, Peirce also considered the manner in which the interpretation of a proper name may develop. This development is analyzed by Peirce into distinct "steps of maturity," and will be the subject of the next section. Allusions to the maturational dimension are already present in both the first *Logical Tract* and in the Lowell Lectures, as shown by the passages quoted above. Moreover, there is a passage from *SLC* that seems relevant to the present discussion. I have postponed consideration of it because I believe that its place and status in the development of Peirce's theory of proper names can be better appreciated once we have understood what his considered taxonomic explication of proper names was.

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A proper name, when one meets with it for the first time, is existentially connected with some percept or other equivalent individual knowledge of the individual it names. It is then, and then only, a genuine Index. The next time one meets with it, one regards it as an Icon of that Index. The habitual acquaintance with it having been acquired, it becomes a Symbol whose Interpretant represents it as an Icon of an Index of the Individual named. (EP 2:286)
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With regard to this passage, Thibaud wrote: "This remarkable text seems to contain the seeds of the whole modern theory of proper names, with regard to both reference and meaning."[29] Now this "remarkable text," usually quoted and commented upon, comes from *SLC*, the first version of the third chapter of the *Syllabus*, which Peirce immediately discarded and re-wrote into *NDTR*, the final version of that chapter. The theory of proper names contained in *SLC* was superseded by that of *NDTR*, and was subsequently developed along the maturational dimension in "The Basis of Pragmaticism" and other papers. But even neglecting its

philological status of discarded draft, the "remarkable text" cannot be interpreted as Thibaud does. He said: "Peirce clearly distinguishes two essential moments in the functioning of a proper name: the act of baptising a deictically identified individual object (first moment of the encounter); the referential use of a proper name as part of a phrase in which we speak of an object in a situation of non direct identification (second and following moments)."[30] Peirce is certainly distinguishing different "moments" in the interpretation of a proper name, but these do not correspond to those later examined along the maturational dimension. Rather, Peirce seems to be trying to capture *developmentally* a distinction that in *NDTR* is captured *taxonomically*. The first moment Peirce is talking of is *not* one in which an act of baptism takes place; Peirce is talking of a situation in which an interpreter meets with (hears, reads) a proper name for the first time. Likewise, the second moment is not the referential use of the proper name in a situation of non-direct identification; Peirce is rather talking of the mechanism by which the second occurrence of a proper name is interpreted as a replica of the type instantiated by the first occurrence. At the time of *SLC* Peirce has not yet distinguished formally between a legisign and its replicas, and therefore rather than saying that the second occurrence is a replica of the same legisign as the first occurrence is, he says that the second occurrence is an "icon of the index." Then, when he says that habitual acquaintance with the name having been acquired, the name becomes "a Symbol whose Interpretant represents it as an Icon of an Index of the Individual named," what he means is that after repeated occurrences of the name the interpreter has become prepared to regard it as a legisign variously instantiated in replicas. It has to be recalled that before *NDTR* only symbols can be types; so in order to say that a proper name is an index-type occurring in replicas he is forced to say that a proper name is an index interpreted as a symbol, which is more or less what he says in this passage from *SLC*. If I am right, then not only Thibaud, but several other scholars have been seriously mistaken in the interpretation of this passage.[31]

2. The Maturational Dimension

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Peirce's most complete analysis of (what I have called) the maturational dimension of proper names is in one of the drafts of the third installment in the 1905–1906 *Monist* series on pragmatism. The first two articles, "What Pragmatism Is" and "Issues of Pragmaticism," had appeared in the April and October issue of Vol. 15, respectively. Of the projected third article, "The Basis of Pragmaticism," there exist several drafts. The earliest version appears to be R 282. R 284 was probably composed during the fall of 1905, while R 280 and 281 were composed after R 284. R 908 (EP 2:360–70) was probably written in December 1905, while R 283 (EP 2:371–97) was written in January 1906. Eventually none of these drafts of the "Basis" was published. In May 1906 Peirce submits "Prolegomena to an Apology for Pragmaticism" to the editor Paul Carus, which appears in the October issue of Vol. 16.

In R 284 his statement is rather cursory: "the first time one hears a proper name used it conveys but a vague idea. The second time one thinks of the object as that same one that was mentioned the other time, etc." (R 284:21). This is hardly an advancement with respect to the *Logical Tract* and the Lowell Lectures quoted above. The real advancement comes with R 280. Here we read:

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in what may be called the ideally normal course of a person's acquaintance with a logically proper name, it passes successively from being an indefinite singular term to being a definite singular term, and after that to being a definite general term. For on the first hearing of it, one gathers that it is a singular; but since the word is without signification, the hearer to whom it is strange will be able to gather from any [statement] he may hear made of its object only that there exists something having the characters asserted. But as he subsequently meets with the term time and again, he gradually comes to learn enough about its object readily to distinguish it from all the other singulars that exist. The term then first functions for him as a proper name. Finally, when everybody in the community is perfectly familiar with the chief characteristics of the singular object, if one of these should be very prominent, there will be a tendency to use the name predicatively to signify that character. (R 280:37)

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In order to understand this passage, we need a preliminary explanation of what Peirce means with the terms 'singular,' 'general,' and 'definite.' Explanation of these in turn requires an understanding of two other allied terms, 'vague' and 'individual.' A sign is either "definite" or "indefinite," "individual" or "non-individual." A sign is definite when the principle of contradiction applies to it, otherwise it is indefinite. A sign is individual when the principle of excluded middle applies to it, otherwise it is non-individual. A sign is "vague" when it is individual and indefinite, it is "general" when it is definite and non-individual, and it is "singular" when it is both definite and individual. It has to be noted that so far I have—following Peirce's earlier semi-technical usage—been using the term 'individual' for what we can now more precisely call 'singular,' which is both individual and definite in the senses specified. Thus, 'Some man' is vague, for contradictory statements can both be true of it: 'Some man is wise, and some man is not wise'; but it is individual, because the principle of excluded middle applies: 'Some man is either wise or non-wise.' By contrast, 'Any man' is general, for it may be that neither 'Any man is wise' nor 'Any man is not wise' is true; but it is definite, because the principle of contradiction applies: 'Any man is wise and any man is not wise' is a contradiction. 'Socrates' is singular, for both principles apply to it: either Socrates is wise or he is not, and he is not both wise and unwise. A proposition cannot be vague and general with respect to one and the same subject. It can, of course, be vague and general with respect to *different* subjects. This is the case of multiply quantified propositions like 'Any man adores some woman,' which is general with respect to men and vague with respect to women. However, a proposition can be both definite and individual with respect to the same subject, in which case that subject is singular.

With these definitions in mind let us now go back to the passage of R 280 about proper names. On the first hearing of a proper name, one merely understands that it names a singular object. Suppose I am told that Léo Ferré was a French chansonnier and that I have never heard of anyone with that name. Since a proper name has no signification—it denotes without connoting—this only means to me that *something* named 'Léo Ferré' was a French chansonnier. The information conveyed amounts to a vague or particular proposition

('Something exists which . . .'). Peirce says it is an "indefinite singular term," but he is not being very accurate here: he should say, as he does slightly later in the same paper, that it is an indefinite *individual* term, namely, a vague term equivalent to 'something.'

The second stage of a proper name's maturity is when, having subsequently met with the name time and again, I have gradually come to know enough about its object so as to distinguish it from all other objects. Having made a bit of Google search I learn that Léo Ferré was an anarchist, that he was the author of *Avec le temps*, that he wrote in Italian, that he owned a villa near Florence. These characters now enable me to distinguish the object of the proper name from other objects (for example, from other French chansonniers, from other anarchists, etc.). Peirce says that when this happens the name has really started to function for me as a proper name, that is, as a sign denoting a *singular* object (but still without connoting it; I will return to this in a moment); it has now become a singular term.

The third stage consists in what Peirce here calls the 'predicative' use of the proper name. Peirce imagines a situation in which one or more characters known to belong to the object of a proper name have become so familiar that the name can be used predicatively to signify those characters. Thus, Léo Ferré being known for his melancholic style, his name can be used predicatively to mean that someone has a melancholic style: 'That singer is a Ferré.' Peirce's third stage is what in rhetoric is called an 'antonomasia.' At this stage of development, the word is no longer used as a proper name but as a predicative expression.

Peirce summarizes his analysis of the "ideally normal evolution" of the interpretation of a proper name in the following table, where the inaccuracy mentioned above is corrected: in the first stage the proper name is an indefinite *individual* (not *singular*) term:

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Stage I Indefinite Individual

Stage II Definite Individual

Stage III Definite General

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In the first stage of its interpretation, a name is interpreted vaguely, in the second, singularly (as an authentic proper name), in the third, generally. It has to be noted that to speak of a proper name as being at some stage of development *simpliciter* is an over-simplification: a proper name is always at some stage of development *for some interpreter(s)*. At any given time, the same proper name can be at one maturational stage for me but at a different stage for someone else. The first time I heard the name 'Léo Ferré' was in the sentence 'Léo Ferré was a French chansonnier' that the woman that would subsequently become my wife uttered during our first date; in that occasion for me the name was at its first maturational stage, while for her it was at its second.[32]

It is not entirely clear, however, why Peirce associates the third stage with *quantificational* generality. We know that a sign may be general *materialiter* or in itself (legisign) and general *formaliter* or as to its object (symbol); we also know that a sign is general in the quantificational sense when it is universally quantified (like 'Any man'). Is a proper name used predicatively, as some proper names are in their third stage, a sign general as to its object (a symbol) or a sign general as to its quantity (a universally quantified term)? A symbol is a general sign because it denotes whatever possesses the characters it connotes, and this seems to be what happens with proper names in their third stage (a 'Ferré' is anything having the characters that Ferré famously had). Why, then, is the third stage associated with quantificational generality and not with symbolicity? Perhaps the answer is simply that having noticed that the first and second stages correspond to the first and second members of his quantificational triplet, Peirce uncritically associates the third stage with the third member and fails to notice that the notion of generality *formaliter* or symbolicity would better suit that purpose.

In the passage quoted from R 280, Peirce seems to suggest that at some point the characters truly predicated of the object of the proper name suffice to readily distinguish that object from all the other objects. It may be tempting to consider this idea as a variant of the descriptivist theory of proper names, usually associated with Gottlob Frege, Bertrand Russell, and Peter Strawson, according to which to a proper name a description (or a cluster of descriptions) is associated which determines the referent of the name: the referent is what

satisfies the description (or "enough" descriptions). Peirce's position, however, is incompatible with the descriptivist theory. Is it then compatible with the "causal theory," especially as defended by Kripke?[33] This question has been the subject of much discussion in the secondary literature.[34] It is our turn, now, to add to the confusion.

Slightly later in R 280 we read:

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A proper name in its second, or proper, stage of maturity, has, of course, no *signification*; that is, its applicability to a given object is not contingent upon that object's fulfilling this or that general condition, but depends solely upon the previous establishment of such a wide-spread habit of speech that the word or phrase is reasonably certain of being understood to denote the very singular that was actually intended. It is important to recognize just what *signification* consists in. . . . Signification consists in such characters as by being known to belong to objects to which a given term is applicable aid in the ascertainment of the general applicability of that term. Thus, when one has only met with a proper name once or twice and then casually and by the way, the characters that one has found attributed to its object as matter undisputed will constitute one's whole knowledge of the name, and are thus of the nature of signification, although it is accidental and insufficient signification. Suppose, for example; one has never heard of Gordius. On first hearing the name, one infers that he is or was *some man*. Next one may gather that he was *some adventurer*; next that he was *some Phrygian*; next that he was *some king*, etc. But when the name has become familiar and reaches its second stage of evolution,—is, in short, used and accepted as a true proper name,—one places Gordius in his proper place in one's mental chart of ancient history, and those predicates no longer serve as signification, but as information. The name now neither needs nor bears any "signification." But if later, the peculiar skill of Gordius in the art of knotting ropes in an inconvenient manner were to become so proverbial, that one could say of a given sailor that he was a Gordius, assured of being understood, then the common noun that the word would have become would have its applicability entirely dependent upon an essential signification. (R 280:41–43)

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'Signification' here should be taken in the sense of what Peirce had earlier called 'connotation,' but with the following qualifications in mind. Signification can be either essential or accidental. In an early paper he had defined the "essential depth" of a term (where 'depth' was a another synonymous for 'connotation,' and thus for 'signification') as "the really conceivable qualities predicated of it in its definition" (W 2:80). The "qualities predicated of a term in its definition" are the characters that determine its denotation. Thus, signification is essential when it determines the denotation; it is accidental when it does not. The term 'bachelor' connotes the characters 'adult,' 'unmarried,' 'male,' and denotes any object that satisfies them. Such signification is "essential." A proper name in its first stage of development may have a signification, says Peirce, but that signification is not essential. Suppose that having never heard of someone called 'Léo Ferré' I am told that Léo Ferré was an anarchist French chansonnier. None of these characters taken singularly enables me to determine the denotation of the proper name, nor do they collectively. They constitute an accidental signification. Yet, there is a point in the process of adding to the accidental signification of the proper name after which the name does become capable of such determination. This is its second stage of maturity. At this stage, however, those characters are not part of the signification anymore, and constitute the name's "information."

'Information' is another technical term of Peirce's early logic, though it also appears in some late manuscripts.[35] In his Harvard and Lowell Lectures of 1865–1866, Peirce explains that the "old law" that the greater the denotation, the less the connotation, only holds good when no new information is involved. Whenever we gain any new piece of knowledge regarding the object of a term, the state of information is altered and the law of inverse proportionality does not hold. Suppose that in a certain state of information, all we know of man is that man is a rational animal. For what we know, some men might be capable of laughing but others might not. Suppose that afterwards we discover that *all* men are capable of laughing. When this happens, the character 'capable of laughing' is added to the connotation of 'man' without any decrease of its denotation: the denotation of 'man' remains

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as before (the entire class of men) while its connotation increases ('rational animal capable of laughing').[36] Any increase of a term's quantity without decrease of the other quantity is termed by Peirce 'information.' Information is the "sum of synthetical propositions in which the symbol is subject or predicate" (W 2:83). Information is also described as "superfluous comprehension" (W 1:467), that is, the surplus of connotation (here termed 'comprehension'), or connotation not necessary to determine the denotation: "Every addition to the comprehension [connotation] of a term, lessens its extension [denotation] up to a certain point, after that further additions increase the information instead" (W 1:467). Strictly speaking, no term has precisely the connotation that is needed to determine its denotation: "The moment an expression acquires sufficient comprehension [connotation] to determine its extension [denotation], it already has more than enough to do so" (W 1:465).

This notion of information is what lies behind Peirce's description of the ideal normal course of the interpretation of a proper name. In its first stage of maturity, a proper name has an accidental signification, because the signification associated with it is unable to determine its reference. The passage to the second stage occurs when the signification associated with it does enable an interpreter to determine its reference; but when this happens, the signification has already turned into information, that is, into superfluous connotation. Suppose that at some point, thanks to a collection of characters regarding the object of the proper name, 'Léo Ferré' has started to function for me as a proper name, that is, as the index of a singular object. In another paper Peirce describes this stage as one at which "that which the name means to me probably represents pretty fairly what it would mean to an acquaintance of the man" (EP 2:405). An acquaintance of the man needs no special character to determine the reference of the name, and Peirce suggests that at a certain point this is what happens to anyone who has collected enough characters regarding its object. Suppose, then, that I know who Léo Ferré was, that is, I am able to determine the denotation of the name without the help of any character of its object; if, then, I am told that Léo Ferré owned a villa near Florence, the character 'owner of a villa near Florence' does not function for me as signification, either accidental or essential, that is, it does not contribute to determining the denotation; rather, it is a new piece of information that I now possess regarding an object that

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I could identify *independently* of that information. At this stage, every new predicate of the object functions as information, not as signification. Peirce is very clear that "a proper name in its proper maturity [the second stage] is wholly devoid of signification" (R 280:44); "the name itself will remain a designation devoid of essential signification" (EP 2:405), because any character that the name "signifies" contributes to the information instead.

It is in its third stage of maturity that the name acquires an essential signification. (Of course, only a few proper names really reach the third stage, namely, those whose referents are universally known to possess certain exceptional or special characters.) If I can say 'That singer is a Ferré,' or 'That sailor is a Gordius,' this is because the person referred to has the characters that the name essentially signifies. But this in turn is only possible if the proper name has become a "common noun," that is, a sign denoting anything that possesses certain characters, and whose applicability is entirely dependent upon an essential signification. In other words, the proper name, when used *per antonomasia*, becomes a symbol and is no longer used as a proper name. This seems a better account of the third stage than the one given earlier in the same manuscript, where the third stage was associated with quantificational generality. The account in this later passage is better because it highlights the crucial fact that in its third stage the name has an essential signification and is applicable to objects only in consequence of it.[37]

Peirce's theory of proper names is not a descriptivist theory. He is very clear that a proper name, in its first and second stage of maturity, has no essential signification: no part of its connotation determines the denotation. In its first stage, it has but an accidental signification; in the second stage, it may have information, but no essential signification. This amounts to saying that, contra the descriptivists, in neither their first nor their second stage of maturity are proper names associated with descriptions that determine their reference. In its third stage, a proper name does have an essential signification and a denotation dependent on that signification. But in that third stage it does not function as a proper name at all.

The affinity of Peirce's position with Kripke's is particularly evident in a passage from a later draft of "The Basis of Pragmaticism" (R 283):

the object of a proper name,—say the name of an acquaintance of the interpreter, can only be recognized by him by means of marks; and when he hears the name mentioned, the image excited in his imagination will be composed of marks (so to say;) and any action he may take in consequence will be guided by those marks. Nay more: it may be granted that the name was conferred in the first instance and that its use has been maintained ever since with the definite intention that the individual should be recognized in the manner thus described. Yet it does not follow and could only very rarely be true that the name *signifies* certain defining marks, so as to be applicable to anything that should possess those marks, and to nothing else. For not to speak of the fact that the interpreter only uses the marks as aid in guessing at his acquaintance's identity, and may possibly be mistaken, however extraordinary they may be, there will be no one definite set of marks which the name signifies rather than another set of equally conclusive marks. If there were any mark which a proper name could be said essentially to signify, it would be the continuity of the history of its object. (R 283:143–45)

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Here Peirce is making Kripke's point that though the *reference* (in Peirce's terms, the "denotation") of a proper name may be fixed by a description (in Peirce's terms, by "marks": "it may be granted that the name was conferred in the first instance and that its use has been maintained ever since with the definite intention that the individual should be recognized in the manner thus described"), yet the name does not *mean* that description ("it does not follow and could only very rarely be true that the name *signifies* certain defining marks, so as to be applicable to anything that should possess those marks, and to nothing else"). If the name 'Aristotle' *meant* 'the greatest man who studied with Plato,' then when we say counterfactually 'Suppose Aristotle never studied with Plato' we should be saying 'Suppose the greatest man who studied with Plato never studied with Plato,' which might seem like a contradiction. But if the description 'the greatest man who studied with Plato' is only used to fix the reference of the name 'Aristotle,' that counterfactual sentence would only mean 'Suppose *that man* never studied with Plato,' which is perfectly acceptable. Peirce's

argument is not framed in terms of a counterfactual situation in which the name still refers rigidly. Yet the point that he makes about the necessity of distinguishing two uses of a description is the same as Kripke's.[38]

In the passage from R 283, Peirce offers two reasons why the description associated with a proper name cannot determine its denotation. The first is that the speaker "may possibly be mistaken" as to the object that satisfies the description. To take one of Kripke's examples, suppose that I only know of Giuseppe Peano that he discovered the axioms of arithmetic, while in fact they were discovered by Richard Dedekind. That the description 'first discoverer of the axioms of arithmetic' is satisfied by Dedekind and not by Peano by no means entails that by the aid of it I refer to Dedekind and not to Peano when I use the proper name 'Peano.' When I say 'Peano was a German mathematician' I say something false about Peano, not something true about Dedekind.

The second reason why the description associated with a proper name cannot determine its denotation is that there is no one description ("definite set of marks") that the name signifies rather than another. The founder of the description theory, Frege, also made the point that different people may give different senses to the name 'Aristotle,' ('the pupil of Plato,' 'the teacher of Alexander')[39]; and Kripke observed that even a single speaker may give sometimes one and sometimes another description as the sense of the name.[40] The name, Peirce says, means neither essentially; if it has a description associated with it, the function of it is to fix the denotation of the name; but the name is not synonymous with the description, and a fortiori it is not synonymous with any of the descriptions that different speakers, or one and the same speaker in different occasions, may associate with it.

Hilpinen quotes R 283 as evidence that Peirce's theory of proper names is consonant with the causal theory.[41] More precisely, as Hilpinen seems to see, in the passage in question Peirce is making the Kripkean distinction between the use of a description as synonymous with a name and the use of a description to fix the reference: "the icons [what Peirce calls 'marks' and which I have considered to be equivalent to descriptions] associated with a proper name determine (for the interpreter) its reference without being part of its meaning."[42] According to Pietarinen, the continuation of the quotation above, which Hilpinen omits,

shows that Peirce is not a supporter of the causal theory.[43] Here is the continuation of the quotation[44]:

<ext>
But this would involve the recognition of a standard epoch. Now we ordinarily neither know [n]or care whether the person with whom we have dealings was ever christened or not. What we care for is the designation [he] ordinarily goes by and which the bank knows him by. And something like this is true of any object that has a proper name. Namely, in using that name one has in mind no reference to any definite occasion. (R 283:145–47)
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According to Pietarinen, the picture that Peirce presents is one in which "The interpreter need not have in mind anything that would account for, or give reasons to believe, how a name is, or fails to be, linked with an individual on some 'definite occasion,' causally, historically, or descriptively."[45] This is right, as far as Peirce is concerned. The point is that no reference to some "definite occasion" in which the name was conferred upon a person is needed in the causal framework, either. Kripke says:

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Usually, when a proper name is passed from link to link, the way the reference of the name is fixed is of little importance to us. It matters not at all that different speakers may fix the reference of the name in different ways, provided that they give it the same referent.[46]
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In R 283 Peirce makes the very same point that Kripke makes here. The definite occasion on which the reference of the name is fixed is of no special concern to the causal theorist. In an initial baptism, reference is typically fixed by ostension or description; subsequent uses of the name are ultimately determined by that initial baptism, but need not refer to it in a definite manner; the reference of the name is rather usually determined by a chain, passing the name

from link to link, which ultimately points back to *some* occasion in which the reference was fixed; but it does not follow that some *definite* occasion is pointed to, presupposed, or required. Peirce's claim that no reference to any definite occasion is needed for the interpretation of a proper name is no proof that his is not a version of the causal theory.[47]

In some of his latest writings, Peirce adds a further tile to the mosaic of his maturational view of proper names. In March 1908 he writes in "The Bed-Rock Beneath Pragmaticism," programmed but never finished fourth article in the *Monist* series on pragmatism:

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when a proper name occurs without any previous hint as to its denotation, it cannot, to the interpreter's mind,—and it is the interpreter's mind and its possible dispositions that can alone give meanings to words,—differ from a common noun. For let a French peasant, for instance, first hear of Tasso in the phrase, "la Sophronie du Tasse," and if it be uttered with an English accent, he will surely think there has been a blunder about the gender. In any case, it cannot suggest any definite individual. (R 300:32)

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In written French the feminine French common noun 'tasse' (meaning 'cup') can be distinguished from the proper name 'Tasse' (the French version of the family name of the Italian poet Torquato Tasso) by the use of capitals, but in spoken French the two are undistinguishable outside context. Sometimes context itself is not enough: to someone competent in French who has never heard of the poet, but who is aware that 'Sophronie' is a proper name, the phrase 'la Sophronie du Tasse' can only mean 'the Sophronie of the cup.' Peirce's point is that, in general, in order to interpret a proper name as a proper name, we need some "previous hints as to its denotation," because *in form* a proper name may not differ from a common noun.

The same is said in "Common Ground," composed in November 1908:

Take, for example, one's awareness of a single object that has a proper name. The first time I hear or read that name there will probably be some circumstance in the context that is a Sign to me of its being a proper name; and more likely than not something in the Sign or its context will show whether it is the name of a person, a geographical feature, a star, an abstract quality or form, a general habit of a universe, or whatever other general kind might be called by a proper name. In addition, there will be something in the mention of it that furnishes me with more specific knowledge about the object, until I am quite familiar with it. (R 612:13–14)

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Suppose I know nothing of academic titles, figures, or roles. If I am told, 'The Provost invited us for dinner,' it is the determinative article 'the' that is a sign for me that 'Provost' is *not* a proper name. But suppose that 'Provost' is the family name of a Bulgarian friend of yours. If I am told, 'Provost invited us for dinner,' it is now the absence of the determinative article that is a sign for me that 'Provost' is a proper name. Peirce also supposes that in most cases the context gives us an idea of the *kind* of thing that the proper name is a name of: if I am told, 'Etna is 3,326 m high,' I am led to exclude that 'Etna' is the proper name of a human being.

Such "hints" or "signs" at our first encounter with a name are necessary if we are to take it as a proper name. It has to be noted that Peirce's point in these passages is not that in its first stage of maturity for a given interpreter a proper name denotes "something" merely. That claim concerned, as we have seen, what the name is interpreted by that person to *denote*. Here Peirce's claim is about the name as a linguistic object, which has to be recognized by an interpreter *as a proper name* in the first place in order for that interpreter to determine what its denotation is. Using the taxonomic terminology of the *Syllabus*, the point that Peirce makes in these passages from 1908 is that when one first hears a proper name, one has to make a decision concerning what kind of sign it is, whether a rhematic indexical legisign (proper name) or a rhematic symbol (common noun); the decision, Peirce claims, has to be

taken on the basis of contextual hints.

Peirce adds that even in the first mention of a proper name there is always something that furnishes more specific knowledge about its object. This "something" is a predicate of the object, which constitutes what in R 280 Peirce calls the 'accidental signification' of the name. The transition to the second stage occurs when the signification becomes "essential," that is, when the signification associated with the name does not determine its object but adds to the information we have about it. In R 612 Peirce adds that subsequently the object of the name may itself be presented to one's perception. His example is the Etna, about which he had read in the classics and which at some point, during a trip in Sicily, he saw. This aspect, however, is of little relevance to a theory of proper names.

3. Conclusion

As with many other aspects of his thought, Peirce's ideas on proper names were in continuous evolution. The developmental account that I have offered indicates that such evolution followed two main directions. Up to the *Syllabus* of 1903, Peirce mainly considered proper names from the point of view of his classification of signs. I have called this the 'taxonomic dimension' of Peirce's analysis of proper names and I have shown that the final theory contained in the *Syllabus*, according to which proper names are rhematic indexical legisigns, was itself the outcome of the long process of clarification and enrichment that his semiotic taxonomies underwent through the years. I believe I have also shown that many apparently conflicting statements made by Peirce about proper names are not in fact such, and that this is best understood through a chronological reconstruction of his thinking about the matter. The other dimension of Peirce's theory of proper names that I have identified emerges clearly after 1903, especially in unpublished papers and drafts from 1905, and concerns what he calls the 'ideal normal course' of the interpretation of a proper name: a proper name, according to Peirce, has three distinct "stages of maturity" for a given interpreter, and really functions as such only at the second stage. I have called this the

'maturational dimension' of the theory. In the course of the reconstruction of this second dimension, I have also argued that Peirce's theory is quite close to the so-called "causal theories" of proper names, and especially to Kripke's. This is no news to Peirce scholars. Yet I believe that the picture of Peirce's theory of proper names that I have offered is not only the first that addresses the problem from a developmental or genetic perspective; it is also, I think, more complete and textually comprehensive than any that has been proposed before.[48]

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[1] Murphey, *Development*, 3. Among those earlier "static" attempts I may mention two otherwise brilliant monographs, Thomas Goudge's *The Thought of C. S. Peirce*, and Manley Thompson's *The Pragmatic Philosophy of C. S. Peirce*, rarely read nowadays.

[2] The ultimate source of this widespread mistaken attitude is the *Collected Papers* (CP). The

developmental method, though not universally accepted or followed, has been applied by Beverley Kent, *Classification*, to the study of Peirce's classification of the sciences.

[3] See Christopher Hookway, *Peirce*, 141.

[4] The literature on Peirce's theory of proper names includes: Pierre Thibaud, "Individuation"; Risto Hilpinen, "Philosophical Logic," "Language and Reference," "Types and Tokens"; Jarrett Brock, "Development"; Jeffrey R. DiLeo, "Proper Names"; David Boersema, "Names and Reference"; Giovanni Maddalena, *Metafisica per assurdo*, 42–54; and Ahti-Veikko Pietarinen, "Pragmatic Theory."

[5] The only exception is Brock, "Development," whose developmental approach is however limited to Peirce's early writings. I return to Brock's article below.

[6] Citations from EP and W are by volume and page number. Citations from CP are by volume and paragraph number (separated by a period rather than a colon). Citations from Peirce's unpublished manuscripts (R/RL) are by manuscript number and, when available, page number; manuscript numeration follows Richard Robin, *Catalogue*.

[7] John Stuart Mill, *Logic*, 30–31.

[8] See e.g. Justus Buchler, *Charles S. Peirce's Empiricism*, 208; Douglas Greenlee, *Peirce's Concept of Sign*, 93; Umberto Eco, *Semiotica e filosofia del linguaggio*, 206; Kelly Parker, *The Continuity of Peirce's Thought*, 157; and Albert Atkin, "Index," 163. I believe a similar account is presupposed in Hilpinen, "Types and Tokens," for which cf. n. 19.

[9] Cf. W 1:303–4, and R 797.

[10] Atkin, "Index," calls this the 'singularity feature' of the index, but given his lack of any developmental perspective, he is unable to locate this feature in the evolution of Peirce's ideas on the index.

[11] Murphey, *Development*, 296–300; see also T. L. Short, *Theory*, 48–51.

[12] Brock, "Development."

[13] Murphey, *Development*, 136–37.

[14] Cf. Edward C. Moore, "The Influence of Duns Scotus on Peirce," 403–4. The term

haecceitas was used by Scotus in his *Quaestiones in Metaphysicam* (cf. e.g. VII, qu. 13, n. 9, n. 26).

[15] Cf. Murphey, *Development*, 299–300, and T. L. Short, *Theory*, 46–51.

[16] Murphey, *Development*, 310.

[17] Hilpinen, "Types and Tokens," interprets this passage from Καινὰ στοιχεῖα as saying that a proper name is an "indexical symbol" (see also Hilpinen, "Peirce's Philosophical Logic," 480). This is reasonably correct, as far as it goes, but cannot constitute an interpretation of Peirce's theory of proper names as whole, as Hilpinen seems to take it to be. For, in the first place, while writing Καινὰ στοιχεῖα Peirce has not yet formally (that is, taxonomically) understood that there are *non-symbolic* conventional signs that are types occurring in replicas; and given this limitation the only thing that he can say about proper names is that they are symbols acting like indices. Secondly, Hilpinen's "indexical symbol" contains a category mistake: according to the *Syllabus*, no index is also a symbol. What Hilpinen (and Peirce in Καινὰ στοιχεῖα) wants to express is better expressed (using the *Syllabus* terminology) by saying that a proper name is an indexical legisign, as we shall see in the sequel. For a similar criticism of Hilpinen's "indexical symbol" see Nathan Houser, "Theory of Propositions."

[18] Cf. EP 2:14 (1894) and EP 2:343 (1905).

[19] In fact, 'rheme' (also 'rhema') is not just a new label for the old concept of term, but a new concept. For our purposes, it is sufficient to consider that from the *Minute Logic* onwards Peirce calls any sub-propositional component a 'rheme.'

[20] They will receive explicit formulation only much later in a 1908 letter to Lady Welby (EP 2:481); see Short, *Theory*, 239–40, and Robert Burch, "Sign-Types."

[21] In the Harvard Lectures of 1903, Peirce distinguishes between "informational" and "monstrative" indices (EP 2:172): an informational index is an index that asserts something; ("indexical proposition" in the *Minute Logic*); a monstrative index is an index that points to an object without asserting anything of it ("indexical rheme" in the *Minute Logic*). A proper

name is a monstrative index. The distinction corresponds to that between impure (i.e. assertive) and pure (i.e. non-assertive) indices I have discussed above in connection with R 484.

[22] The distinction between *suppositio formalis* and *suppositio materialis* is found in William of Sherwood (*Introductiones in Logicam*, 136) but not in Ockham, whose own distinction is into *suppositio materialis*, *simplex*, and *personalis* (*Summa logicae*, I:67–69).

[23] On Peirce's theory of the dicisign see Frederik Stjernfelt, *Natural Propositions*.

[24] There is also the parallel sub-category of hypoicons, of which I will say nothing except that, like 'subindex,' 'hypoicon' is a *hapax legomenon* in Peirce's corpus.

[25] In light of this, Atkin's account of the "subindex" ("Index") can be shown to be fundamentally flawed. First, Atkin fails to see that the "subindex" is a taxonomically unsatisfactory temporary expedient that develops quite soon into the taxonomically satisfactory "indexical legisign." Second, Atkin thinks that a subindex is a symbol, while it is, in Peirce's later terminology, a legisign; and to confuse a symbol with a legisign is no small problem. Third, Atkin claims that the subindex has two varieties, the "monstrative" (non-assertive) and the "informational" (assertive); see n. 23, for this terminology. This claim has no textual basis, and none of the examples that Peirce gives of subindices in *SLC* is informational. These flaws in Atkin's account are the effect of not considering the *evolution* of Peirce's theory of the index.

[26] Short, *Theory*, 25.

[27] The letter is in the Rare Book and Manuscript Library (Butler Library) at Columbia University. A copy of it is available at the Peirce Edition Project, IUPUI.

[28] In "What Pragmatism Is," the first article of the *Monist* pragmatist series of 1905–1906, Peirce explains that while a common noun like 'soldier' is general both objectively and subjectively, a proper name like 'George Washington' is subjectively general only (EP 2:342). With 'objectively' and 'subjectively' he means what in the *Logical Tracts. No. 2* was expressed by *formaliter* and *materialiter*, respectively. Maddalena (*Metafisica per assurdo*,

44–45) who is aware that proper names are not general objectively or *formaliter*, thinks that they are general subjectively or *materialiter* both qua rhemes and qua legisigns; but their subjective generality has nothing to do with their being rhemes; their being rhemes has rather to do with the fact that they are non-propositional signs. Maddalena also thinks that a proper name's subjective generality is due to its being a symbol (*Metafisica per assurdo*, 43); this may be true of the pre-*Syllabus* doctrine, but not of the *Syllabus*, where Peirce is taxonomically clear that also non-symbolic signs can be subjectively general (i.e. can be legisigns).

[29] Thibaud, "Individuation," 527.

[30] Thibaud, "Individuation," 529.

[31] Just another example. DiLeo ("Proper Names") intelligently examines the rhematic, the indexical, an the legisign components of Peirce's taxonomic definition of proper names in *NDTR*, but fails to realize that *SLC* was superseded by *NDTR*, so that the doctrine of proper names of *SLC* cannot be uncritically assimilated to that of *NDTR*. In particular, it makes little sense to say, as DiLeo does ("Proper Names," 583), that the indexical component of the definition may be either "genuine indexical" or "subindexical," because the taxonomically unsatisfactory subindex is abandoned in *NDTR* and is turned into the taxonomically satisfactory indexical legisign.

[32] I owe this point to an anonymous reviewer.

[33] 'Causal Theory' was how Garreth Evans described Saul Kripke's non-descriptivist theory of proper names; see Garreth Evans and J. E. J. Altham, "The Causal Theory of Names."

[34] See Hilpinen, "Philosophical Logic," "Language and Reference," "Types and Tokens"; DiLeo, "Proper Names"; Boersema, "Names and Reference"; and Pietarinen, "Pragmatic Theory."

[35] See for example R 664–667.

[36] Cf. W 1:275.

[37] The maturational dimension is also discussed in the "Prolegomena," the article that

eventually was published instead of "The Basis." Peirce here connects the first stage of proper names interpretation to the use of "selectives" in Existential Graphs (CP 4.568); cf. also the *Logical Tracts. No. 2* (CP 4.460), and see Pietarinen, "Pragmatic Theory," for further details.

[38] See Kripke, *Naming and Necessity*, 56–59.

[39] Cf. Gottlob Frege, *Collected Papers*, 158n4.

[40] Cf. Kripke, *Naming and Necessity*, 30.

[41] Hilpinen, "Language and Reference," 287.

[42] Hilpinen, "Language and Reference," 286.

[43] Pietarinen, "Pragmatic Theory," 353–354.

[44] Pietarinen mistakenly quotes both passages as "R 280," while they are from R 283.

[45] Pietarinen, "Pragmatic Theory," 353.

[46] Kripke, *Naming and Necessity*, 139.

[47] Boersema ("Names and Reference") thinks that the difference between Peirce and the causal theorists is due to Peirce's original notion of the interpretant. Boersema thinks that the interpretant is what guarantees the commonality of experience of speaker and listener. This is wrong, because an interpretant is what a sign *conveys*, while the commonality of the experience of speaker and listener is what a sign *presupposes*. Later Boersema seems to realize this, and writes that "when Peirce claims that a sign's 'Interpretant is all that the Sign conveys,' he surely rejects names as rigid designators, since names convey more than the mere existence of an object" ("Names and Reference," 357). This simply begs the question: that according to Peirce names convey more than the mere existence of an object is precisely what should be demonstrated.

[48] I am indebted to Frederik Stjernfelt and to two referees for the *Journal of the History of Philosophy* for helpful comments and criticisms.