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UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

INDIVIDUALITY IN THE PHILOSOPHY OF
CHARLES SANDERS PEIRCE

A Dissertation
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
Doctor of Philosophy

By
Rafael Francisco Rondón
Norman, Oklahoma
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INDIVIDUALITY IN THE PHILOSOPHY OF
CHARLES SANDERS PEIRCE

A Dissertation APPROVED FOR THE
DEPARTMENT OF PHILOSOPHY

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References to the Primary Texts

Throughout the body of the text Peirce's own work, both published and unpublished, will be referred to in a number of different sources. They will be indicated in the text parenthetically by the following abbreviations:

***Collected Paper of Charles Sanders Peirce*, ed. C. Hartshorne, P. Weiss, and A. Burks (Cambridge: Harvard University Press, 1931-1958). Since most of the references will be to this original collection, I will use the standard convention of volume number followed by paragraph number (e.g., CP 5.213), with no initial identifying letters.**

***Writings of Charles S. Peirce: A Chronological Edition*, ed. M. Fisch et al., first four volumes completed (Bloomington: Indiana University Press, 1982-). References will be abbreviated as *W* followed by volume number and page number.**

***The Charles S. Peirce Papers* microfilm collection (Harvard University Library, 1966). References will follow the numbering system developed by R.S. Robin in *Annotated Catalogue of the Papers of Charles S. Peirce* (Amherst: University of Massachusetts Press, 1967) and will be abbreviated *MS* followed by the manuscript number and the page number.**

***The New Elements of Mathematics*, ed. C. Eisele (The Hague: Mouton, 1985). References are abbreviated *NE* followed by volume number and page number.**

***Charles S. Peirce: Contributions to "The Nation,"* 3 vols., ed. K.L. Ketner and J.E. Cook (Lubbock: Texas Tech University Press, 1975-79). References are abbreviated as *CN* followed by volume number and page number.**

***Charles S. Peirce: Letters to Lady Welby*, ed. Irwin Lieb (New Haven: Whitlocks, Inc., 1953). References are abbreviated *LW* followed by page number.**

Introduction

The purpose of this dissertation is to show that Peirce's theory of individuality is both consistent and plausible. This is an important issue when it comes to an analysis of Peirce's philosophy because an inconsistency in his theory of individuality could spell disaster for the rest of Peirce's philosophical system. Peirce's philosophical system is categorial. Many of the issues surrounding charges of inconsistency and implausibility with respect to his theory of individuality focus on more fundamental claims about the nature of Peirce's categories and their relationship to one another. The reliance of his whole philosophical system on his categories is stressed by Peirce in his frequent and constant categorial analyses of almost every phenomenon he investigates. Thus, trying to make sense out of any of his philosophy, much less his epistemology and metaphysics, without reference to his categories, does not make sense. Furthermore, any attack on his theory of individuality which rests substantially on a perceived problem with Peirce's categories is an attack on Peirce's entire philosophical system.

The Importance of Peirce

Not only is it important to examine Peirce's theory of individuality for the sake of Peirce scholarship, but it is important to examine it for the sake of philosophy as a whole and metaphysical theories of individuality in particular. The importance stems from Peirce's stature as a philosopher and the role he played in shaping the nature of contemporary philosophy.

While this is a very narrow philosophical biography of the life of Peirce, it is worthwhile to list a few of his more widely recognized achievements in order to give some content to the claim that Peirce is an important philosophical figure and that such a detailed study of his philosophy is warranted.

The best description I have seen of Peirce's major accomplishments, his stature as a philosopher and scientist, and the contributions he made to the natural sciences and the humanities is Peirce scholar Max Fisch's account.

Who is the most original and the most versatile intellect that the Americas have so far produced? The answer "Charles S. Peirce" is uncontested, because any second would be so far behind as not to be worth nominating. Mathematician, astronomer, chemist, geodesist, surveyor, cartographer, metrologist, spectroscopist, engineer, inventor, psychologist, philologist, lexicographer, historian of science, mathematical economist, lifelong student of medicine; book reviewer, dramatist, actor, short story writer; phenomenologist, semiotician, logician, rhetorician {and} metaphysician{.} He was, for a few examples, the first metrologist

to use a wave-length of light as a unit of measure, the inventor of the quincuncial projection of the sphere, the first known conceiver of the design and theory of an electric switching circuit computer, and the founder of "the economy of research." He is the only system-building philosopher in the Americas who has been both competent and productive in logic, in mathematics, and in a wide range of sciences. If he has had any equals in that respect in the entire history of philosophy, they do not number more than two.¹

Peirce is also credited with having founded Pragmatism.

Pragmatism is the only unique indigenous philosophical system that the Americas have contributed to Western philosophy. In addition, Peirce has influenced many famous contemporary philosophers. Perhaps the most notable of them is Noam Chomsky.

Noam Chomsky, the inventor of generative grammar and transformational grammar, was asked in 1976 which philosopher was his kindred in ideas. He answered, "In relation to the questions we have been discussing {concerning the philosophy of language} the philosopher to whom I feel closest and whom I'm almost paraphrasing is Charles Sanders Peirce."²

The distinction made here between Chomsky's philosophy of language and the rest of his philosophy is probably not a real one. The foundation of Chomsky's entire system is his generative grammar and transformational grammar. If they go, then the rest of his system goes.

¹Printed in *Charles Sanders Peirce: A Life* (Bloomington: Indiana University Press, 1993) by Joseph Brent 2-3.

²Printed in Brent 6.

The dynamics described by his philosophy of language permeates his entire philosophical system (much as Peirce's categories permeate his entire philosophical system), including his social and political philosophy. However, this does not take away from the quote because its purpose is to show that Peirce has had a dramatic impact on philosophy. This can be seen, in part, in the cadre of notable philosophers that have knowingly or unknowingly followed his lead.

The Categories

Any attempt to prove that Peirce's theory of individuality is consistent and plausible must begin with an examination of Peirce's categories. Indeed, that is how this investigation begins. The focus of this analysis is two pieces written by Peirce at very different times in his philosophical career. In the first piece ("On a New List of Categories," CW 2.433-438, 1867), Peirce's account of his categories is exclusively formal. This formal account has certain shortcomings that Peirce himself notices within the piece and attempts to address for the rest of his philosophical career. Indeed, the problem is complex and requires a solution or revision that ultimately and clearly distinguishes pragmatism from other philosophical traditions.

The second piece to be examined ("One, Two, Three: Fundamental Categories of Thought and Nature") (CW 5.242-247, 1885) is significant because it is the first piece in which Peirce renames the categories and reduces them from five to three. In this piece and others written in 1885 and later, the categories undergo a thorough revision both in terms of the way in which Peirce characterizes them individually and in the way he describes the relations between them. What is different about this new list of categories is that it relies on a radically different form of justification than the first list. Furthermore, Peirce's account of these categories is formal and material. The addition of this material aspect to Peirce's account of the categories allowed him to address most of the concerns that accompanied his early formulation of the categories. It also allowed him to accommodate his new view on the metaphysical presuppositions of scientific inquiry, and the existential distinctions that follow from them, without radically overhauling his entire philosophical system.

In analyzing each of the pieces, I start off with a general description of the essential and most basic categorial distinctions. This is followed by an account of the methods employed in fixing or finding the categories. The discussion on method naturally leads to a discussion on the justification of the categories. Finally, the metaphysical implications of the

categories are drawn out, and the theories of individuality generated by each list of categories are broadly characterized. The lack of detail in defining the theories of individuality, at this point, is intentional. The task of the rest of the dissertation is to clarify and examine both theories, using the method developed by Jorge Gracia for testing theories of individuality.

At the end of this preliminary analysis one thing is clear. Although Peirce's early and late theories of individuality are distinct, they are not inconsistent with each other. Moreover, even if they were inconsistent with each other, all that it would entail is that Peirce changed his mind with respect to certain philosophical issues. Such changes are common in the writings of philosophers who wrote as much and as long as Peirce did. Thus, the chronology of the writings should be taken into account when forming judgments about the consistency or inconsistency of Peirce's theory of individuality as well as the rest of his philosophical system.

Gracia's Method

Gracia's method for analyzing and testing theories of individuality is the most comprehensive and effective method available. It is the best method available because it clearly separates the metaphysical and epistemological issues associated with individuality from each other and defines each of the issues precisely. The method consists of determining whether or not the theory of individuality under scrutiny can answer six questions consistently and plausibly. The questions correspond to six problems that he claims any good theory of individuality should have an acceptable solution for. If an answer is consistent, then there is no possible world in which it leads to self-contradiction or produces a contradiction when combined with the answers given to the other questions. If an answer is plausible, then it is likely to be true in all possible worlds, especially this world. Since it is the purpose of this dissertation to show that Peirce's theory of individuality is both consistent and plausible, it can be taken for granted that it will be argued that it passes the tests.

The first question that a good theory of individuality must answer is, "What is the intension of 'individuality?'"¹ As Gracia puts it, this question asks "about what it is to be an individual as opposed to something else."² The intension of a term is the meaning or connotation of that term. The meaning of a term consists of the set of necessary and sufficient conditions that must obtain for anything to be considered as legitimately falling under the extension of that term. Thus, the answer to the question must entail the set of necessary and sufficient conditions for individuality. On Peirce's early theory of individuality, the intension of "individuality" is a toss up between impredicability and non-multiple-instantiability. Later on, after revising the categories, Peirce views individuality as noninstantiability.³ Peirce's reasons for revising his theory of individuality, the shortcomings and strengths of both theories, and their relationship to each other are also examined.

¹Jorge J. E. Gracia, *Individuality: An Essay on the Foundations of Metaphysics* (Albany: SUNY, 1988) 27.

²Gracia 9.

³ A mark of a substance (i.e., what is really real), according to Aristotle, is that it cannot be predicated of anything else. That is, it is not instantiable. However, this metaphysical connotation of predicability and its negation is not always accepted by proponents of the impredicability view of individuality.

The second question that a good theory of individuality must answer is, "What is the extension of 'individuality?'"¹ In other words, what things, if any, are individuals? The extension of a term is what that term denotes. If an entity is denoted by a term, then that term can be applied correctly to that entity. The answer to this question is determined by the answer to the first question. This is because whatever answer is given must be consistent with the answer given to the first question. Thus, all entities that are in the set that constitutes the extension of "individuality" must meet the necessary and sufficient conditions for individuality. On Peirce's early theory of individuality, there are no individuals, in the traditional sense, because it entails that all individuals are singulars.² On Peirce's late theory of individuality the extension of "individuality" is the set of all existing things. The advantages, potential and actual problems, and relationships between the two theories are then discussed in detail.

¹Gracia 57.

²Singulars are universals that cannot be multiply instantiated. For example, the universal *strongest man in the universe* is not multiply instantiable because it can only be instantiated in one object in the universe at any given time.

The third question that a good theory of individuality must answer is, "What is the ontological status of individuality?"¹ Ontology, defined in classical terms, is

The branch of metaphysical inquiry concerned with the study of existence itself (considered apart from the nature of any existent object). It differentiates between "real existence" and "appearance" and investigates the different ways in which entities belonging to various logical categories (physical objects, numbers, universals, abstractions, etc.) may be said to exist.²

Thus, an answer to this question involves placing individuality into a metaphysical category. Which metaphysical category individuality falls into is determined primarily by the way in which it exists. On Peirce's early theory of individuality, individuality is a special type of general or universal.³ The view entailed by Peirce's late theory of individuality is that individuality is a mode. These determinations regarding the ontological status of individuality for Peirce's early and late theories of individuality are relatively non-controversial. However, making sense of what a mode is

¹Gracia 117.

²*A Dictionary of Philosophy*, 2nd ed., ed. Anthony Flew (New York: St. Martin's Press, 1984) 255-256.

³Peirce does not really subscribe to any traditional theory of universals. Instead, he believes that there are real generals which, unlike universals, are not completely determinate and include an element of vagueness.

and showing it to be consistent with the answers given to the two previous questions is not an easy task.

The fourth question that a good theory of individuality must answer is, "What is the principle of individuation?"¹ The principle of individuation is the set of necessary and sufficient conditions that must obtain for a universal to become an individual. In slightly different language, the principle of individuation is the set of necessary and sufficient conditions for the instantiation of a universal. The treatment of this topic in this section does away with the traditional notions of principles and causes in favor of necessary and sufficient conditions. This is done in order to eliminate confusion. However, great care is taken to maintain the distinction between the questions concerning the principle of individuation and the intension of "individuality." On Peirce's early theory of individuality, the principle of individuation is the bundle of features that constitutes the individual. This type of theory is known as a bundle theory of individuation. Existence is the principle of individuation on Peirce's late theory of individuality. Since Peirce does not discuss his own principle of individuation directly, his view must be inferred from his discussion on related issues and his characterization of the categories.

¹Gracia 141.

The fifth question that a good theory of individuality must ask is, "How are individuals discernible?" Or, in Gracia's own words, "What are the criteria that serve to identify individuals as such?"¹ Unlike the previous four questions, this question is epistemic and not metaphysical. As such, the answer to this question must provide the necessary and sufficient conditions "on the bases of which minds may know something as individual."² On Peirce's early theory of individuality an individual is discernible only if it is contrasted by a mind with another individual and is found to be similar or different.

Empirical psychology has established the fact that we can know a quality only by means of its contrast with or similarity to another. By contrast and agreement a thing is referred to a correlate, if this term be used in a wider sense than usual (CW 2.53).

On Peirce's late theory of individuality an individual is discernible through its reactions with other individuals that are somehow perceived by a mind.

Thus, on both theories, the discernibility of one individual requires that it react with another individual and that the reaction be perceived by a mind.

This, of course, does not exclude minds from being one of the individuals reacted against. For example, Avo (my buff-colored cocker spaniel) can

¹ Gracia 21 and 179.

² Gracia 21.

be discerned by me through a reaction perceived by me with my senses (e.g., my eyes and the rest of the hardware that encompasses the process of vision). There is a strong tendency to view discernibility as a metaphysical issue. However, for reasons that will be discussed later, this is a mistake which Peirce's pragmatism is in an especially good position to correct.

The sixth and final question that a good theory of individuality must ask is, "How are individuals referred to?"¹ This question is different than the previous questions because it is neither epistemological nor metaphysical. This is a semantic question. The thrust of the question is to ask which signs refer to individuals and how they do it. Peirce's theory of signs, which motivates both his early and late theories of individuality, is explored. On Peirce's early theory of individuality, as I mentioned before, it is not clear that there are any individuals. Thus, an analysis of how individuals are referred to must be based instead on how singulars are referred to. Singulars are referred to through the use of signs that can function as the subjects of propositions. Since singulars are generals, they naturally lend themselves to a definite description theory of reference which incorporates uniqueness clauses in much the same way that

¹ Gracia 201.

Russell's did. In Peirce's late theory of individuality, proper names and indexicals are used to refer to individuals. Not surprisingly, of the questions mentioned thus far, it is this semantic question concerning individuality that most contemporary philosophers, and Peirce, have spent most of their time working on.

Peirce's Contribution to the Problem

As argued above, Peirce's philosophy is a major influence in Western philosophy and his solution to the problems associated with his early and late theories of individuality are important in measuring the worth of his contribution to philosophy in terms of leaving behind a system that is not only consistent, but also plausible.¹ However, one may still wonder whether Peirce's resolution of these internal conflicts merits such detailed study and whether it contributes much to the debate, past or present, concerning the metaphysical nature of individuality.

It will be argued in this dissertation that Peirce's main contribution to the debate is his formulation of the principle of individuation in a way that is consistent with the view of individuality as noninstantiability. Only on this account of individuality can one escape various metaphysical

¹ The consistency claim holds only for his later theory independently of the early theory. This is purely a logical claim because there is a great deal of similarity between the early and late theories.

problems associated with other accounts of the intensionality of individuality.

Thus, before moving on to Peirce's categories and a Gracian analysis of them, it is instructive to look at the problem of individuation as it is and has been formulated throughout the history of Western philosophy and examine how Peirce's account of the principle solves various problems and contributes something useful to the philosophical debates surrounding this issue.

The problem of individuation, according to Gracia, has two parts.¹ The first concerns the identification of the principle. The second concerns determining whether the principle is the same for all individuals. In answering both questions some common-sense questions must be asked. However, the answers to these questions stray far from what most would consider a common-sense answer. One of the most important questions that must be asked is, "What is it about individuals that makes them metaphysically distinct from one another?" In other words, what makes me an individual as opposed to making me and my shirt an individual, or me and my shirt and this chair I am sitting in an individual? It is the answer to this question, and others like it, with respect to other individuals,

¹ Gracia 41.

that serves as an answer to both questions. If such a principle can be identified in one individual, then there is an answer to the first question. If the principle identified appears to be the same for any individual that can be thought of or that is possible, then there is an answer to the second question. The answer to both questions could also be that there is no identifiable principle of individuation for anything taken to be an individual.

How philosophers answer these questions is important because these questions lie at the core of what is taken to be a common feature of human experience. Everyone would agree that the way one experiences the world, prior to any philosophical analysis, involves a very robust notion of individuals. Indeed, while there is some question as to whether or not universals or generals are experienced, there is no real debate over whether humans believe and behave in ways that indicate and presuppose a belief in the existence of individuals.

Gracia divides the various accounts of the principle of individuation into five groups¹. The groups reflect the essential features that each group of theories appears to possess. Since the focus of this dissertation is on the existence of individuals and Peirce believed that, although generals are real, only individuals exist, this short journey into the principle

¹ Gracia 143.

of individuation will only cover those theories and attempts to solve the problem which presuppose the claim that individuals exist and that they are individuated metaphysically. As such, the theories examined are theories concerning the individuation of what are called "individual substances" by Gracia.¹ Substances, for him, are those things which are noninstantiable instances of universals. Accommodating this view to Peirce's later categories, which is the list of categories that the dissertation really focuses on, requires a slightly different way of putting the problem. On Peirce's account of the problem, substances are metaphysical entities that are capable of realizing or instantiating generals.

The five kinds of theories concerning the individuation of substances are bundle theories, accidental theories, essential theories, extrinsic theories, and existential theories. The first four of these theories appear to be an unsatisfactory account of the principle of individuation for substances. They have what appear to be insurmountable problems that are metaphysical in nature and they are not consistent with the view that

¹ Gracia 143.

individuality is noninstantiability. Noninstantiability, as intimated above, appears to be the only non-problematic view of individuality.¹

The first kind of theory concerning the principle of individuation for substances is the Bundle Theory of Substance Individuation.² On this view, a substance is individuated on the basis of the bundle of features it happens to possess. This view appears to have quite a few advantages. First, it seems to mesh nicely with the way the world is experienced. Avo, the world's most beautiful cocker spaniel, has several features that can be listed. He is a dog and has floppy ears, buff-colored fur, brown eyes, a sweet disposition, and a warm smile. Avo's best friend from the Claremont Pooch Park is Thumper. Thumper is also a cocker spaniel and he also has floppy ears, buff-colored fur, brown eyes, a sweet disposition, and a warm smile. However, Thumper is two inches taller than Avo and about eight pounds heavier. Thus, what appears to individuate each of these wonderful creatures is the bundle of features they possess. They have different bundles of features and, hence, they are distinct individuals.

1 In Chapter 3 several arguments are given for the claim that noninstantiability is the only satisfactory account of the intensionality of individuality.

2 Gracia 144-150.

The second major advantage of this theory is that it answers both of the questions associated with an adequate analysis of the problem of individuation mentioned earlier. The theory identifies the principle of individuation and it follows from that principle that it is the principle for all individuals. It is a universal principle that cuts across all possible worlds.

According to Gracia there are two major objections that have been leveled against bundle theories of substance individuation.¹ The first objection is that one of its consequences is that no two individuals can have the same set of features. If they did, then they would be one individual and not two. However, as Gracia points out, it is hard to see how, if two substances can have the same essential features, they could not also have, at least in principle, the same accidental features. Such a thing may not occur in our universe, but there is the logical possibility that it could. This possibility is enough to show that the bundle theory is not an adequate theory of substance individuation.

The second objection is that on the bundle view all the features of an individual become necessary features of that individual. This is problematic because it runs counter to experience. In experience, not all the features of an individual seem to necessarily belong to it. For

1 Gracia 144-147.

example, if the number of hairs on Avo's head were to change by one, Avo would not cease to be Avo and become some other individual. In addition, individuals also appear to possess contradictory or incompatible features. Gracia gives the example of Socrates' hair color at different times in his life. In his earlier years Socrates had black hair. During his later years his hair color changed from black to gray. The bundle view does not appear to be able to explain this. Finally and related to the last two points made, this theory of individuation cannot account for change over time.

Although these two objections are persuasive, there are yet other problems associated with this theory that Gracia indicates are not really surmountable. The first problem is that the bundle view confuses the problem of individuation with the problems of distinction and difference. Thus, it takes a metaphysical question for an epistemological question. Second, in so doing it assumes a view of individuality which is inconsistent with the view argued for in this dissertation and defended by Gracia. Namely, the Bundle Theory of Individual Substance Individuation is incompatible with the view that individuality is noninstantiability. Some of

the philosophers who once held this view in one of its forms are Bertrand Russell, Nelson Goodman, Kenneth Barber, and Hector-Neri Castañeda.¹

The next group of theories concerning individual substance individuation investigated by Gracia is the group of Accidental Theories of Individuation.² On this view, it is not all of the features of individuals that individuate them. Rather, it is some specific set of features. The features responsible for individuation are the accidental features. Accidental features are features that are necessary for the existence of the individual in which they are instantiated. The two versions of this kind of theory that Gracia examines are the Spatio-Temporal Theory of Individuation and the Quantitative Theory of Individuation.

On the spatio-temporal theory, individuation is the result of spatial and/or temporal location. Thus, even though Avo and Thumper are similar in many ways, perhaps in all ways with respect to their intrinsic qualities, they occupy different spatio-temporal locations. From the spatio-temporal view it follows that they are metaphysically distinct individuals and this appears to fit nicely with the way the world is

¹ Gracia 265.

² Gracia 150.

experienced. One thing that should be preserved, if possible, is the common-sense view of the world. This view does just that.

Gracia claims that there are several problems with this view.¹ The two most serious problems with it are (1) an individual's individuality should be something which properly belongs to it, not something that changes at each instant of time, and (2) it cannot account for the existence of spiritual beings. This is because spiritual beings have no spatio-temporal features. An example of such a being is God. Whereas there might be some question about God's existence there does not appear to be any contradiction in asserting that it is possible that God exist. Therefore, this theory does not appear able to answer the two questions associated with the problem of individuation consistently, if at all. Thus, because of the two major problems, the spatio-temporal account of individuation does not appear to be an good theory of individual substance individuation.

In addition to the two problems mentioned, there is also one more problem that is perhaps more serious than the two mentioned. This account of the principle of individuation entails an epistemological as opposed to a metaphysical understanding of individuality. Thus, the

¹ Gracia 151-153.

spatio-temporal account of individuation may be a sufficient condition for the epistemological individuation of individuals in certain contexts. However, it does not provide a good metaphysical account of individuality across possible world. Some of the philosophers who at least once held some version of this theory are Boethius, J. W. Meiland, Leibniz, V. C. Chappel, Herbert Hochberg, D. M. Armstrong, and Hans Reichenbach.¹

The Quantitative Theory concerning the individuation of substances is the view that the quantitative features of an object such as its weight, height, and length can explain the individuation of substances.² This theory, like the spatio-temporal theory, has certain advantages. These are reaped by associating quantitative features with Lockean like primary qualities. As Gracia points out, it is not so crazy to be tempted by the thought that what keeps an individual, like Avo, from being instantiated somewhere else are his primary qualities. However, the problems with this view are rather obvious. First, since the primary qualities mentioned, with the exception of weight, are related to spatio-temporal location, the view suffers from the same problems that the spatio-temporal theory suffers from. Second, this view cannot explain how individuals that do not

¹ Gracia 265-266.

² Gracia 155.

have any quantitative features are differentiated. For example, God is often taken not to have any quantitative features but God is considered an individual. Third, quantities change while individuals remain the same. If Avo gains five pounds, he does not cease to be Avo. He has not lost his individuality. And, finally, like the spatio-temporal theory, this theory relies on an epistemological account of individuality. While quantitative features may be a sufficient condition for epistemologically individuating substances in some contexts, they do not constitute necessary conditions for the existence of substances. Again, as before, part of the problem is that the quantitative-feature account of the principle of individuation relies on an epistemological view of individuality, whereas what is being asked for is a metaphysical account of the principle that is consistent with the view that individuality is noninstantiability. This view, although flawed in the ways suggested, is often attributed to Thomas Aquinas.¹

The third kind of theories examined by Gracia are Essential Theories of Individuation.² These theories, unlike the two previous kinds of theories, focus solely on the intrinsic features of individuals as potential

¹ Gracia 266.

² Gracia 155-156.

individuators. Gracia discusses three different types of essentialist theories.

The type kind of essentialist theory is the Materialist Theory of Substance Individuation.¹ On this theory matter is the principle of individuation. Matter, as construed on this view, is some sort of featureless entity. Moreover, at first glance it appears to be an excellent candidate for the principle of individuation. Avo's twin brother is nearly identical to him. They have pretty much all the same intrinsic features and they share many of their extrinsic features as well. In some universe it might even be possible for them to be identical with respect to every feature. In such a universe it would be their matter that would make them distinct and it would be their matter that is not sharable.

Gracia indicates that there are primarily three problems with the Material Theory of Substance Individuation.² The first problem is that matter is not itself individual. Thus, it is not clear that it can function as a principle of individuation. The second problem is that it limits individuality to the physical world. Thus, beings such as angels or God cannot be individuals as they do not exist in the physical world. The third problem is

¹ Gracia 156.

² Gracia 156-158.

that even if matter is taken to be pure potentiality, it still cannot explain individuation. This is because pure potentiality is not individual and what is not individual does appear capable of functioning as a proper principle of individuation. What is ultimately wrong with this account of the principle of individuation, as Gracia points out, is that it entertains a view of individuality that is false. The only account of individuality that does not lead to the types of problems discussed thus far, is the view of individuality as noninstantiability. Some of the philosophers that have had the material theory view attributed to them are Aristotle, Duns Scotus, and Thomas Aquinas.¹

The second type of essentialist theory of substance individuation is the Formal Theory of Individuation.² On this view it is an individual's substantial form that individuates it. In Avo, for example, the substantial form would be cocker-spaniely. There are two fundamental objections to this view. The first is that forms are universals by definition. Since they are universals and given what has been said above, they cannot properly function as principles of individuation. The second objection is that even if some universals could function as principles of individuation, most cannot.

¹ Gracia 267-268.

² Gracia 158-160.

Gracia goes on to say that theories that can explain only a few cases of a particular phenomenon are notoriously inadequate, and that, in itself, is enough to dismiss the theory. As with the other kinds of theories that have been discussed, formal theories of individuation fail at a more fundamental level. They fail at the intensional level. At the intensional level they must assume that individuality is something other than noninstantiability. As Gracia states, while these views may account for difference in certain contexts they cannot account for individuality. A couple of philosophers that have had the formal theory view attributed to them are Aristotle and Thomas Aquinas.¹

The third essentialist view that Gracia discusses is the Bare-Particular Theory of Individuation.² On this view the principle of individuation is nothing more than itself. The only function of the principle of individuation is to individuate substances. Thus, the principle cannot be defined in any other terms. We know the effects of the principle but nothing else about it. The principle has no features or characteristics other than its function; hence, the name "bare." As Gracia states, the principle is discovered dialectically and its existence viewed as a demand

¹ Gracia 268-269.

² Gracia 160-161.

of reason. The advantages of this account of the principle of individuation rest primarily in the problems cited with the previous theories examined that it avoids. However, there are still problems with this view. Gracia cites three major problems with the view. First, as characterless entities, bare particulars are mysterious to the point of unacceptability. Second, just about any attempt to give some content to the notion of a bare-particular leads to some version of the spatio-temporal view found inadequate earlier. Finally, unlike the previous theories examined, the bare-particular theory goes rather nicely with the view that individuality is noninstantiability. However, proponents of the bare particular view do not make that link. Thus, the bare particular view falls short of its mark. Some of the philosophers that have been associated with this view are Aristotle, Duns Scotus, and Gustav Bergmann.¹

The next theories that Gracia investigates are those that are known as Extrinsic Theories of Individuation.² On the extrinsic theory, "individuality is the result of the action of some kind of natural agent or cause." Thus, Avo is an individual because of the reproductive behavior of his parents, Penny and Sir Rusty. It is that action between his parents

¹ Gracia 269-270.

² Gracia 161-162.

that is the principle of individuation. The problem with this theory is similar to that cited for the accidental-feature theories. Namely, an individual's individuality is posited outside of the individual. Moreover, because of the extrinsic character of the principle of individuation it becomes non-essential to the individual. Moreover, this account of the principle of individuation is not compatible with the conception of individuality as noninstantiability. According to Gracia the extrinsic view is not very popular. To his knowledge it is not held by any modern or contemporary philosopher and was held by only a few medieval philosophers.

Peirce, like Gracia, opts for the Existential Theory of Individuation.¹ On this view, the principle of individuation is existence. Existence has all the advantages and none of the disadvantages of the other views examined. It is not a feature, not a mystery; its metaphysical, and answers both questions associated with the problem of individuation. Thus, it appears that the existential theory is not only a good theory, it is also the best.

Concluding Remarks

The purpose of this introduction was threefold. First, I wanted to place Peirce firmly within the Western philosophical tradition and

¹ Gracia 170-178.

demonstrate the importance of his work to contemporary philosophy. Peirce is an often neglected philosopher, and it is still not uncommon to mention his name in certain philosophical circles without anyone's knowing who he is or much about him or even who he is. Second, I wanted to show how complex and interconnected Peirce's philosophical system is by briefly discussing his categories. Peirce may be the most misquoted philosopher in the history of philosophy. Most of these misquotations are the result of a failure to understand the function of the categories and the restrictions they place on interpretation. Indeed, wresting a quote from here or there without first filtering it through Peirce's categories is tantamount to committing philosophical malpractice. Finally, this introduction was also intended to provide a taste of what is to come by way of analysis. That is, I wanted to introduce Gracia's method for testing theories of individuality. The brevity of this introduction was necessary. Gracia's method brings with it a heavy and complex machinery that at times appears overwhelming. However, this machinery is necessary for dealing with a topic as abstract and far from ordinary discourse, philosophical and otherwise, as individuality is. In the end, Gracia's method yields only one good theory of individuality. All the others examined fail miserably. Interestingly, but perhaps not surprising

at this point, the theory of individuality that Gracia ultimately comes out in favor of, is nearly identical to Peirce's theory of individuality. And , of course, where they differ, Peirce is in the right—in a left-handed sort of way.

Chapter 1 - The Early Categories

Introduction

One cannot even begin to understand Peirce's metaphysics, much less his philosophical system, without first understanding his philosophical categories. Peirce took very seriously the task of discovering and then developing the philosophical categories. He devoted a great deal of time towards developing them. Moreover, the coherence of his own philosophical views, as well as that of other philosophical views, was determined, in part, by his assessment of the applicability or inapplicability of his categories to them.

In developing his own list of philosophical categories Peirce was not condemning all the philosophers before him who engaged in the same enterprise. He often cited Aristotle and Kant, both of them with categorial philosophical systems, favorably. In 1905, while commenting on his first list of categories("On a New List of Categories") (CW 2.49-59), which he wrote in 1867, Peirce claims that he was greatly influenced by Kant and, to a lesser extent, by Aristotle (CP 1.560). However, he could not adopt Kant's list of categories because it suffered from a lack of logical rigor. Indeed, he found that several of Kant's categories could be reduced to one another (CP 1.563). Contrary to this, Peirce believed the correct list

of categories to consist of categories that are irreducible. Thus, Peirce could not accept Kant's list of categories. Neither could he accept Aristotle's *Categories*, because he did not believe the system generated by Aristotle's *Categories* to be suitable for modern times (1.1).¹ Moreover, Peirce believed that similar criticisms could be leveled against nearly every other list of categories he examined.

Peirce philosophized from the time he was twelve until he died, i.e., for a period of about sixty three years, 1851-1914. Like all thinkers who philosophize for so many years, Peirce changed his mind about several aspects of his philosophical system, including his early list of categories. Upon discovering some logical and phenomenological errors in his early list of categories (1.564-565), Peirce decided to revise the list. Some contemporary Peirce scholars, most notably Murray Murphey, have claimed that Peirce's revision of the early list of categories was much more radical than Peirce cared to admit.² However, regardless of whether or not Peirce's assessment of the revision that took place is wrong, it is

¹Although Peirce made this claim in 1898, it is consistent with his earlier views and, in fact helps to unify several of his apparently incompatible early criticisms of Aristotle.

²Murray G. Murphey, *The Development of Peirce's Philosophy*, 2nd ed. (Indianapolis: Hackett, 1993) 3-4.

indisputable that Peirce did get his later list of categories by seriously reconsidering and then reworking his early list. As will be pointed out in what follows, the vestiges of his early list are more than obvious in Peirce's characterization of the later list.

Finally, something must be said of the purpose these philosophical categories are meant to serve and what some of the primary problems are, in general, with any categorial philosophical system. In addressing both these issues I will borrow from Hookway's discussion of Peirce's categories. First, according to Hookway, the categories are supposed to serve as the most perspicuous fundamental classification of the elements of reality.¹ Thus, in most of these categorial philosophical systems and especially in Peirce's, any cognition or object of cognition must necessarily be classifiable in terms of the categories. There is no such thing as a cognition or an object of cognition that the categories do not apply to. Second, the most serious problems with any categorial philosophical system, as Hookway point out,² are epistemological problems. The two biggest problems that I see are (1) how to be sure that the categories arrived at apply exhaustively and are fundamental to

¹Hookway, Christopher, Peirce, 2nd ed. (New York: Routledge, 1992) 81.

²Hookway 81.

cognition and (2) how to show that cognition incorporates reality in the epistemologically relevant ways. For Peirce (1) relies primarily on two a priori proofs and one inductive proof; (2) relies primarily on whether or not there actually exists a relationship between reality and cognition that allows for an objective account of truth defined independently of the cognition of any one individual.¹

At the end of "On a New List of Categories" (CW 2.49-59, 1867) Peirce attempts to show that his categories are fundamental to at least one universal science, logic (CW 2.56). This is revealing because Peirce believed that all other disciplines, including metaphysics, follow from logic. If the categories are fundamental to logic, then they are fundamental to every discipline that follows from it. However, this justification of the categories does not really answer (1). To answer (1) adequately, Peirce has to show that the categories provide the only exhaustive analysis of cognition and that the categories are fundamental to cognition. In his critiques of the alternative lists of categories that he rejects, Peirce

¹The one exception to this necessary, although not sufficient, condition for truth is God. Peirce did conceive of God as an individual (CW 2.422-438). Truth is created by God and, thus, is dependent on his cognition (or whatever his corresponding faculty is). Therefore, truth is dependent, at least in this case, on the cognition of an individual. However, we can dissolve this problem if we take Peirce as referring here to all individuals except God.

attempts to show that his categories provide the only exhaustive analysis of cognition. He also argues effectively in "On a New List of Categories," exclusive of his argument for the fundamentality of the categories to logic, for the universal applicability of the categories to cognition (CW 2.52-56).

The intricacies of Peirce's handling of these epistemological issues are philosophically interesting and any exploration of them is more than worthwhile. However, what I am primarily interested in is Peirce's metaphysics. In particular, I am interested in how he metaphysically characterizes individuals and how this characterization helps resolve some of the problems traditionally associated with the problem of individuality. In the following I will go through "On a New List of Categories" (CW 2.49-59) and, in the next section, "One, Two, Three: Fundamental Categories of Thought and of Nature" (CW 5.242-247, 1885) and some other pieces written in 1885 or later. In doing so, I hope to place Peirce firmly within a particular metaphysical framework from which his theory of individuality can be assessed.

"On a New List of Categories"

The year 1867 was extremely busy for Peirce. He completed a great deal of work, and much of it was philosophical. This was also the year that Peirce completed what he was to later call his one contribution

to philosophy (CW 2.xxv), "On a New List of Categories." Peirce's system, as mentioned above, is categorial. He begins this paper with a discussion on what the function of conceptual activity or cognition in general is.¹

According to Peirce the function of a conception is to reduce the manifold of sensuous impressions to unity (CW 2.49). The manifold is just that part of the content of consciousness contributed by the senses and prior to any conceptual analysis. It is chaos and confusion prior to the application of a conception which reduces it to unity. When the content of consciousness is reduced to unity, some of the confusion present prior to the application of a conception is removed. Just how much of the confusion remains is determined by how well the conception performs its function. Indeed, Peirce claims that the validity² of a conception is measured by the degree to which it is impossible to reduce the manifold to unity without it (CW 2.49). He believes all of his categories are as valid as

¹I am following Hookway and Murphey in understanding Peircean conceptions or conceptual activity as cognition in general. From now on, when I refer to cognition I will be referring to cognition and its objects unless otherwise specified. Murphey 21 and Hookway 90.

²Peirce is not referring to logical validity here. Rather, he is referring to the value of a conception measured in terms of how well it performs its intended function to reduce the manifold to unity.

any conception can be, and he expects that it will be impossible to reduce any manifold to unity or, at the very least, ultimate unity, without the introduction of certain elementary conceptions. These conceptions are his categories. Thus, Peirce intends the categories to be universal. They are universal in two ways. First, they are available to anyone capable of forming a conception. Anyone who seriously reflects on the nature of cognition will have access to the categories. Second, they suffice to explain any cognition.¹ In other words, there is no manifold to which these categories fail to apply.

Since the categories are universal in the way described, they must each perform some unique and irreducible function in reducing the manifold to unity. Recognizing this, Peirce claims that the theory he is proposing or defending (this depends on how one interprets Peirce) gives rise to “a conception of gradation among those conceptions which are universal” (CW 2.49). The gradation he is referring to is the gradation of the categories. At the beginning and at the end of Peirce’s categories are the non-accidental categories. Moving gradually from one to the other,

¹Hookway 81.

there are three stages. Each of these stages is an accidental category.¹ The three accidental categories are needed to move from unity to chaos and from being to substance. Thus, some of the categories may be required to unite the manifold, while others may be required to unite a conception with the manifold to which it applies (CW 2.49).

The Non-Accidental Categories

According to Peirce there are two non-accidental categories, substance and being. In his discussion of these categories Peirce refers to them as conceptions. He begins this section of the paper with a discussion of the conception of substance and then moves on to a discussion of the conception of being.

The conception of substance is the conception which is closest to the manifold. Peirce characterizes this conception in two ways. First, the conception of substance is the conception of *the present, in general* (CW 2.49). At first glance, this conception does not appear to be legitimate. However, according to Peirce, it is a conception because it meets the universal criteria that he established for the categories above.

1 The accidental categories are the categories that have content. The non-accidental categories have no content. The function of the accidental categories is to mediate through a series of cognitive processes, between the non-accidental categories.

This conception is an act of attention, and, as such, it has no connotation. However, it does possess the power to direct the mind to an object. Thus, its function is denotative and not connotative. Since this conception has no connotation, like the manifold, it also has no unity. It is because this conception has no connotation that it appears to be radically different from other types of conceptions.

Second, the conception of substance is the conception of IT in general (CW 2.49). The conception of IT in general is the conception of that which must be recognized before “any discrimination can be made between what is present” (CW 2.49). Once the IT has been recognized, the metaphysical parts that are abstracted from it can be attributed to it. The IT, however, cannot be attributed to anything in the way its attributes are attributed to it. This is because its metaphysical parts are predicated of it. The IT cannot serve as a predicate of any subject nor can it be considered as within or as part of a subject.

Peirce looks at all three conceptions—substance, *the present in general*, and IT in general—as synonymous. “*This conception of the present in general*, of the IT in general, is rendered in philosophical language by the word ‘substance’ in one of its meanings” (CW 2.49). Thus, the conception of substance is an act of pure denotation or

attention, and it is the conception of that which plays or can play the role of the subject in a proposition.

Next Peirce discusses the conception of *being*, which is at the other end of Peirce's spectrum of categories. Peirce defines the conception of being in four different ways.

First, the conception *being* is the conception of that which is implied in the unity of a proposition (CW 2.49). The unity of a proposition consists in the connection of a predicate with a subject. The conception of being is what is implied in the copula of the predicate with the subject. Thus, there are three parts or aspects to every proposition. These are the subject, the predicate, and what is implied by the joining of the two, the conception of being.

Second, the conception of being is that which "completes the work of conceptions of reducing the manifold to unity" (CW 2.49-50). It completes the work of conceptions by uniting the predicate with the subject or, in less linguistic and more metaphysical terms, the conception of being unites the quality with the substance (CW 2.52). Thus, the conception of being is, in part, what makes it possible for us to attribute the metaphysical parts of a particular substance to that substance.

Third, the conception of being is the conception which contains

those propositions wherein the two verbs, *actually is* and *would be* agree (CW 2.50). The verb which serves as the copula in this case means either *actually is* or *would be*. The two propositions that Peirce uses to show the difference between the two verbs are, respectively, "There *is* no griffin," and, "A griffin *is* a winged quadruped" (CW 2.50). The first of the propositions points to or implies an actual state of affairs while the other proposition implies a possible state of affairs.¹ Peirce claims that the conception of being contains only those propositions wherein these two verbs agree. Thus, it seems the concept of being contains only those propositions that signify a state of affairs in which something that is possible is attributed to something actual. In other words, the two verbs agree when a quality is hypothetically attributed to a substance.

Fourth, the conception of being is the conception of that which implies the indefinite determinability of the predicate (CW 2.50).

Predicates are universal in the sense that any particular predicate can be

¹Armstrong, D.M., *A Theory of Universals: Universals and Scientific Realism, Volume II* (Cambridge: Cambridge University Press, 1990) 175. I am borrowing Armstrong's definition of a state of affairs and defining it, as he does, as "a particular (including higher order particulars) having a property, or two or more particulars being related." Peirce would probably have preferred the term "individual" to "particular."

determined or predicated by any substance of a certain type(s). To use Peirce's example, let us examine the predicate "is a tailed man" (CW 2.50). This predicate can be determined, in principle, by anything that is a man. For any possible man, it is possible that he have a tail. The predicate need not be determined by any particular man. Thus, the predicate is not a subject, but is determined by a subject to some extent. Furthermore, predicates cannot be entirely indeterminate. If a predicate were entirely indeterminate, it would have the characters common to all things. However, no subject can have the characters common to all things because "there are no such characters" (CW 2.50).

Interestingly, Peirce leaves open the possibility of predicates which are partially indeterminate. Unfortunately, he does not give any examples of what such predicates might be. There appears to be, off hand, only three possibilities. Peirce could be considering (1) disjunctive predicates, (2) vague predicates, and/or (3) unsaturated predicates.

There are good reasons for believing that disjunctive predicates would not be acceptable to Peirce, especially in cases where one or more of the disjuncts are not actualized. David Armstrong gives three reasons for not accepting such predicates which Peirce would have found

convincing, at least during the early stages of his philosophical career.¹ I will briefly list these reasons.

- (1) Disjunctive predicates offend against the principle that a predicate be identical in all of its predications.
- (2) If disjunctive predicates are allowed, then every subject will have an indefinite number of disjunctive predicates and this number is at least as much as the number of possible predicates.
- (3) Disjunctive predicates break the link between predicates and the causal powers of subjects.

Given the verificationist overtones of Peirce's early pragmatic theory of meaning, I do not think he would have accepted disjunctive predicates on the grounds of (1) and (3) (CW 1.7, 1.50, 2.7, and 2.10). Furthermore, his frequent extolling of the virtues of simplicity² would have

¹Armstrong 20. Armstrong, of course, talks about properties and not predicates. However, when Peirce speaks of predicates in this context he is referring to those predicates that signify certain qualities. Peirce's qualities are very much like Armstrong's properties. Also, both Armstrong and I are referring to disjunctions in a logical sense, as an inclusive "OR" with a corresponding truth table.

²Although I could not find any early examples of Peirce's stressing simplicity in the way that he does in his later works, the seeds of his later view were planted here and earlier on. For example, it is by simplifying the manifold through abstraction that an understanding of the manifold is acquired.

probably led him to reject disjunctive predicates on the grounds of (2). Aside from these problems, Peirce would also have had trouble admitting disjunctive predicates because of the way he defines the conception of being. Non-actualized disjuncts would not be contained within the conception of being. Thus, if disjunctive predicates were to be accepted, there exists the possibility of propositions that are only partially contained within the conception of being. It would also have to be possible for the same predicate to be determined differently by two different subjects, by the same subject at two different times, or by the same subject in distinct possible worlds. Peirce would not be able to accept this. In addition, nowhere in Peirce's writings could I find any mention of disjunctive predicates or universals discussed in any way that would be relevant here.

Vagueness, although a good candidate, does not seem to be what Peirce is talking about here. Vague predicates are predicates whose extensions are to some degree indeterminate. The extension of a predicate is that set of things that the predicate denotes. Peirce believed that "vagueness is as evident a character of the objective world as preciseness."¹ Even the most vague predicates, those associated with

¹Arthur Smullyan, "Some Implications of Critical Common Sensism," in *Studies in the Philosophy of Charles Sanders Peirce*, ed. Philip P. Weiner and Frederic H.

perceptual beliefs, are partially determinate (CP 5.498).¹ As such, these predicates are useful for practical or commonsense purposes. Thus, they do not violate Peirce's claim that no predicate can be completely indeterminate. In addition, vagueness plays an essential role in the formulation of several key concepts for Peirce. Some of these are generality,² quantification,³ evolution,⁴ and continuity.⁵ However, Peirce does not discuss the notion of vagueness in any way that is relevant to this issue prior to 1885. Thus, it is unlikely that vague predicates are what he is referring to when he refers to partially determined predicates.

The last and most promising of the possibilities are unsaturated

Young (Cambridge, Mass.: Harvard University Press, 1952) 118.

¹C.F. Delaney, *Science, Knowledge and Mind: A Study in the Philosophy of C.S. Peirce* (Notre Dame: University of Notre Dame Press, 1993) 114. I found Delaney's discussion of this passage extremely helpful for understanding Peirce's characterization of vagueness.

²Hookway 35-36; Peter Skagestad, *The Road of Inquiry* (New York: Columbia University Press, 1981) 66; and Claude Engel-Tiercelin, "Vagueness and the Unity of C. S. Peirce's Realism," *Transactions of the Peirce Society*, Winter, Volume XXVIII, Number 1 (1992): 67. Engel-Tiercelin characterizes generality and vagueness as opposite forms of indeterminacy and as causally and logically distinct from one another.

³Hookway 237-238.

⁴Hookway 279-280.

⁵Engel-Tiercelin 70.

predicates. Unsaturated predicates are predicates considered exclusive of their attachment to or instantiation in any particular object.¹ Such predicates are partially determined because their application is restricted.

For example, the predicate "is a reptile" is a partially determined predicate because it cannot be applied to any warm-blooded animals. It is partially indeterminate, as well, because it can only be fully determined by being instantiated in an individual (or subject). However, given this possibility, what Peirce accepts as a partially determined predicate remains a mystery.²

Finally, Peirce wraps up this section on the non-accidental categories by making a final statement about the conceptions of substance and being.

Thus, substance and being are the beginning and end of all conception. Substance is inapplicable to a predicate, and being is equally so to a subject (CW 2.50).

¹Frege regarded concepts as essentially incomplete (as contrasted with objects, whose names can stand alone).

²Hookway 85-87. Hookway explains Peircean predicates, considered independent of a subject, by drawing similarities between them and Fregean unsaturated or incomplete expressions (*concepts* are the non-linguistic counterparts of predicate expressions for Frege). Hookway believes the comparison is warranted because Peirce and Frege discovered and developed quantified logic independently of each other at about the same time.

Every conception, in principle, begins with the manifold of substance and ultimately ends with the unity of being. The conception which is closest to the manifold is *substance*, and the conception that is closest to unity, which is the principle of unity itself, is *being*. Thus, they are at the opposite ends of all conception. The conception of substance is inapplicable to a predicate because the conception of substance has no unity prior to its being coupled with a predicate. The conception of being is inapplicable to a subject because the conception of being has no content prior to the connection of a predicate with a subject. The subject of every conception is the content of consciousness, which in most cases consists of the manifold.

Method for Fixing the Accidental Categories

If the two non-accidental categories are at opposite ends of the conception scale, then there must be other universal elementary conceptions which allow for the conceptual movement from confusion to understanding (from chaos to unity). Peirce does not need a special method for discovering the non-accidental categories. He arrives at those through a simple phenomenological analysis of conception in general. However, with the accidental categories the process of discovery is a bit more complex. Simple reflection is not sufficient for access to the

accidental categories. Peirce's method for accessing them is *abstraction*.

The method of abstraction is also referred to as the method of *prescision* by Peirce. In this section of the paper Peirce defines *prescision* and contrasts it with two other methods of mental separation which are frequently mistaken for forms of abstraction.

The two other processes of mental separation are *discrimination* and *dissociation* (CW 2.50). Discrimination is that process of mental separation whereby terms are separated by their essences or meanings (CW 2.50). Discrimination is the process of drawing a distinction in meaning. We can discriminate "red from blue, space from color, and color from space" because in each of these pairs one term can be distinguished from the other by the difference in their meanings. However, in cases where such a distinction in terms of meaning cannot be drawn, discrimination cannot take place. Thus, we cannot discriminate color from red. This is because not all instances of color are red, whereas, all possible instances of redness are also instances of color. Therefore, there is no way to define red such that it is not a color, and, thus, no way to discriminate red from color.

"Dissociation is that separation which, in the absence of a constant association, is permitted by the law of association of images" (CW 2.50).

Furthermore, "it is the consciousness of one thing, without the necessary simultaneous consciousness of the other." Thus, we can "dissociate red from blue, but not space from color, color from space, nor red from color" (CW 2.51). Dissociation depends, to some extent, on the dissociative capacities of the person dissociating. Dissociation is a psychological and not a logical term. What can be dissociated is determined by the psychological make-up of each individual or type of individual. For example, I may be able to dissociate color from space, whereas somebody else may not be able to. Peirce suggests that this might be the case with blind people (CP 1.549).¹ A person that has been blind since birth and has never seen color has a conception of space radically different than a sighted person's conception of space.² Such a person

¹This example comes from Peirce's later writings. For the most part, I try to avoid examples from time periods other than the one I am currently examining in order to avoid the charge that I am not paying attention to the developmental aspects of Peirce's philosophy. Thus, while I do use some examples from later periods here, it is only to clarify certain notions and not to make any philosophical points beyond those that Peirce makes in whatever selection of writings I am, at the moment, examining.

²Locke and Berkeley also discussed this phenomena of perception. It is known in the literature as the "Molyneux Problem." See George Berkeley, *A Treatise Concerning the Principles of Human Knowledge* (1710, Indianapolis: Hackett, 1982) 40 and 56; George Berkeley, *Three Dialogues Between Hylas and Philonius* (1713, Indianapolis: Hackett, 1979) 37; and John Locke, *An Essay*

might be able to dissociate color from space. The possibility of such cases, however, does not do damage to the objectivity of Peirce's notion of dissociation. Rather, it relativizes dissociative capacities to the cognitive capabilities of the dissociator.

Prescision "supposes a greater separation than discrimination but less separation than dissociation" (CW 2.50). Prescision is a process in which one element of an object or substance is attended to the neglect of other elements.¹ One element of an object is supposed without supposing any other elements of the object. We can prescind red from blue and space from color, but not color from space nor red from color (CW 2.51).² Peirce gives a possible-worlds analysis of how abstraction works which clarifies the notion of prescision. The example he uses is

Concerning Human Understanding (1690, New York: Dover, 1959) 186-188.

¹Something interesting to notice here is that Peirce has shifted from manifolds of sensuous impressions and contents of consciousness to objects. The best way to think of the objects Peirce refers to in this section is as the objects of cognition.

²Such a separation is supposed to be greater than discrimination. However, this is not clear. It appears that discrimination involves a greater separation than prescision. For example, I can discriminate color from space but I cannot prescind color from space. Furthermore, similar concerns arise when considering the distinction between prescision and dissociation. Prescision seems to involve a greater separation than dissociation. In addition, the verificationist slant of Peirce's early pragmatic theory of meaning appears to run against several of these distinctions.

that of separating color from extension. He claims that he cannot prescind color from extension because he can find no possible world in which color, defined as a quality of objects, exists without extension (CP 1.549).¹ In any universe in which he finds color, he finds it instantiated in objects which, by definition, are extended. Thus, color cannot be mentally separated from extension through prescision.

In some cases, prescision is reciprocal. For example, red can be prescinded from blue and blue can be prescinded from red. However, according to Peirce, reciprocity (or symmetry) is not essential to prescision (CW 2.51). We can prescind space from color, but we cannot prescind color from space. Peirce is especially interested in the non-reciprocal cases of prescision when he is elaborating his categories because in these cases what is prescinded reduces that which it is prescinded from to unity. The conception of red, for example, is reduced to unity by the conception of color.² This is because we can explain or remove some of

¹Peirce is playing a bit loose with language here. He should not be taken to be making the claim that qualities exist in the same way that objects do. Rather, he is making the point that in any universe in which he finds colors instantiated, he finds them instantiated in objects which, by definition, have extension.

²When I attribute unity to something, I am not attributing to it that unity of being that is obtained only with the application of the conception of being. The unity I am referring to is a unity which advances, to some degree, the unity of that which is united toward the ultimate unity contained within the conception of being. Until

the confusion of redness by conceiving of it as a color. Peirce characterizes elementary conceptions as conceptions that are prescindable from every manifold and in such a way that their application reduces whatever they are applied to, to the ultimate unity of being. All other conceptions are arbitrary because they are not universally non-reciprocal and/or applicable to cognition. Thus, Peirce claims that the impressions and more immediate conceptions cannot be definitely conceived without, at some point, referring to the elementary conceptions (CW 2.51). It is for this reason that the explaining conceptions can be prescinded from the more immediate conceptions and impressions while the reverse is not true. In other words, this is why precision is not generally a reciprocal relation.

With this method in hand, Peirce is now able to systematically search for the categories that serve as the connection between the unity of being and the manifold of substance.

The Accidental Categories

The accidental categories for Peirce are quality, relation, and representation. As categories they must, as stated above, perform one of

the ultimate unity is obtained, there is no definite conception.

two functions. They must either unite the manifold of substance directly or unite some other conception to the manifold. Quality and relation perform the latter function, and representation performs the former. Furthermore, the unifying conception must be such that neither of the elements united could be supposed without it.¹

Peirce claims that empirical psychology has discovered the conditions under which we can legitimately introduce a new conception which serves as “the next conception in passing from being to substance” (CW 2.51). The conditions are (1) the conception must already be in the data which are united to that of substance by the first conception and (2) the conception must be incapable of being supposed without the first conception.

¹There appears to be something wrong with the supposability condition that Peirce puts forth here. When an elementary conception functions to conjoin another elementary conception to the manifold, it can be supposed without supposing the elements conjoined. However, the elements conjoined cannot be supposed without also supposing the conception that joins them. This is problematic because as the prescision process takes place each of the elementary conceptions will be both independently supposable and not supposable without first supposing some other conception. This message is especially problematic because Peirce refers specifically to elementary conceptions. However, one way of resolving this tension is to view the elements as premises occasioning the conjoining conception and, as such, neglectable once the elements have been conjoined. This analogy between premises and elements follows nicely from several of the recommendations of empirical psychology mentioned by Peirce (CW 2.51).

Peirce begins the examination of his categories with the conception of quality. Every proposition has a subject that indicates a substance and a predicate that indicates a quality. The conception of quality is the first conception in order in passing from the conception of being to the conception of substance because it is the function of the conception of being to unite the quality with the substance. Thus, quality meets both conditions established through the discoveries of empirical psychology. The conception of quality lies in the data which are united to the conception of substance by the conception of being, and it cannot be supposed without the conception of being.

Before being united to the conception of substance by the conception of being, the conception of quality must be taken in the same way the manifold is. Once it has been taken as immediate it transcends what is given (the more immediate conception) and is then considered independent of it (CW 2.52). Thus, its application to a substance, after it has been rendered independent of substance, makes its application to that substance hypothetical. Peirce has at least two good reasons for claiming that the application of a quality to a substance is hypothetical. First, propositions, as he analyzes them, involve "the applicability of a mediate conception to a more immediate one" (CW 2.52). By

characterizing propositions in this way he eliminates the possibility that qualities are given in the impression. If they were given in the impression, then they could not be applied to it. Furthermore, if they were given in impression, then the distinction between substance and quality would disappear, and this is a distinction that Peirce needs to preserve. Thus, Peirce needs the applications of qualities to be hypothetical in order to preserve his analysis of propositions.

Second, Peirce needs the application of the conception of quality to be hypothetical in order to maintain the objectivity of qualities. If the qualities were purely the results of introspection, as they are often taken to be, there would be no way of distinguishing between the objective and subjective elements of consciousness. This would be problematic because it would be very difficult, if not impossible, to determine what could be securely inferred from any of the elements of consciousness. Peirce claims that "nothing is assumed respecting the subjective elements of consciousness which cannot be securely inferred from the objective elements" (CW 2.52). He succeeds in doing this, in part, by drawing the distinction between impressions and qualities.¹

¹This anticipates "Questions Concerning Certain Faculties Claimed for Man" (CW 2.193-211).

To clarify the conception of quality Peirce uses the proposition "This stove is black," as an example (CW 2.52). The conception *this stove* is the conception of a substance and, as such, is more immediate than the conception of *black*. Peirce claims that *blackness* and *embodying blackness* are equivalent and that this indicates that *blackness* is a pure abstraction. In order to take the form of an hypothesis, the conception of blackness must be a pure abstraction. Only in this way can Peirce hypothetically apply the conception of blackness to the conception of stove.¹

Peirce needs *black* and *embodying blackness* to be equivalent in order to allow for the possibility of taking *blackness* immediately. Without this possibility the conception of quality, in general, cannot retain its hypothetical status. If the conception of quality loses its hypothetical status it loses its objectivity, and the security of the inferences from it is also lost. Thus, Peirce gives something like the following argument for the equivalency of *black* and *embodying blackness*.

- (1) A superfluous conception is an arbitrary fiction.

¹To some of the empiricists (Locke and Hume, e.g.), this would probably seem backward. But Peirce is correct in taking *black* to be an abstraction, not a literal building block of ordinary perception.

- (2) Any conception which contains a superfluous conception is itself superfluous.**
- (3) Elementary conceptions are not superfluous.**
- (4) Therefore, elementary conceptions are not superfluous nor do they contain any superfluous conceptions.**
- (5) The conception of quality is an elementary conception.**
- (6) Therefore, the conception of quality is not superfluous nor does it contain any superfluous conceptions.**
- (7) If two conceptions can be applied indifferently to all the same facts and the conceptions are not equivalent, then one of the two conceptions is superfluous.**
- (8) The conception of quality contains the conceptions of blackness and embodying blackness.**
- (9) The conceptions of blackness and embodying blackness can be applied indifferently to all the same facts.**
- (10) Therefore, the conceptions of blackness and embodying blackness are equivalent.**

With this argument Peirce is able to preserve the objectivity of the conception of quality and all the conceptions it contains because if a quality and its embodiment are equivalent, then the application of a quality

to an object is hypothetical.

At this point, Peirce is ready to refine his definition of quality. A quality is a general attribute which is constituted by reference to pure abstraction (CW 2.53). Furthermore, any abstraction of this type “may be termed a *ground*” (CW 2.53). Thus, the conception of a quality or a general attribute is the conception of a reference to a ground. As I mentioned above, the relation of prescission between elementary conceptions, for Peirce, is not reciprocal. Thus, reference to a ground cannot be prescinded from the conception of being (CW 2.53).

Although reference to ground is the first conception in passing from being to substance, it does not unite the manifold to substance directly. Thus, there must be another conception in the passing from being to substance which is united by the conception of quality to the conception of substance and which itself cannot be supposed without the conception of quality. According to Peirce, the conception which meets these conditions is *relation*. Citing empirical psychology once again, Peirce claims that we can know a quality only through contrast or agreement (CW 2.53). The only way we can understand a quality is by means of finding it similar or dissimilar to another quality. The other quality which serves as the basis for contrast or agreement is termed a *correlate*. Thus, ‘the occasion of

the introduction of the conception of reference to a ground is reference to a correlate" (CW 2.53). As with the conceptions of being and quality, the conception of quality can be prescinded from the conception of relation but the reverse is not true. This, as before, is consistent with Peirce's requirement that the relation of prescision between an elementary conception and any other conception be non-reciprocal.

Peirce gives three examples of the relation at work. The examples are geared toward the introduction of the next accidental category. The conception of relation, like quality, does not unite the manifold of substance directly. However, before jumping into the next category, going over Peirce's examples will help to clarify the category of relation.

The examples that Peirce uses are examples of contrast and not cases of agreement. Agreement takes place when the relatum¹ and the correlate are identical. For example, two black objects will agree in their blackness. This is because, qualitatively, the two instances of blackness are indistinguishable. In such cases, the two objects embody blackness,

¹Peirce uses the term "relate" and "relates" as opposed to "relatum" and "relata." Peirce also uses the term "relate" to refer to one of the supposable objects of the categories. In order to avoid the appearance of equivocation, I will use the latter pair of terms and reserve "relate" for reference to the supposable objects of the category of relation.

and the reference to a ground of the relata "is a prescindable or internal quality" (CW 2.55). With contrast, however, the reference to a ground of the relata is "an unprescindable or relative quality" (CW 2.55). In cases of agreement there is concurrence and, as such, the relata are not distinguishable, but in cases of contrast there is opposition and the relata are distinguishable.¹ With agreement the relation can be reduced to the non-relative and internal quality which is multiply instantiated in the facts compared. On the other hand, in the cases of contrast, the relation cannot be reduced to the internal or other non-relative qualities that constitute the relata.

Peirce's first example is a comparison of the letters p and b (CW 2.53). He claims that we can conceptually flip one vertically and superimpose it over the other such that, if one were to be made clear, then the other could be seen through it. In doing this we can establish a relation between the two letters. The relation is that when one of the letters is flipped, it embodies the likeness of the other. What makes this a case of contrast and not agreement is that, without the flipping or flippability, neither of the letters embodies the likeness of the other. The

¹This distinction along with one other will be explored shortly in a discussion on the three types of signs that follow from the three accidental categories.

image that we have formed of the relation between the two letters "mediates between the images we have of the two kinds" (CW 2.53).

In the second example Peirce asks us to think of the relationship between a murderer and the murdered person (CW 2.53). The relation instantiated here is the relation of murder. This relation mediates between the murderer and the person murdered. The conception of murder, in this case, represents one of the relata as standing for the other which is serving as a correlate. As in the first example, we form a conception which serves as a representation that mediates between the relatum and the correlate.

In the third example *homme* and *man* are contrasted (CW 2.53). The relation between the two is the conception of their meaning. The conception mediates between the two such that one can always serve to represent the other, which functions as the correlate. Thus, *man* represents *homme* in virtue of the mediating representation, the definition of *man* and *homme* (which is the same), which itself is in relation with one or the other of the terms depending on which one functions as the correlate. This case is not one of agreement because, as with the other two cases, the relation between the relata is not reducible to their internal

or other non-relative qualities.¹

Citing these examples as common and representative, at least in form, to all possible instances of comparison, Peirce lists some of the necessary conditions for comparison in general. These are that

every comparison requires, besides the related thing, the ground, and the correlate, also a mediating representation which represents the [relatum] to be a representation of the same correlate which this mediating representation itself presents (CW 2.53).

Each of these conditions, with the exception of the mediating representation, is satisfied by one of the accidental elementary conceptions already discussed.

Since the conception of relation does not unite the manifold directly, we are in need of at least one more elementary conception. The conception introduced, as with those conceptions introduced before it, must also meet the two conditions established by discoveries in empirical psychology. The mediating representation, which Peirce terms the

¹Unfortunately, these examples do not meet their intended goal of clearly distinguishing relation from the other two accidental categories. All of these cases, however, do clearly distinguish representation from the other two accidental categories. In all these cases the relation seems to rely on the mediating representation. Representamens are the supposable objects of the category of representation. A representamen is a sign in its broadest sense (CP 2.74).

interpretant, meets the two conditions and, thus, constitutes the third of the accidental categories, the conception of *representation*. Peirce does not give any definition for this conception but, instead, gives several examples which, to a great extent, follow the same model that the previous examples for the conception of relation follow. The essence of what Peirce intends to show with these examples is that the conception of representation is the conception of something (a word, a portrait, or a weathercock) which represents something else (a dog, a person, or the direction of the wind) to the corresponding conception in the mind of the intended person (CW 2.54). Thus, the conception of representation lies in the data which are united to the conception of substance by the conception of relation, and it cannot be supposed without the conception of relation. Therefore, it is the next conception in order in passing from being to substance. However, unlike the two preceding elementary conceptions, the conception of representation unites the manifold of substance directly. Hence, past it, there is no further occasion for the introduction of another elementary conception. Also, as with the previous categories, the category of representation cannot be prescinded from the categories that come before it, in passing from the conception of being to the conception of substance, but it can be prescinded from those that

come after it. Thus, it can be prescinded from the conception of substance.

At this point Peirce is ready to list his elementary conceptions and for the first time calls them *categories* (CW 2.54).

Being

Quality (Reference to a Ground)

Relation (Reference to a Correlate)

Representation (Reference to an Interpretant)

Substance

Peirce labels the three intermediate categories "accidents"¹ (CW 2.55) and then goes on to list the supposable objects which the categories afford us.

What is

Quale - that which refers to a ground

Relate - that which refers to a ground and a correlate

Representamen - that which refers to ground, correlate, and interpretant

¹Peirce is loosely modeling his categories after Aristotle's *Categories* by referring to the intermediate categories as "accidental" and to the others as "substantive." The categories of substance and being are very loosely analogous to Aristotle's conception of substance. The three intermediate categories are, in the same way, similar to Aristotle's conception of accident.

It

Thus, the objects we are afforded are general attributes.

These attributes are the attributes of one object in the case of quale, two objects in the case of relate, and three objects in the case of representamen.¹ Relates can be viewed as two-place relations and representamens as three-place relations. Realizing that all three of the supposable objects are some sort of quality and wanting to discriminate between the categories in a way that preserves the irreducibility of the categories, Peirce clearly defines the kinds of qualities that are contained within the conception of each of these accidental elementary conceptions.

Internal qualities are those that correspond to quale. These are qualities that are prescindable from a relation between two or more relata.

In such cases, the relata are all the same. Thus, the relation itself is reducible, in some sense, to the relata. Nothing is added to the understanding of the any of the relata as a result of the relation. For example, a billion yellow things would not help us to understand yellow because they are all alike insofar as they are all yellow.

¹Here, as before, the objects Peirce refers to are objects of conception. Such objects need not necessarily be the three-dimensional objects that we usually designate with the word "object."

Relative qualities are the qualities that correspond to the relata. In such cases the relata are not the same and the relative quality is not reducible to the relata. Something is added to the understanding of each of the relata by the introduction or application of the relative quality.

Imputed qualities are those that correspond to representamens. These are qualities that cannot be prescinded from reference to an interpretant, and they are not reducible to any combination of internal and/or relative qualities. Something is added to the understanding of the relatum, correlate, and interpretant by the introduction or application of the imputed quality.

From the three supposable objects of conception there follow three supposable kinds of representations.

- (1) Likeness - those representations whose relation to their objects is a mere community in some quality.¹
- (2) Indices - those representations whose relation to their objects consists in a correspondence of fact.²
- (3) Symbols - those representations whose relations to their

¹ These were later called icons. An example of an icon is a map.

² An example of an index is the rising mercury in a thermometer as a result of being heated by the sun or some other heat source.

objects is an imputed character or general sign.¹

These three supposable kinds of representations follow from the three supposable objects of conception which follow directly from the categories. Thus, Peirce has shown that the categories exhaustively apply to cognition.

Justification of the Categories

In showing that the categories are exhaustively applicable to cognition, Peirce has met the condition of universality that he earlier claimed any adequate list of categories must meet. By disqualifying all other lists known to him for various epistemological, logical, or phenomenological reasons, he has made the case for his list of categories even stronger. His is the only list of categories that is universally and exhaustively applicable to cognition. Thus, it may seem, at this point, that Peirce is engaging in overkill by giving a further logical justification of his categories. However, this is not the case because the logical justification of the categories plays an important role in Peirce's argument for the categories. What Peirce has shown up to now is that his categories apply exhaustively to cognition. What he has not shown is that the categories are fundamental to any analysis of cognition. If the

¹ An example of a symbol is a word written in the English language.

categories are fundamental to any analysis of cognition, then Peirce has made a very strong argument for the categories. Fundamentality is much stronger than applicability. It is in this way that Peirce's logical justification of the categories is different than the non-logical justifications. Peirce uses logic as an example because it is fundamental to so many other sciences. If the categories are fundamental to logic, then it is likely that they are fundamental to every other possible science as well.

Logic, as defined by Peirce, treats "of the formal conditions of the truth of symbols" (CW 2.57). Furthermore, it is fundamental to any science that has the determination of the truth of symbols as its stated or practiced goal. Thus, by showing that his categories are fundamental to logic, Peirce is showing that his categories are fundamental to every science that logic is fundamental to. Some of the sciences that Peirce believed logic is fundamental to are biology, metaphysics, physics, and psychology.¹ What is significant about logic and the sciences that follow

¹I am especially interested in the relationship between logic and metaphysics. Which of the two ought to be fundamental to the other is a debate which rages on even today. Peirce believed that metaphysics should follow from logic and heavily praised those philosophers who followed or attempted to follow this rule. (CW 1.63, CW 2.165, CW 4.252, CW 4.n170, CW 5.223-224, CP 1.487, CP 1.488, CP 1.625, CP 3.454, CP 3.487, CP 3.560, and CP 4.571). I have listed as many of the citations as I could find because of the importance this notion plays in determining what sort of realist Peirce was. He could not have adopted any version of metaphysical realism which he did not perceive as following from

from it is that we usually appeal to them to settle any doubts we may have. To a great extent, our beliefs are determined by the results of the practice of these sciences.

In going through Peirce's logical justification of the categories, I will, in addition to describing Peirce's argument for the fundamentality of his categories to logic, describe the general model motivated by the categories that is fundamental to logic and any of the sciences that follow from it.

The logical justification of the categories that Peirce gives does not follow the traditional form of a logical justification. Traditionally, a logical justification involves showing that a set of propositions follows directly from logic, in general, or a specific logical system, in particular. Contrary to this tradition, Peirce logically justifies his categories by showing that they are fundamental to logic. In other words, we could not make sense of logic in the way that we do without the categories.

Peirce begins his justification of the categories with two characterizations of logic. The first is a description of the subject-genus of logic. The second focuses on the extension of the subject-genus of logic.

logic.

According to Peirce, a good definition of the subject-genus of logic is that it treats "of second intentions as applied to first" (CW 2.56).¹ First intentions are themselves conceptions, but they signify things, and not other signs. Thus, at the most basic level second intentions are conceptions of conceptions. That is, they are conceptions that have as their objects other conceptions. Second intentions are (1) the objects of the understanding considered as representations and (2) symbols (CW 2.56). As an object of the understanding considered as a representation, a second intention is a reference to an interpretant. As an interpretant it is a mediating representation which represents one of its relata "to be a representation of the same correlate which this mediating representation itself represents" (CW 2.53). Since in the case of logic all the relata are first intentions, all the relata are first intentions, and all the relata are conceptions. Thus, a second conception represents another conception to yet another conception in the mind.

As symbols second intentions are "signs which are at least potentially general" (CW 2.56), and they are also relative to the understanding. A second intention is potentially general because its

¹ The terminology ("first intention." "second intention") derives from medieval logic.

relation to this object is an imputed quality, and all qualities are at least potentially general. There may be qualities that apply to only one individual at a time or that apply to only one individual for all time. However, as long as it is possible that some other individual could have possessed that quality, that is, if the conception of the quality succeeds in reducing the manifold of substance to unity, either directly or indirectly, then the quality is at least potentially general. It is part of the definition of a quality that it possess this feature.. Second intentions are also relative to the understanding. This appears to be a stumbling block to the objectivity of logic. However, second intentions are relative to the understanding only in the sense that all other conceptions and all other objects are relative to the understanding (CW 2.56). Everything is relative to the understanding in the sense that there are general rules that govern and, to some extent, determine what relations can be established between the mind and anything that it acts upon.

After characterizing logic in this way Peirce goes on to show that the rules of logic apply to all symbols. He does this by first distinguishing between two types of conceptions. The first are those conceptions "which are supposed to have no existence except so far as they are actually present to the understanding" (CW 2.56). The second are those

conceptions which are external symbols. These symbols "retain their character of symbols so long as they are only *capable* of being understood (CW 2.56).

The rules of logic apply immediately to the first and mediately to the second through the first. The first are second intentions. The external symbols are not second intentions until they are present to the understanding. Both—the first and the second—have as their objects first intentions. Thus, the subject-genus of logic is not restricted to symbols that are present to the understanding. It applies to all symbols, even if they are only potentially second intentions. Furthermore, the rules of logic apply to all conceptions, not just symbols. This is because for every possible conception which is not a symbol there is a possible symbol which has it as its object. Therefore, the rules of logic apply to most symbols immediately and, through them, to all remaining conceptions including likenesses and indices. According to Peirce, the rules of logic do not apply to likenesses and indices immediately because no arguments can be constructed from them alone.

At this point Peirce has still not shown that the categories are fundamental to logic. What he has shown is that the rules of logic exhaustively apply to all cognition, but only through symbols. The subject-

genus of logic is the set of all possible symbols and nothing other than symbols. Therefore, symbols are fundamental to logic. If the conception of a symbol is fundamental to logic, then whatever is fundamental to the conception of a symbol is fundamental to logic as well. A symbol is one of three kinds of representation, and representation is a category for Peirce.

If one of Peirce's categories is fundamental to the conception of symbol, then all the categories are. Thus, Peirce's categories are fundamental to the conception of a symbol and, through the conception of a symbol, they are also fundamental to logic.

Interestingly, Peirce's categories are fundamental in other ways to the conception of a symbol. After showing that his categories are fundamental to logic, Peirce redefines logic as the science that "treats of the reference of symbols in general to their objects" (CW 2.57). He claims that this view of logic makes it one of three conceivable universal sciences. Each of these sciences follows from and embodies a strong resemblance to one of the accidental categories. The first is *formal grammar*. It treats of "the reference of symbols in general to their grounds or imputed characters" (CW 2.57). This reference constitutes the formal conditions for the meaning of a symbol. It treats of the quality of a symbol. The second is *logic*. It treats of the reference of a symbol to its

object. This reference constitutes the formal conditions of the truth of symbols (CW 2.57). It treats of the relation of a symbol. The third is *formal rhetoric*. It treats of the reference symbols in general to interpretants (CW 2.57). This reference constitutes "the formal conditions of the force of symbols, or their power of appealing to the mind" (CW 2.57). It treats of the representation of a symbol. Thus, not only are symbols a type of representation, but each of the conceivable universal sciences treats of one of the three modes of symbols. This shows that the categories are fundamental to logic in another way. Namely, the project of logic is contained within the conception of relation.

Another way in which Peirce shows how the categories are fundamental to the conception of a symbol can be found in his analysis of the three different kinds of symbols. These three general divisions are supposed to exhaustively classify and characterize all possible symbols.

(1) *terms* - symbols which directly determine only their grounds or imputed qualities, and are thus but sums of marks (CW 2.57).

(2) *propositions* - symbols which also independently determine their objects by means of other term or terms, and thus, expressing their own objective validity, become capable of truth and falsehood (CW 2.57).

(3) arguments - symbols which also independently determine their interpretants, and thus the minds to which they appeal by premising a proposition or propositions which such a mind is to admit (CW 2.57).

The rules of logic apply to all possible symbols. Within the sphere of logic a term functions as a quale, a proposition functions as a relate, and an argument functions as a representamen. The objects they function as are each the supposable objects of one of the accidental categories.

In addition to these examples of how the categories are applicable and fundamental to logic, Peirce gives two others. The first example attempts to show that arguments can be divided, in general, into three kinds. Each of these kinds has as a major premise a proposition that functions as one of the three kinds of representation. The three kinds of representation are likenesses, indices, and symbols. I will not examine these arguments any further. However, Peirce does view this as another way in which the categories are fundamental to logic.

In the second example Peirce claims that any further division of terms, propositions, and arguments follows from the distinction between extension and comprehension, and their relationship to information. Each

of the elements in this distinction, including information, corresponds to one of the accidental categories. A symbol's comprehension is its connotation. Its connotation is its reference to the common characters of its objects. This reference functions as a quale and is a subject of formal grammar. A symbol's extension is its denotation. Its denotation is its direct reference to its objects. This reference functions as relate and is a subject of logic. A symbol's information is its "reference to synthetical propositions in which its objects in common are subject or predicate" (CW 2.59). This reference functions as a representamen and is a subject of formal rhetoric. Information is inversely related to comprehension and extension. An increase or decrease in information is accompanied by a corresponding increase or decrease in extension, comprehension, or both.

The last example is significant for two reasons. First, it ties the categories to a sophisticated theory of meaning which allows for the assessment of all information in terms of connotation and extension. Such an analysis is useful in drawing a clear distinction between different types of arguments and the elements of arguments. For example, it is extremely helpful in drawing a clear distinction between abduction, deduction, and induction. Second, in Peirce's characterization of

extension as denotation lies the seed of his later formulation of the category of secondness.¹

What is most important about Peirce's logical justification of the categories is that he believed it showed that the categories are not only exhaustively applicable to cognition, but that the categories are fundamental to cognition as well.

Metaphysical Implications of the Categories

The metaphysical implications of the early categories are not as clearly discernible as they are for the late categories. However, Peirce's movement from an ill-defined metaphysics in his early categories to a sophisticated, well-defined metaphysics in the late categories is in keeping with the general theory of cognition motivated by both lists of categories and with pragmatism as Peirce defines it.² Both the theory of

¹Peirce does not discuss connotation and denotation in the order that I discuss them. He also does not make many of the connections that I do with the categories. However, I do not believe he would have disagreed with me.

²Peirce did not use the word "pragmatism" until late in his philosophical career. He decided to label his brand of pragmatism "pragmaticism" in order to keep it from being confused with the pragmatism of William James and John Dewey. He described his own account of pragmatism as logical and objective. Contrary to this, he described most other accounts of pragmatism, especially those of James and Dewey, as psychological and subjectivistic. For a more detailed account of Peirce's reasons for adopting this terminology see "What Pragmatism Is" (1904-1905, CP 5.411-437).

cognition and pragmatism suggest that cognitive movement is from the vagueness of the undefined, chaotic manifold to the preciseness of the sophisticated conceptions that are hypothetically applied to the manifold.

The metaphysical implications of the early categories follow from the kinds of objects that are recommended by the categories. At the most basic level, two kinds of objects appear to be recommended—those objects contained by the conception of substance and those contained by the conception of being. These two conceptions are supposed to exhaustively classify all kinds of objects. Furthermore, the two conceptions are mutually exclusive in their applicability. If an object is contained within one of these two conceptions, then it cannot be contained by the other.¹

Peirce is fairly explicit about what kinds of objects are contained within the conception of being. The conception of being contains, primarily, the conception of quality. The conception of quality is the first of Peirce's accidental categories in passing from being to substance. The objects introduced by this category are qualia. Qualia are internal

¹Peirce gives an argument for the mutual exclusivity of these concepts as early as 1866 (CW 1.518). From that argument Peirce concludes that it is absurd to apply being or non-being to a substance because being and non-being apply only to qualities.

qualities. The next accidental category is the conception of relation. The objects afforded by this category are relates. Relates are relative qualities. The last of the accidental categories is the conception of representation. The objects afforded by this category are representamens. Representamens are imputed qualities. Thus, the three kinds of objects afforded by the conception of being are three kinds of qualities, each of them irreducible to any of the others. The major difference between the three is in their complexity. Internal qualities are monadic, relative qualities are dyadic, and imputed qualities are triadic.

Peirce is not at all explicit about what kinds of objects are contained within the conception of substance. Since the conception of substance and the conception of being are mutually exclusive in their applicability, and since they exhaustively classify all kinds of objects, the conception of substance must contain all the kinds of objects that are not contained within the conception of being. Peirce does not give much detail about what kinds of objects are substances in "On a New List of Categories," but it is possible to speculate about some of the details by looking at one of the examples he uses.

In explaining how the conception of being and the conception of substance are related, Peirce uses the proposition, "The stove is black,"

as an example. The stove is the substance "from which its blackness [or any other quality] has not been differentiated" (CW 2.50). The "is" in the sentence functions as the conception of being which, while not changing the substance in any way, explains the confusedness of the substance "by the application to it of 'blackness' as a predicate" (CW 2.50). Thus, substances are objects that are unchanged, yet explained, by the application of a predicate through the conception of being whose function is designated by the word "is." Furthermore, substances cannot be attributed to other substances as qualities or as parts of substances. The function of a quality in the world is analogous to the function of a predicate in a sentence.

While this characterization of substance does distinguish it from qualia, relates, and representamens in general, it does not provide us with an adequate or unambiguous account of substances. For example, it does not tell us much about the kinds of objects that constitute the extension of the conception of substance. It is not until 1868 in "Some Consequences of Four Incapacities" that Peirce gives a more concrete description of substances. He poses the question, "For what does the thought-sign stand -what does it name -what is its *suppositum*?" (CW 2.224) In other words, what is explained through the application of a

quality? It is a substance that is reduced to unity through the application of a quality. Thus, the suppositum of a thought must be a substance. This is not to say that we do not have thoughts about qualities, for that would be inconsistent with Peirce's definition of qualities as pure abstractions (CW 2.52-53). Rather, Peirce's claim is that even thoughts about qualities are ultimately thoughts about those objects to which they may apply.

Peirce characterizes the suppositum as an outward thing when a real outward thing is thought of (CW 2.224). However, there appear to be difficulties with this view. The most obvious difficulty is Peirce's claim that every cognition is determined logically by previous cognitions (CW 2.213 and 2.238). If every thought is determined by all previous thoughts about the same object, then a thought can refer to an outward thing only through denoting a previous thought about the same object. If the same condition holds for every previous thought, as Peirce believes it does, then the connection between the outward thing and the thought that it stands for cannot be made. There is an infinite regress involved here because a potentially infinite set of signs must be gone through and, even then, the object is not arrived at. Thus, it would seem, Peirce has a difficulty in explaining the connection between the reality of outward things and the

thoughts that stand for them.

It is in Peirce's response to this criticism that he gives us his clearest insight into his early theory of individuals. Peirce attacks this problem on two fronts. First, the conception of reality that must be assumed in order to motivate this polemic is misguided. Second, the conception of an individual that proponents of this criticism appeal to is also misguided.

Peirce discusses the nature of reality, among other things and in other places, in his discussion on the last of the four incapacities (CW 2.238). We do not have the capacity to conceive of the absolutely incognizable. Thus, the absolutely incognizable is absolutely inconceivable. However, we might be led by a quite natural line of reasoning to think that the incognizable is conceivable. Peirce tell us that every cognition we have has been logically derived by induction and hypothesis from previous cognitions which are "less general, less distinct, and of which we have a less lively consciousness" (CW 2.238). These previous cognitions are derived from cognitions which are also less general, less distinct, and less lively than them. If this continues on, it is only natural to assume that, eventually, the ideal first and singular object will be arrived at. It might even be thought that this singular is out of

consciousness and that, in-itself, exists as some kind of Kantian noumenal object.

According to Peirce, no thought can be traced back to the absolute singular envisaged by this line of reasoning. If such a thing were to exist, then we would have a conception of the incognizable. The problem with the connection between cognition and reality mentioned above arises only if it is assumed that reality is constituted by these ideal singulars. However, as Peirce points out, this conception of reality is misguided. What is meant by the expression "the real" must be cognizable to some degree in order to mean anything at all (CW 2.238). If it is cognizable, then it is of the nature of a cognition in some objective sense. If it is of the nature of cognition, then it must be, like a cognition, to some degree indeterminate and general. Thus, nothing which is real is absolutely singular. Therefore, these ideal singulars cannot be the constituents of reality. Although things exist apart from their relation to minds, they are still relative to minds because reality entails cognizability.

What is especially interesting for my purposes is Peirce's analysis of singulars and his discussion on how misunderstanding them can lead to a misguided conception of reality. In order to understand Peirce's conception of an individual, his conception of a singular must be

understood. Peirce claims that "individual" and "singular" are equivocal terms (CW 2.233). They are equivocal terms in the sense that most people use the terms interchangeably without realizing the etymological and philosophical differences that exist between the two (CW 2.390).¹ The difference between the two is the difference between that which is absolutely indivisible and absolutely determinate, and individual [to atomon], and that which is one in number, a singular [to kath' hekastan]. Peirce prefers the term "singular" because singulars are not opposed to generals as individuals are (CW 2.233).

A singular is an object, general in character, which can only be represented as being in one place at one time. Peirce cites several things which are singular in this sense. Among these are the sun, Hemolau Barbarus, and Toussaint (CW 2.224 and 2.233). Peirce claims that all of these objects are singular in both senses. They are one in number and they can only be in one place at one time. All of these are also general in two respects. First, they are the objects of cognition; therefore, they must

¹Peirce's earliest complete account of singulars is in "Description of a Notation for the Logic of Relatives, Resulting from the Amplification of the Conceptions of Boole's Calculus" (1870, CW 2.359-429). I will be citing this paper in explaining some of the notions Peirce discusses in "Some Consequences of Four Incapacities."

be of the nature of a cognition. Second, every good treatise in logic treats them as general terms (CW 2.233). Thus, logic prevents us from treating them as absolutely determinate. In emphasizing this point, Peirce gives an argument for the impossibility of the existence of logical atoms (CW 2.390-390). Logical atoms are terms that are not capable of logical division and of which every predicate may be affirmed or denied. The argument is:

- (1) Whatever lasts for any time, however short, is capable of logical division because in that time it will undergo some changes in its relations (CW 2.390-391 n8).
- (2) What does not exist for anytime, however short, does not exist at all (CW 2.390-391 n8).
- (3) Therefore, all that we perceive or think, or that exists, is general (CW 2.390-391 n8).
- (4) Therefore, the absolute individual cannot be realized in sense or thought, but cannot exist, properly speaking (CW 2.390-391) n8).

At first glance, (3) does not appear to follow from (1) and (2). Moreover, (4) does not appear to follow from the previous premises either. This is because there are several missing premises. The argument can

be reformulated to account for the missing premises and to make the chain of reasoning a bit easier to follow. The reformulated argument is:

- (1) If something exists, then it must last for some time.
- (2) If something lasts for any time, then it is capable of logical division.
- (3) Therefore, if something exists, then it is capable of logical division.
- (4) If something is capable of logical division, then it is partially indeterminate.
- (5) If something is capable of logical division and it is partially indeterminate, then it is general.¹
- (6) Therefore, if something is capable of logical division, then it is general.
- (7) Therefore, if something exists, it is general.
- (8) If something is absolutely individual, then it is not general.
- (9) Therefore, the absolute individual (the logical atom) cannot exist.

Thus, singulars, as defined and argued for by Peirce, are consistent in this

¹This antecedent must be a conjunction because not everything that is indeterminate is general. Indeterminacy can also be a sign of vagueness.

respect with his theory of cognition and his conception of reality. Singulars are generals which are not multiply instantiable. This distinguishes them from most other generals. However, this characterization of singulars seems to apply to two kinds of generals. The first are those denoted by terms like "Charles Sanders Peirce." The second are those denoted by expressions like "the most able philosopher in the universe." Even though these two are both singulars according to Peirce's definition of singularity, they are singular in different ways. Peirce touches on this, but comes to no clear conclusion about it (CW 2.391).

If it is accepted, as I have suggested, that singulars are substances for Peirce, then the list of objects afforded by the categories is complete. The four kinds of objects afforded by the categories are singulars, qualia, relates, and representamens. All are general and all are consistent with Peirce's conception of reality. However, there are several problems and logical paradoxes associated with classifying substances as generals. These and other problems will be discussed in the next section. It is Savan's contention, as well as mine, that these problems are what led Peirce to revise his early list of categories.¹

¹David Savan, "On the Origins of Peirce's Phenomenology," in *Studies in the Philosophy of Charles Sanders Peirce*, ed. Philip P. Wiener and Frederic H. Young (Cambridge, Massachusetts: Harvard University Press, 1952) 192. The

Problems with the Early Categories

Many philosophers and scholars have found a variety of problems with Peirce's early list of categories. In particular, they have found problems with the metaphysics and epistemology that follow from these categories. Even a superficial treatment of all the perceived problems would necessitate a treatise much longer than the one I have planned. Since this dissertation is geared towards Peirce's metaphysics and, specifically, his theory of individuals, I will focus primarily on what I believe are the four most serious problems with the early categories that have an impact on Peirce's metaphysics. The first two problems are pointed out by David Savan. These two problems deal primarily with Peirce's conception of reality. The third and fourth problems are raised by Richard Bernstein and Paul Weiss.

Problem (1) - Peirce defines reality in terms of truth. Real objects are the objects of true cognitions. Unreal objects are the objects of untrue cognitions (CW 2.239). True cognitions are those which would in the long run and without definite limit, be held by an ideal community that is

paradoxes I have in mind are those alluded to in 1870 (CW 2.390-391 n8). The paradoxes alluded to by Savan are from 1893 (CP 4.79). The paradoxes of 1870 are not the same as the paradoxes of 1893, but they are related.

capable of an indefinite increase in knowledge (CW 2.239). True cognitions are also those cognitions whose falsity is not discoverable and whose error is absolutely incognizable. Two conclusions follow naturally from these characterizations of reality and truth. First, absolutely determinate individuals cannot be real because they cannot be the objects of true cognitions. In addition, absolutely determinate individuals cannot be the objects of true cognitions because, as the argument above shows, they are absolutely incognizable. Second,

There is nothing, then, to prevent our knowing outward things as they really are, and it is most likely that we do thus know them in numberless cases, although we can never be absolutely certain of doing so in any special case (CW 2.239).

Savan takes this conception of reality to entail an extreme form of idealism that falls short of an absolute idealism and which is incompatible with Peirce's empiricism.¹ He believes that it follows from Peirce's idealism that a thing has to be cognized in order to exist, and that this leads to a specific inconsistency in Peirce's view. His argument for this claim is:²

¹Savan 188. Savan is not making a general claim about any possible inherent incompatibility between idealism and empiricism. Rather, he is making a point about the incompatibility of these specific, Peircean forms of idealism and empiricism.

²Savan 188-189. Savan's formulation of this argument is not as explicit as mine.

- (1) If a thing can only *be* in so far as it will be known in the unlimited community of knowledge, then reality must lie in the existence of *actual* cognitions.
- (2) On Peirce's view, a thing can only *be* in so far as it will be known in the unlimited community of knowledge.
- (3) Therefore, on Peirce's view, reality must lie in the existence of actual cognitions.
- (4) If a view holds that reality must lie in the existence of actual cognitions, then that view does not allow for the possibility that an object be cognizable yet never cognized.
- (5) Therefore, Peirce's view does not allow for the possibility that something be cognizable yet never cognized.
- (6) If a view does not allow for the possibility that something be cognizable yet never cognized, then that is a problem for that view.
- (7) Therefore, not allowing the possibility that something be cognizable yet never cognized is a problem for Peirce's view.

However, the only thing I have done to the argument is to add the hidden premises that are obviously needed to make the argument valid.

There are several controversial premises in this argument. The primary flaw with this argument is that it assumes that cognition somehow determines reality rather than represents it. Thus, I will go through each of the following controversial premises, emphasizing the role this assumption plays in motivating those premises.

The problem with premise (1) is that the consequent does not necessarily follow from the antecedent. The consequent is too restrictive.

What should follow from the antecedent, with respect to the connection between reality and cognition, is that reality must lie in the existence of possible cognitions. The only way to restrict this consequent to actual cognitions, as Savan does, is to assume that cognitions determine reality rather than be determined by it. On Peirce's view, cognition does not constitute reality. On the contrary, reality underlies cognition. Cognizability is a condition of existence. However, this cognizability condition does not require that an object be actually cognized in order to be real.¹ Thus, premise (1) must be considered false or, at the very least, an instance of question begging. Therefore, premises (3) and (5) are

¹Two points should be made clear here. First, this is not the only necessary consequent that follows from the antecedent, although it is the only form of Savan's consequent that can be accepted if the hidden assumption is revealed and discarded.

false or are the result of question begging.

Premise (6) is not controversial. Not allowing for the possibility that something be cognizable yet never cognized is problematic, according to Savan, for two reasons. First, it consigns reality to the existence of actual cognitions. Second, it makes a perfectly sensible supposition—that such a possibility is coherent—self-contradictory.¹ Although it has already been shown that premise (5) follows from premises that are false or instances of question begging, it is still worthwhile to go through Peirce's opposition to this premise in order to further clarify his position.

Savan claims that Peirce's view does not allow for the possibility that an object be cognized without being actually cognized because it consigns reality to the existence of actual cognitions. As I have already claimed, however, Peirce does not believe that reality is consigned to actual cognitions. Indeed, there is plenty of evidence which suggests that Peirce holds the broader view that reality must lie in the existence of possible cognitions, i.e., be knowable. The first piece of evidence is that Peirce never makes the claim that reality must lie in the existence of actual cognitions. Savan cites the following passage as proof that Peirce

¹Savan 188-189.

does make the claim. In responding to the problem of formulating an adequate conception of futurity in general, Peirce says:

The solution, however, is very simple. It is that we conceive of the future, as a whole, by considering that this *word*, like any other general term, as "inhabitant of St. Louis," may be taken distributively or collectively. We conceive of the infinite, therefore, not directly or on the side of its infinity, but by means of a consideration concerning words or second intention (CW 2.251).¹

Savan interprets Peirce, in this passage, as claiming that "the indefinite future, in which the reality of anything else lies, is itself a second intention."² I take this to be a misinterpretation of this passage. What Peirce is addressing is the conception or meaning of futurity in general, not the reality of the future. In fact, earlier in the same paragraph Peirce rebukes Hegel for conflating the two. He says that such a view makes all "finite knowledge to be worthless," absolutely limits knowledge, and, hence, "contradicts the fact that nothing is absolutely incognizable" (CW 2.250). Thus, the passage cited by Savan does nothing to bolster his claim that Peirce believed that reality is consigned to the existence of actual cognitions.

The second piece of evidence is that Peirce always uses the term

¹ See CP 5.30.

²Savan 189.

"cognizable" rather than "cognized" when discussing the cognizability condition of real objects. For example, "In short, *cognizability* (in its widest sense) and *being* are not merely metaphysically the same, but are synonymous terms" (CW 2.208).

Finally the third piece of evidence is that Peirce actually claims that things *are* apart from the representation relation. For Pierce,

...there is no thing which is in-itself in the sense of not being relative to the mind, though things which are relative to the mind doubtless are, apart from that relation (CW 2.239).

Thus, Peirce explicitly denies that reality lies in the existence of actual cognitions. Real objects, real outward things, *are* apart from their relation to the mind. Their relation to mind is that of being possible objects of experience.

As I mentioned before, the claim that reality must lie in the existence of actual cognitions only follows necessarily from the claim that a thing can only *be* in so far as it will be known in the unlimited community of knowledge if it is assumed that reality is determined by cognition. Peirce, however, suggests that it is the other way around for the most part.¹ If we have a mental sign, a cognition, of a real object, then that

¹I do not make an absolute claim here because in the case of voluntary action, the mind (cognition) does determine reality to some extent (CW 2.233). The determination, when it has occurred, will be as much a fact as the presence of a

cognition is not that object, nor does it determine that object. The cognition involves the real object as an argument of its representative function. The cognition "is almost (is representative of) that thing" (CW 2.238).

Although this problem does not turn out to be serious for Peirce, responding to it in any way other than this opens the door to a variety of related problems which are much more difficult to respond to, if they can be responded to at all.

Problem (2) - In "Questions Concerning Certain Faculties Claimed for Man" (1868) Peirce gives several arguments against the notion that there are cognitions which are intuitions. He defines intuitions as cognitions that are "not determined by a previous cognition of the same object, and therefore so determined by something out of consciousness" (CW 2.193). From these arguments he draws several conclusions. They are:

- (1) By the simple contemplation of a cognition, independently of any previous knowledge and without reasoning from signs, we are not enabled rightly to judge whether it refers

mountain.

immediately to its object (CW 2.193).

- (2) We have no intuitive self-consciousness (CW 2.200)**
- (3) We have no intuitive power of distinguishing between the subjective elements of different types of cognitions (CW 2.204).**
- (4) We have no power of introspection, and our whole knowledge of the internal world is derived from observation of external facts (CW 2.205).**
- (5) We cannot think without signs (CW 2.207).**
- (6) A sign can have no meaning if by its definition it is the sign of something absolutely incognizable (CW 2.208).**
- (7) There is no cognition not determined by previous cognition (CW 2.209).**

By Peirce's own admission, the paper containing the arguments from which these conclusions are drawn was "written in this spirit of opposition to Cartesianism" (CW 2.213). Although I will not be discussing, in detail, all the arguments that lead to these conclusions, there are four denials that result from these seven conclusions and which, while laying a stronger foundation for the attack on Descartes, may leave Peirce in the position for which he originally criticizes Descartes.

The four denials referred to are discussed by Peirce in, among other places, "Some Consequences of Four Incapacities." They are (CW 2.213):

- (1) We have no power of introspection, but all knowledge of the internal world is derived by hypothetic reasoning from our knowledge of external facts.
- (2) We have no power of intuition, but every cognition is determined logically by previous cognitions.
- (3) We have no power of thinking without signs.
- (4) We have no conception of the absolutely incognizable.

Although these propositions are all interrelated, the one which causes the most severe problems for Peirce's metaphysics is proposition (2). As I stated before, Peirce believes that all the universal sciences whose stated or practiced goal is truth, follow from logic. Metaphysics, on this view, consists of a logical analysis of cognition, which itself is thought to constitute a representation of the *real* world. The problem with proposition (2) is that it appears to restrict any possible contact between reality and cognition.¹ It seems to suggest, in combination with the other

¹ This appears to conflict with a clear implication of (1)-namely, that we *do* know external things.

propositions (especially propositions (3) and (4), that all cognitions are about other cognitions and that no cognition is about something which is not a cognition. If this interpretation of Peirce's view of cognition is accepted, then no science, including metaphysics, is equipped to inform us about the nature of reality. This is the interpretation that Savan appeals to when he makes claims like, "The conclusion to which Peirce is thus led, but which he is apparently reluctant to draw, is that everything which in any sense *is*, is a representation."¹ The difference between this problem and the first problem is that the first problem exploits a connection that is assumed to exist between cognition and reality. This problem questions whether, on Peirce's view, such a relationship can obtain.

In discussing the problem I will go through each of the aspects of Peirce's theory of signs, especially his theory of mental signs, where the problem manifests itself.

Peirce discusses his theory of signs in some detail while working through proposition (3). Each sign has three elements. The first element of a sign is the material quality of the sign. The material qualities of a sign

¹Savan 188-189.

are those characters which belong to a sign in itself and apart from the sign's representative function (CW 2.225). Peirce uses the word "man" as an example of the material quality of a sign. The word "man," considered apart from the sign "man" and as consisting of three letters written on a piece of paper without relief, is the material quality of the sign "man."¹

In the case of mental signs or cognitions, the material quality of the sign is a feeling. Peirce divides cognition into two general types with respect their material quality. The first type consists of those cognitions whose material quality is made prominent as a result of impulse. In such cases there is no relation of reason which explains how the cognition is determined by previous cognitions (CW 2.230). Examples of this type of cognition are sensations proper and emotions. The second type consists of those cognitions whose material quality is not made prominent and whose determination from previous cognitions is through a relation of reason. The material quality for both of these types of sign is a feeling. The feelings associated with sensations and emotions are much stronger than those associated with other cognitions. Peirce suggests that this difference might be explained biologically. He describes the feelings that

¹This is only one of the infinite number of possible sets of characters that can function as the material quality for the sign "man."

function as the material quality of a sensation or emotion as natural signs determined by the constitution of our nature by an inexplicable, occult power (CW 2.228-229). According to Peirce, such an occult power might reside in the nerve tissues and its dynamics explained neurophysiologically (CW 5.230).

The material quality of a sign is the *quality* of a sign and, as such, corresponds to the first of the accidental categories. This is also where Savan's second problem is first presented. Savan says that Peirce makes four claims that force him to conclude that immediacy is reducible to "generality or empty and abstract universality, and in either case is nothing apart from the sign situation."¹ The four claims are (1) sensation is general and indeterminate (CW 2.195 ff.); (2) the qualities of sense are cognitive and their meaning lies in their future interpretants (CW 2.208-210); (3) as immediately present, all feelings are indistinguishable (CW 2.226); and (4) the material quality of a sign is the feeling of the sign (CW 2.228). Although Savan is right about Peirce's characterization of sensation and feeling, he is wrong about what this implies for Peirce's theory of reality and its connection to cognition. There are several reasons why Savan is

¹Savan 189.

wrong. I will mention only three of them briefly. First, the reducibility claim is in conflict with Peirce's earlier claims that elementary conceptions are not reducible to any other conceptions. Thus, the immediate is not reducible to the mediate. Substance is not reducible to being. Second, as I argued in response to Problem 1, although everything is relative to the semeiotic process, not everything must be involved in the semeiotic process. Feelings and emotions have being and are real only in relation to representation and the semeiotic process, but this does not mean that the real objects that feelings and emotions signify cannot be apart from their relation to the semeiotic process. Real objects need not actually be involved in the semeiotic process; they need only be capable of being involved in the semeiotic process. Third, most of the citations used by Savan on this point are pulled out of context and placed in contexts where their intended meanings are obscured. For the sake of brevity, I will examine what appears to be the most egregious example of this.

Toward the end of his discussion on Peirce's characterization of feelings, Savan cites Peirce in the following way:¹

As Peirce puts it, everything which is present to us is a phenomenal manifestation of ourselves: ([CP] 5.283); and we are no more than evolving signs.

¹Savan 189.

Savan cites Peirce in this way in the context of denying that sensations are connected to a reality that is apart from its relation to mind. If we look at the complete citation, the intended meaning of the passage obscured by Savan can be easily brought to light. The full passage is:

But it follows from our own existence (which is proved by the occurrence of ignorance and error) that everything which is present to us is a phenomenal manifestation of ourselves. This does not prevent its being a phenomenon of something without us, just as a rainbow is at once a manifestation of the sun and of the rain. When we think, then, we ourselves, as we are at that moment, appear as a sign (CW 2.223).

Thus, our functioning as a sign through cognition does not preclude us, at those moments we are functioning as a sign, from signifying real objects that are apart from our actual cognitions. True cognitions are not just manifestations of ourselves, but manifestations of real, outward things as well.

The second element of a sign is its pure denotative application. The pure denotative application of a sign is the "real, physical connection of a sign with its object, either immediately or by its connection with another sign" (CW 2.228). With respect to mental signs, the pure denotative application of a sign is the real connection, which brings one thought into relation through the power of attention or abstraction which is

aroused when the same phenomenon presents itself repeatedly on different occasions, or the same predicate in different subjects (CW 2.232). As such, the pure denotative application of a sign is an induction. However, it is an induction which assesses only past experience. Thus, it is an argument from enumeration (CW 2.232). Repeated acts of attention produce effects on the nervous system and lead to the formation of habits. Actions that result from the sensations aroused by habits are voluntary actions, and those that result from our original nature are instinctive actions (CW 2.233). Voluntary actions result from cognitions whose pure denotative application takes the form of abstraction. Instinctive actions result from cognitions whose pure denotative application takes the form of attention.

Savan's difficulty with Peirce's theory of signs and, particularly, Peirce's account of the pure denotative application of a sign is Peirce's claim that "a sign must be capable of being connected (not in reason but really) with another sign of the same object, or with the object itself" (CW 2.225). Savan claims that the object itself must be a non-semeiotic existent. A non-semeiotic existent is an object which "exists independently of the semeiotic situation."¹ Furthermore, according to

¹Savan 189.

Savan, Peirce has no right to appeal to such an object because he fails to make the distinction between the cognizable and the incognizable, between *reality* and *existence*, as Kant does.

This difficulty is similar to the first difficulty explored in this problem. However, unlike the first difficulty, an attempt is made to show that Peirce appeals to a conception of reality which he earlier explicitly denies. The two aspects of this difficulty are related. If what Peirce is referring to by "the object itself" is a real object completely independent of the semeiotic process, then Savan is correct in claiming that the pure denotative application of a sign does not, on Peirce's scheme, connect cognition to reality at all. This, however, is a misguided view of what Peirce means by "the object itself."

The object itself, for Peirce, is a real object. A real object is an outward thing that is cognizable and capable of functioning as the object of a true proposition. Thus, although real objects exist apart from being actually cognized, they do not exist independently of the semeiotic process. Once this notion of reality is accepted, the second aspect of this difficulty, as well as the first, disappears. The connection of cognition to reality through the pure denotative application of the cognition is no longer problematic on these grounds.

The third element of a sign is its representative function (CW 2.227). This is the element of a sign that makes it a representation. With respect to mental signs, all cognitions are representations. Savan claims that Peirce's view of reality forces Peirce to accept, although Peirce does not recognize this himself, that "everything which in any sense *is*, is a representation."¹ Without going into another discussion on how Savan has once again misinterpreted Peirce's conception of reality, it will suffice to say, first, that according to Peirce, representations do not determine reality, but are determined by it. Second, as Peirce himself claims about his own realism and that of any other realist worth his salt:

...a realist is simply one who knows no more recondite reality than that which is represented in a true representation (CW 2.239).

The two problems dealt with thus far are strongly related to Peirce's theory of individuality. Peirce's response to both problems is to define reality in a way that is consistent with the theory of cognition motivated by his early categories, while still retaining the commonsense conception of reality as something which *is* apart from being actually cognized. On such a view of reality, Peirce is forced to adopt the view that what we intend to

¹Savan 190.

refer to as *individuals* are really *singulars* that are to some degree indeterminate and, thus, not opposed to generality. Peirce's conception of reality determines his early theory of individuality. As I have shown, the problems that Savan discusses arise only if a different conception of reality is attributed to Peirce. The different conceptions of reality that Savan attributes to Peirce with these two problems are respectively, (1) reality as determined and constituted by cognition and (2) reality as absolutely determinate and completely independent of any relation to mind. Both of these conceptions are examples of gross, yet widespread, misinterpretations of Peirce.

Although these two problems appear to have been easily resolved, the responses given to them severely restrict Peirce's ability to maneuver out of further difficulties that arise as a result of these responses. The two problems discussed thus far dealt mainly with Peirce's conception of reality and its relationship to his conceptions of cognition and individuality.

The next two problems deal specifically with Peirce's conception of individuality as he himself construes it. The conception of individuals as indeterminate singulars is accepted and a series of metaphysical problems are deduced from it.

The following problems are discussed in great detail by Greesham

Riley. Riley defends Peirce from attacks leveled at him, via his conceptions of individuals and individuality, by Richard Bernstein, Paul Weiss, and John Boler.¹ The difficulties raised by Boler deal mainly with aspects of Peirce's later categories and conception of individuality. Bernstein and Weiss, however, motivate their problems with Peirce's conception of individuals by relying on, for the most part, four passages. Three of the four passages are from Peirce's early philosophical writings. The third and fourth problems result from the difficulties raised by Bernstein and Weiss.

One difficulty with this sort of analysis is my lack of agreement with the antagonists, Bernstein and Weiss, over what the scope of the difficulties are. Both Bernstein and Weiss claim that the difficulties that they perceive in Peirce's conception of individuals apply to Peirce's later writings as well. Moreover, each of them liberally cites passages from Peirce's later writings to strengthen their criticisms. In addition to this, Riley himself cites liberally from all of Peirce's writings as if Peirce's notion of reality and individuality were only negligibly modified by Pierce throughout the course of his philosophical career. However, in spite of

¹Greesham Riley, "Peirce's Theory of Individuals," *Transactions of the Charles S. Peirce Society*, Summer, Volume 10, Number 3 (1974): 135-165.

these bits of carelessness, the problems raised by Bernstein and Weiss still present a serious problem for Peirce's conception of individuality, and force one to reevaluate this conception so forcibly that it seems likely that Peirce had in mind similar considerations when he revised his early list of categories.

The four passages primarily focused on by Bernstein and Weiss are:¹

- (1) This distinction between the absolutely indivisible and that which is one in number from a particular point of view is shadowed forth in the two words *individual* and *singular*, but as those who have used the word *individual* have not been aware that absolute individuality is merely ideal, it has come to be used in a more general sense (1870, CW 2.390).
- (2) Now you and I –what are we? Mere cells of the social organism...there is nothing which distinguishes my personal identity except my faults and my limitations...my blind will, which it is my highest endeavor to annihilate (1892, CP 1.673)
- (3) The individual man, since his separate existence is manifested only by ignorance and error, so far as he is anything apart from his fellows, and from what he and they are to be, is only a negation (1868, CW 2.241-242).
- (4) Ignorance and error are all that distinguish our private

¹Riley 136-137. For direct accounts of the difficulties raised by Bernstein and Weiss see Richard Bernstein, "Action, Conduct, and Self-control," *Perspectives on Peirce*, ed. Richard J. Bernstein (New Haven: Yale University Press, 1965) 66-91, and Paul Weiss, "Charles S. Peirce, Philosopher," *Perspectives on Peirce*, ed. Bernstein, 120-140.

selves from the absolute ego of pure apperception (1868, CW 2.203).

In the following I will go through the two distinct problems suggested by Bernstein and Weiss. In doing this I hope to further clarify Peirce's early conception of individuals and to point out some of the difficulties that may have led him to revise it. In discussing these next two problems I will be borrowing a great deal from Riley's analysis of them. Riley presents and attacks the problems at two levels. The first involves a description of what Bernstein and Weiss conclude from the passages cited. The second involves a discussion of any possible inconsistencies with the rest of Peirce's system that follow from these conclusions.

Problem (3) -According to Riley, and I agree with him, Bernstein concludes from passages (2), (3), and (4) that, for Peirce, individuals (or, at the very least, human individuals) are not "*real* in isolation from some group or other."¹ However, for the purposes of my discussion of this problem, I will focus only on passages (3) and (4) because these two are from Peirce's early writings.

The first question to ask is whether in these passages Peirce actually denies the reality of individuals in isolation from some group or

¹Riley 137.

other. If we look at the context in which these statements are made, it becomes evident that Bernstein has read a bit too much into these passages.

According to Riley, passage (3) takes place in the context of Peirce's exploring whether or not we have an intuitive self-consciousness.¹ In this context the primary concern of the passage is the process through which we gain knowledge of our internal selves. We gain knowledge of our internal selves by interacting with other real objects in the world through experience. When experience fails to meet our expectations, we are confronted with our own ignorance and error. Confronted by them, we are forced to determine where they reside, and, through a very natural line of reasoning, are led to the belief that they reside in us.² Thus, we infer the existence and character of our internal selves from our experience of outward or external things. This is where the flaw in Bernstein's analysis lies. He fails to distinguish between how we know that an individual exists and the conditions for the existence of an individual. We can know an individual only through its interactions with

¹Riley 147.

² Peirce argues that this is the way a child comes to sense of his separate identity.

and relations to other individuals. However, this does not require that an individual must be known in order to exist. Such a view assumes that in order to exist, a real object must be the object of an actual, true cognition.

As I have shown in my discussion of the first two problems, Peirce explicitly denies this.

Passage (4) takes place in the same context as passage (3). Furthermore, contrary to Bernstein's claim, both passages presuppose rather than deny the existence of real objects in isolation from some group or other.¹ However, aside from Bernstein's misinterpretation of passages (3) and (4), the conclusion that Bernstein draws can still be considered. Does Peirce's system allow for the conception of an individual as real in isolation from some group or other? The answer to this question is not as easy to formulate as the answers to the questions associated with the previous problems. The difficulty in responding to this problem lies in Peirce's characterization of an individual. For Peirce, an individual is a singular. A singular is a general that is not multiply instantiable. As all other generals, singulars must be instantiated in some object in order to exist. Thus, it appears that real individuals cannot exist in isolation from

¹Riley 148.

some group or other. This, in turn, leads to at least two inconsistencies in Peirce's early system which he does not really address. First, there is an inconsistency between substances and individuals. Peirce characterizes substances as not capable of being attributed to other substances in the same way that qualities are attributed to them and as not able to function as mere parts of other substances (CW 2.49). Thus, given the above characterization of singulars as generals, substances cannot be singulars.

Second, if substances are singulars, then there is an inconsistency between the above characterization of singulars and Peirce's claim that all real objects *are* apart from their relation to all other objects, including minds (CW 2.239)..

Peirce has several avenues available to him for escaping from these difficulties. The only problem is that all roads lead to greater difficulty. In order to escape, Peirce has to modify his conception of reality in a way that makes it even harder to reconcile it with his epistemology and theory of cognition. As unattractive as it may seem, this is precisely what he does in revising his early list of categories. He alters his conception of reality, primarily, by drawing a distinction between *singularity* and *individuality* that takes into account the historical development of both terms.

Problem (4) - From passage (1) Weiss concludes "without qualification that Peirce said there are no individuals."¹ This, of course, is false. Although Peirce does from time to time forget to indicate whether he is speaking about ideal individuals or real individuals, he does not do so in passage (1). In passage (1) he explicitly refers to absolutely determinate individuals. For Peirce an ideal is "a limit that the possible cannot attain" (CW 2.238 n7). Absolute individuality is an ideal. Thus, in passage (1) Peirce is not saying that there are no individuals.

Although Weiss' interpretation is as misguided as Bernstein's, it is still worthwhile to consider whether or not a weaker form of his conclusion is plausible. For example, his claim can be modified to exploit the ideal characterization of individuality in the passage. The difficulty could be put the following way: given that Peirce denies the existence of absolute individuals, can he still coherently claim that individuals exist? The response to this difficulty, like the response to the last difficulty, is not very easy to formulate. In fact, the same considerations that prevented a way out for Peirce in the last problem play just as strong a role with respect to this problem. The view of individuals as singulars that are generals of a

¹Riley 136-137.

certain kind appears to be irreconcilable with any of Peirce's early characterizations of substance.

Chapter Two - The Late Categories

The problems with Peirce's early list of categories discussed thus far are difficult problems, but not insurmountable. However, there were some more serious problems that came to light as Peirce developed his logic of relatives in the early 1870's¹ and his quantificational logic in the mid 1880's.² Although Peirce felt that it was primarily his work in logic that motivated the revision, Peirce scholars have suggested that logical considerations were a contributing factor but not the major impetus for the revisions.³ The problems they see as really inspiring the change are metaphysical and epistemological. There are also certain regresses that Peirce's early theory of cognition entailed that many Peirce scholars and philosophers at large have found to be vicious.

This chapter begins with a look at the various speculations about Peirce's reasons for revising his categories. The concerns that manifested themselves in the revision also required that an alternative method for fixing the categories be used. Thus, after an examination of possible reasons for the revisions, the new method employed for fixing the

1 "Description of a Notation for the Logic of Relatives" (CW 2.359-429).

2 See "On the Algebra of Logic: A Contribution to the Philosophy of Notation" (CW 5.162-190).

3 For examples see Hookway 113-116 and Murphey 192.

categories is examined. This section is naturally followed by a description of the late of categories by way of contrast with the early categories. However, it is not only the differences that are focused on. It is argued in this section that the early categories are consistent and somewhat vague approximations of the late categories.

No discussion of Peirce's categories, early or late, is complete without an excursion into his justification for them. Peirce's late categories were justified inductively as well as *a priori*. This marks a point of departure from the early categories.

The next section is on the metaphysical implications of the late categories. As in the previous chapter, when discussing the metaphysical implications of the categories, the focus is on the implications for Peirce's theory of individuality. It is not only the purpose of this dissertation that directs the focus of inquiry toward concerns over individuality. The most "radical" revisions of Peirce's categories are in his theory of individuality and how it impacts his theory of reality in general.

Finally, problems with Peirce's late categories are critically examined. Those cited are taken from the concerns of some of the top Peirce scholars. They are, as before, primarily metaphysical and epistemological. However, one of the problems discussed involves a

paradox that has an ambiguous and philosophically unclassifiable nature.

Peirce believed strongly in the principles of evolution. He believed that the universe, in all its aspects, was in a constant state of becoming. Thus, it is not surprising that his philosophical musings evolved as well. That this happened is evidenced by the way in which the revisions take place. Peirce's early categories were a bit vague and, to say the least, incomplete. As far as categories go, they were nearly pure possibility. The early categories then met with the "shock" of critical inquiry. This led to the evolution of the late categories, which itself became more and more precise on its way toward the infinitely distant yet nearly felt truth that humans live in.

Revision of the Early Categories

That Peirce substantially revised his early list of categories is a non-controversial claim. What is often and hotly debated are his reasons for doing so and how radical the revisions were. Perhaps the two most persuasive accounts of the reasons Peirce had for revising the categories are found in the analyses of Murray Murphey¹ and Christopher Hookway.² These two accounts will be examined in some detail.

¹ Murphey 296-320.

² Hookway 113-117.

Interestingly, Peirce's account of his reasons for revising the categories appears to be the least persuasive.

Murphey believes that Peirce began to revise the categories very soon after writing "On a New List of Categories" and the series that followed drawing out the cognitive and other implications of the early categories. The series known as the *Journal of Speculative Philosophy* Series included *Questions Concerning Certain Faculties Claimed for Man* (CW 2.193-211) and *Some Consequences of Four Incapacities* (CW 2.211-242) among others. In 1870 Peirce wrote *Description of a Notation for the Logic of Relatives, resulting from an Amplification of the Conceptions of Boole's Calculus of Logic* (CW 2.359-429). This is where Murphey believes Peirce first broke from the early list of categories.¹ In "On a New List of Categories" Peirce had a subject-predicate theory of propositions. With the development of his logic of relatives Peirce was forced to abandon this theory. This is because one of the implications of the logic of relatives is that all of the intermediary categories are equally abstract. Thus, each could serve as a proper predicate and the question regarding how the predicate is united to its object in a proposition is no longer answerable on the scheme provided by the early categories.

¹ Murphey 298-299.

The second contributing factor to the revision came in 1875, when Peirce first makes the connection between thirdness and continuity (e.g., CP 1.337 and 1.340).¹ This tie led to his formulation of the material aspect of thirdness (a notion to be discussed shortly), which was crucial in maintaining a symmetrical revision of the categories.

Murphey believes that the first dramatic revision of the categories takes place in 1885 in "One, Two, Three: Fundamental Categories of Thought and of Nature" (CW 5.242-247). The change, which will be discussed in the section on the categories themselves, was primarily motivated by Peirce's new analysis of the "index" and what it refers to. Murphey believes that this new analysis is the result of Peirce's discovery of the existential quantifier in his theory of quantification, which he developed just prior to writing "One, Two, Three: Fundamental Categories of Thought and of Nature."²

What is most interesting about Murphey's analysis is that, although Peirce himself claims that it was his discovery of the theory of quantification that led him to revise the categories, Murphey believes that it was something other than that. Peirce, he claims, stated that his logic

¹ Murphey 296.

² Murphey 299-301.

was responsible for the revision of the categories in order to stay within the constraints of his architectonic view of theory construction. Moreover, no one has been able to determine how the acceptance of quantification theory necessitates Peirce's late theory of individuality.

According to Murphey, the strongest impetus for category revision came from Peirce's recognition that there were some serious problems with his early theory of reality.¹ The most serious of these problems is that an extreme form of subjectivism follows directly from the theory of cognition proposed in "On a New List of Categories." This is a serious charge and, although I don't agree with Murphey's analysis of what follows from Peirce's early theory of cognition, I do agree that the potential for this type of misinterpretation was always apparent to Peirce. Perhaps, in response to these types of suggestion, Peirce decided to strengthen his categories by giving them a more empirical justification.²

Christopher Hookway also believes that it was the recognized shortcomings of Peirce's theory of reality that led him to revise the categories and, in particular, the category of Secondness. Furthermore, Hookway even has a theory about what led Peirce to recognize these

¹ Murphey 319.

² I have already defended Peirce from a similar charge in the last section. See pages 82-85.

shortcomings. 1

According to Hookway, it was F. E. Abbot's book *Scientific Theism* that got Peirce to reconsider his view of reality and the implications of his idealism.² In this book, contrary to what Peirce believed, Abbot argued that science is not metaphysically neutral. The metaphysical claims presupposed by science are:

- (1) An external universe exists *per se* - that is, in complete independence of human consciousness so far as its existence is concerned; and man is merely part of it, and a very subordinate part at that.
- (2) The universe *per se* is not only knowable, but known - known in part, though not in whole.
- (3) The 'what is known' of the universe *per se* is the innumerable relations of things formulated in the propositions of which science consists; consequently, these relations objectively exist in the universe *per se*, as that in it which is knowable and known.³

From these three presuppositions Hookway concludes that

Abbot is a realist in a double sense: he rejects transcendental idealism and believes that we have knowledge of *noumena*; and he rejects nominalism and thinks that among the constituents of this independent but knowable reality are relations, which are general phenomena, universals.⁴

1 Christopher Hookway, *Peirce* 112-117.

2 F. E. Abbot, *Scientific Theism* (Boston, 1885).

3 Hookway, *Peirce* 114.

4 Hookway, *Peirce* 114.

In addition, Hookway describes Abbot's attack on Kant and his attribution of nominalism to Kant.

In 1886, Peirce reviews *Scientific Theism* for *The Nation* (CN 1.71-74) In his review he fiercely defends Kant from nominalism and science from metaphysical bias. The book, however, did significantly impact Peirce. Abbot was a classmate of his. Moreover, as is argued in the next chapter, Peirce was vehemently opposed to nominalism his entire philosophical career and never gave up his respect and love for Kant. Thus, it is surprising that in the definitions he wrote for the *Century Dictionary* published in 1889, Peirce classifies Kant as a nominalist and promotes Abbot's account of the metaphysical presuppositions of science.¹

When the Murphey and Hookway accounts of Peirce's reasons for revising his categories are put together with the qualifications mentioned above, a persuasive argument is produced for the claim that it was the appearance of certain shortcomings in Peirce's theory of reality that truly led him to revise the categories.²

¹ Hookway, *Peirce* 115.

² There are other accounts of Peirce's reasons for revising the categories that are related but not as persuasive. See Savan 192; and Isabel S. Stearns, "Firstness, Secondness, Thirdness," *Studies in the Philosophy of Charles Sanders Peirce*, ed. Philip P. Wiener and Frederic H. Young

Method for Fixing the Categories

In the last chapter Peirce's method for fixing the early list of categories was examined in some detail. For the non-accidental categories Peirce used the Kantian method of analyzing the functions of concepts in cognition. The most fundamental, abstract, and ubiquitous functions of concepts were then determined. The result of this analysis was Peirce's designation of Substance and Being as the two non-accidental categories. Peirce then employed prescision as a method for determining the accidental categories. These differed from the non-accidental categories and each other in terms of content, level of abstractness, and function. What these two methods have in common, according to most Peirce scholars, and to Peirce himself, is that both methods are *a priori*. Experience does not inform them; rather, they inform experience.

However, given the specter of extreme subjectivism that loomed in the background and Peirce's exposure to and acceptance of Abbot's view of science and disparagement of Kantian transcendental justifications,

(Cambridge, Massachusetts: Harvard University Press, 1952) 195-196. Savan claims that it was the logical and empirical problems of Peirce's early categories that led to the revision whereas, Stearns attributes the revision to Peirce's desire to synthesize the best aspects of empiricism and his abductive rationalism.

Peirce needed another method which would allow him to fix the categories empirically. The method that he chose was phenomenology.

In order to understand what phenomenology is, as Peirce characterizes it, and the role that it plays within his philosophical system, a lengthy explanation that does not contribute a great deal to the discussion of his theory of individuality would be required. Thus, for the sake of brevity and in an attempt to preserve the focus of this inquiry, only the highlights of Peirce's account of phenomenology are here presented.

The first stage in understanding the role of phenomenology, which Peirce later came to call *phaneroscopy* (CP 1.284), is to determine its place and function within Peirce's conception of philosophy. In a discussion on the categories and their relation to normative science, Vincent Potter gives a succinct account of phenomenology.

Philosophy deals with ordinary facts of man's everyday existence, open to all at any time to observe. Peirce subdivides philosophy into phenomenology, normative science, and metaphysics. Phenomenology takes inventory of what appears without passing any judgment upon what it observes. It says neither 'true' or 'false' nor 'good' or 'bad' about the phenomena. One might say that, for Peirce, phenomenology merely observes and catalogs the contents of experience. Normative science evaluates and judges the data thus collected, while metaphysics tries to comprehend their reality.¹

¹ Vincent Potter, *Charles S. Peirce on Norms and Ideals* (New York: Fordham, 1997) 8.

Thus, in this passage the role of phenomenology is viewed as providing a template or framework from which the entirety of the contents of consciousness, in all of their forms and possibilities, can be characterized. In order to employ this method, consciousness itself must be closely examined because it is the structure of consciousness as observed by the conscious being to whom it belongs that will determine, to a great extent, the result of this type of inquiry.

Peirce defines phaneroscopy as the "description of the *phaneron*" (CP 1.284). By the *phaneron* he means

the collective total of all that is in any way or in any sense present to the mind, quite regardless of whether it corresponds to any real thing or not (CP 1.284).

Thus, phaneroscopy does not concern itself with metaphysics, although it may provide the metaphysician with the raw materials for his or her work. Moreover, phaneroscopy "does not undertake, but sedulously avoids, hypothetical explanations of any sort" (CP 1.287). In doing so, phaneroscopy does not concern itself with normative science.

According to Peirce, phaneroscopy has five tasks that it must perform. These are (1) signalize the broad classes of phanerons by engaging in direct observation of the phaneron and the generalizing from those observations, (2) describe the features of each of the broad

classes, (3) show that, although the features are so mixed that they cannot be separated from one another, the features are still disparate, (4) show that the categories are the broadest categories of phaneron there are, and (5) enumerate the principal subdivision of all the categories (CP 1.286). Thus, as Potter indicated above, phaneroscopy attempts to provide a template or framework through which the universe can be viewed or, rather, perceived.

Before moving on to the next section on the categories, one last thing must be mentioned. Peirce believed that while phaneroscopy could provide a formal account of the categories, it could not account for the material aspects of the categories that he was forced to recognize.

Indeed, Peirce says as much:

So far, as I have developed this science of phaneroscopy, it is occupied with the formal elements of the phaneron. I know that there is another series of elements imperfectly represented by Hegel's Categories. But I have been unable to give any satisfactory account of them (CP 1.284).

What Peirce is referring to in this last passage is the material aspect of the categories. This is significant because, in the late categories described in the next section, it is the material aspect of the categories that is pivotal in redefining them. Interestingly, even though they play this crucial role, Peirce does not think that the material aspect of the

categories can be characterized as precisely as their formal aspects. Not only is this one of his shortcomings, but it is a shortcoming for all humans. The material aspect of at least two of the late categories is non-rational. As such it does not lend itself to analysis. Peirce claims that he devoted two "passionately laborious" years of his life to an exploration of the material aspects of the categories and came up empty handed. He also claims that his experience with this task was not peculiar to him as every other attempt of which he was aware met with the same or a worse fate (CP 1.287).

Phaneroscopy, defined in terms of its subject and its tasks, is a powerful philosophical tool for Peirce. It allows him to empirically ground his method for fixing the categories while keeping himself from the battles that are waged in the metaphysical and normative science camps. Where phaneroscopy also comes in handy is in Peirce's use of it later on to inductively justify his categories.

The Categories

The most obvious revision of the categories is in terms of their number. The early list (of 1867) has five categories. The late list of categories has only three. Excluded from the late list are the categories of Substance and Being. These categories were abandoned in the 1870's

with the development of Peirce's logic of relatives. The second most obvious change is the name of the categories. The new categories, which correspond approximately to the early accidental categories, are Firstness, Secondness, and Thirdness. That Peirce used these names is not too surprising given some of the concerns he expressed in "On a New List of Categories" in 1867. In one passage in particular Peirce somewhat laments that the early categories do not properly correspond to their numerical correlates.

This passage from the many to the one is numerical. The conception of a *third* is that of an object which is also related to two others, that one of these must be related to the other in the same way in which the third is related to that other. Now this coincides with the conception of an interpretant. An *other* is plainly equivalent to a *correlate*. The conception of second differs from that of other, in implying the possibility of a third. In the same way, the conception of *self* implies the possibility of an *other*. The *ground* is the self abstracted from the concreteness which implies the possibility of an other (CW 2.55).

While a radically deconstructive soul might take this nearly impenetrable passage to be the sole reason for Peirce's revision of the categories, it is probably best viewed as a subdued expression of Peirce's desire to have his categories correspond with their numerical correlates.

The third most obvious change in the categories is the above-mentioned addition of the material aspect to their analysis. The addition

of this material aspect allows Peirce to escape charges of extreme subjectivism. It is primarily with respect to this addition that the late list is substantially different from the early list.

In 1885 Peirce wrote "One, Two, Three: Fundamental Categories of Thought and of Nature" (CW 5.242-247). He starts off by giving examples of "*trichotomies* or three-fold distinctions" (CW 5.242). One of the trichotomies he examines in this first section is the trichotomy of signs.

One very important triad is this: it has been found that there are three kinds of signs which are all indispensable in all reasoning; the first is the diagrammatic sign or *icon*, which exhibits similarity or analogy to the subject of discourse; the second is the *index* which like a pronoun demonstrative or relative, forces the attention to the particular object intended without describing it; the third is the general name or description which signifies its object by means of an association of ideas or habitual connection between the name and the character signified (CW 5.243).

The differences at this point between the accidental categories of the early list and the categories of the late list are not very apparent.

However, a few moments later Peirce makes the difference between the two clear.

By such sort of synthesis, the whole organism of logic may be mentally evolved from the three conceptions of first, second and third, or more precisely, An, Other, Medium (CW 5.245).

At this point an analysis of the categories in terms of their formal and material aspects is in order. The first category is Firstness. In 1885

Peirce describes Firstness, with respect to consciousness, as, "Feeling, the consciousness which can be included with an instant of time, passive consciousness of quality, without recognition or analysis" (CW 5.246). Thus, formally, Firstness is still pretty much the same as the early category of Quality. It is a monadic or non-relative term (CP 1.293, CP 1.295, CP 1.303). However, in its material aspect it is much different than Quality.¹ In "On a New List of Categories" Quality is an abstraction, a reference to a ground. Firstness, on the other hand is,

What the world was to Adam on the day he opened his eyes to it, before he had drawn any distinctions, or had become conscious of his own existence - that is first, present, immediate, fresh, new, initiative, original, spontaneous, free, vivid, conscious, and evanescent. Only, remember that every description of it must be false to it (CW 1.357).

Firstness, in its material aspect is not an abstraction but a mode of being, that is, the being of "positive qualitative possibility" (CP 1.23). As Murphey correctly points out it is something very different from the embodied abstraction of the "New List."²

¹ All the late categories differ in their material aspect from their corresponding early categories ancestors and each other. All of the early accidental categories are, materially, pretty much the same. They are all conceptions with no *real* metaphysical correlates.

² Murphey 307.

The second category is Secondness. In 1885 Peirce describes Secondness with respect to consciousness as, "Consciousness of an interruption into the field of consciousness, sense of resistance, of an external fact, of another something;" (CW 5.246). In this description the seeds of its difference from the early category of Relation are planted. Formally, Secondness is a genuine dyadic relation. A genuine dyadic relation is a dyadic relation that is not reducible to the objects being related. Thus, at least formally, Relation and Secondness appear very similar. However, there are some subtle differences. The most important of these differences, especially for Peirce's theory of individuality, is the way the index sign is redefined. In the early list, indices refer to objects but only mediately and through other signs. In fact, some Peirce scholars¹ have suggested that, on Peirce's early categories, indices never quite reach the object they are supposed to refer to.

Secondness, as an index in the late categories, does not have to work its way through a series of signs to get to the object it denotes. Rather, it refers to the object immediately. Although structurally the same as the index promoted by the early categories, this redefining of the index makes it formally distinct in terms of its operative nature.

¹ Murphey 309; Hookway 119; and Savan 193.

The material aspect of secondness is the most significant change in Peirce's revision of this category as well as his revision of all the categories. The material aspect of Relation is an abstraction. That is, Relation just is a conception. The material aspect of Secondness, on the other hand, is that it is a mode of being. It is the "being of actual fact" (CP 1.23). As such, the material aspect of Secondness is Haecceity. Haecceity, as a "brute fact" is not a conception or a quality. It is irrational.¹

Those who experience its effects perceive and know it in that action; and just that constitutes its very being. It is not in perceiving its qualities that they know it, but in hefting its insistency then and there, which Duns Scotus calls its *haecceitas* (6.318).

Haecceity carries the existential quantifier for Peirce. It is ultimately a type of experience which confers upon its object individuality and existence. In this capacity, it functions, epistemologically, as Peirce's principle of individuation and plays a significant role in the discernibility of individuals.² It is important to recognize at this point, however, that haecceity does not function as a metaphysical principle of individuation for

¹ Jeffrey R. DiLeo, "Peirce's Haecceitism," *Transactions of the Charles S. Peirce Society* Winter Volume XXVII Number 1 (1991): 93.

² For an enlightening discussion of these aspects of haecceity see Murphey 310-311; and DiLeo 92-96.

Peirce. For Peirce, as I mentioned above, the metaphysical principle of individuation is existence.

The final category is thirdness. In 1885 Peirce describes Thirdness with respect to consciousness as “synthetic consciousness binding time together, sense of learning, thought” (CW 5.246). In this definition the relationship between Thirdness and Continuity can be seen in the description of Thirdness as that which binds time together. The reference to time is significant because Peirce viewed time as a continuous entity. However, even before 1885, in 1875, Peirce was already reevaluating his conception of Representation (reference to an Interpretant). Indeed, Peirce claims that, “Continuity represents Thirdness almost to perfection” (CP 1.337).

There is not a huge difference, if any, between Representation and Thirdness in terms of their formal aspects. Formally, they are both genuine triadic relations. Genuine triadic relations are relations that bind their members in a way “that does not consist in any complexus of dyadic relations.”¹ It is in their material aspect that Representation and Thirdness are different. The material aspect of Representation consists of

1 Justus Buchler, *Charles Peirce's Empiricism* (New York: Octagon Books, 1966) 100.

its being a conception or an abstraction. On the other hand, the material aspect of Thirdness is never explicitly or clearly worked out by Peirce. If Peirce is to remain consistent, then Thirdness must have a material aspect. Thus, Peirce scholars have speculated about what this might be.

Murphey points out that Peirce regarded "rationality or intelligibility as in some sense experienced."¹ From this he infers that those aspects of signhood that are required for the experience of rationality or intelligibility to take place constitute the material aspect of Thirdness.

Adding strength to Murphey's claim is Savan's analysis of the material aspect of Thirdness. Savan starts his analysis with an examination of several key quotes. The one which is most revealing is CP 5.150.

Generality, Thirdness, pours in upon us in our very perceptual judgments, and all reasoning, so far as it depends on necessary reasoning, that is to say, mathematical reasoning, turns upon the perception of generality and continuity at every step.

Savan then shows how abduction can be viewed as a form of "instinctive perception of the generality of the universe."²

Finally, consistent with but slightly different than Murphey or Savan, Stearns views the material aspect of Thirdness as the immanence of mind

¹ Murphey 313.

² Savan 193.

within the phaneron.¹ This is consistent with Peirce's many claims to the effect that matter is really only effete mind hidebound with habits (CP 6.25).

Justification of the Categories

The justifications for the late categories, with one exception, are pretty much the same as the justifications cited for the early categories. The early categories are justified by Peirce primarily, but not exclusively, in two ways. First, the categories are part of the necessary structure of cognition. Without the categories cognition could not be properly analyzed and understood. Second, logic, and all the disciplines for which it is essential, depends on the theory of signs that follows from the categories. Moreover, logic itself admits of a trichotomy that corresponds rather well with the three kinds of sign. Although these justifications can be viewed as *a priori* at the time that the early categories were formulated, they cannot be viewed as such in the late categories. This is because, after his adoption of phaneroscopy, Peirce took all of the normative sciences, including logic, to be observationally based, and inductively justified. It is this attempted merging, whether successful or not has still to

1. Stearns 198.

be determined, that gives Peirce's pragmatism one of its many unique flavors.

Another logical justification that Peirce developed for his categories is known as his "Remarkable Theorem."¹ Peirce did not present this justification in "On a New List of Categories" because at that time, 1867, he had not fully developed his logic of relatives.

According to this theorem in formal logic, there are only three kinds of genuine (irreducible) relations. There are genuine monadic, dyadic, and triadic relations. However, relations with a valency of four or more (that is, any n -place relations where n is greater than or equal to 4) can be reduced to some combination of genuine relations.

That this theorem does not hold for modern quantificational logic is shown by both Hookway and Murphey.² Thus, a detailed explanation of how the theorem works and on what quantificational logical systems it works is not necessary. What is interesting about this justification of the categories is that Peirce was aware of the existence of these other logical systems through the work of the English logician A.D. Kempe whose work Peirce does refer to in the *Collected Papers*.

¹ Hookway 97.

² Murphey 305-306; and Hookway 97-101.

The third and final justification that Peirce gives for the late categories is inductive. It is the justification made available through his phaneroscopy. Through the use of phaneroscopy the categories are observed in as objective and unbiased a manner as possible. Every time Peirce employed this method and, legitimately, arrived at the list of categories that constituted his late list of categories, he inductively confirmed the hypothesis he associated with the categories. Although Peirce did not develop his phaneroscopy until the early 1900's, he was using it, perhaps unknowingly, as early as 1885. In both "Notes on the Categories" (CW 5.235-241) and "One, Two, Three: Fundamental Categories of Thought and of Nature" (CW 5.242-247) Peirce sees and points out trichotomies everywhere. He observes them in logic, consciousness, biology, and the rest of the physical sciences. It is no wonder he was a firm believer in the Trinity.

Metaphysical Implications of the Categories

In the last chapter it was determined that the early categories introduced only generals, albeit, four different kinds of generals. Now that the late categories have been explained, the same question can be asked about them, "What kinds of metaphysical entities are introduced by the

late categories?" The best approach is to start with Firstness and go through each of the categories.

Firstness, through its formal aspect, introduces genuine monadic relations. Through its material aspect it introduces real possibilities. Secondness, through its formal aspect, introduces genuine dyadic relations, and through its material aspect, it introduces existing individuals. Finally, thirdness, through its formal aspect, introduces genuine triadic relations. Through its material aspect, it introduces real generals.

Thus, through their formal aspects, the late categories introduce the same metaphysical entities that are introduced by the early categories. However, through their material aspects, the late categories also introduce real possibilities, real actualities (existing individuals), and real generalities. The most significant of these new entities are the real actualities, that is, the introduction that is the focus of the next chapter.

Problems with the Categories

Addressing all of the perceived problems with Peirce's late categories is a task which is beyond the scope of this dissertation and, certainly, this section of it. Thus, this section will focus on what are taken by many Peirce scholars to be the two most serious problems with Peirce's categories and with respect to the theory of individuality that

issues from them. As it turns out, the solutions provided for these two problems also shed some light on other perceived problems with the late categories.

The first problem is one that Secondness shares with Firstness and possibly with Thirdness. It is the problem of reconciling the formal aspect of Secondness with its material aspect. The formal aspect of Secondness consists of a genuine dyadic relation. The material aspect of Secondness is haecceity. Genuine dyadic relations are generals whereas haecceity is non-qualitative and anti-general (CP 3.434, 3.460, 5.49, 6.82, and MS 942: 16-17). Thus, there is a straight-forward inconsistency between the two aspects of Secondness.

At first glance, this looks like an insurmountable difficulty for Peirce. However, a look at his theory of cognition and the role played by the material aspect of Secondness shows that the problem is not all that severe.

On Peirce's theory of cognition all thought is in the form of signs (CP 5.251). Thus, any thought at all about the elements observed in the phaneron, including those that exhibit a material and irrational character, must be expressed in terms of a conception, which is a sign. Signs, as mentioned above, are essentially general. The best that can be done in

the pursuit of an understanding of Secondness is to formally represent it in its simplest form, that is, in terms of its function within the theory of signs. This does not reduce Secondness to Thirdness. Rather, it makes Secondness somewhat understandable by introducing the intelligibility of Thirdness in the form of a conception. Thus, the solution to this problem does not lie in trying to ease or do away with the tension between the formal and material aspects of Secondness. It lies in understanding the role that each of these aspects plays within Peirce's semeiotic.

The second problem is related to the first. (Ultimately, all of these apparent problems with Peirce's late categories can be dissolved by tracing the function of each of the categories, in both its aspects, through Peirce's semeiotic.) Murphey frames the problem in the form of a paradox.¹ The paradox concerns haecceity and Peirce's claim that it is subject to the principle of non-contradiction and the law of excluded middle. Before his development of the late categories Peirce argued that fully determinate individuals could not exist because if they did, they would violate the principle of non-contradiction and the law of excluded middle. This is because he did not believe in the existence of instantaneous states. Instantaneous states are the indivisible states of an

¹ Murphey 311-312.

existing object. If there are no instantaneous states, then all the states of any existing object, no matter how briefly that object exists, are divisible and subject the object to change in ways that violate the principle of non-contradiction and the law of excluded middle. With the introduction of haecceity, Peirce makes room in his ontology for the existence of instantaneous states. It is not too far a stretch to view Peirce's accounts of the haecceity of an object as a series of fully determinate instantaneous states causally connected somehow. However, there is a problem with this account because, for Peirce, no qualities can exist in an instant. "Therefore, even if *haecceities* have instantaneous states, they have no qualities during those states."¹ Thus, even though the principle of non-contradiction and the law of excluded middle hold for haecceities, they do so vacuously.

While there is no contradiction here, the paradox does illuminate a tension between the categories. This tension is described by Murphey as a difficulty in defining the relation between the discrete and the continuous in Peirce's late categories.² Kemp-Pritchard describes the tension as a difficulty in reconciling the continuity-basic and entity-basic tendencies in

¹ Murphey 312.

² Murphey 319.

the late categories.¹

As both Murphey and Kemp-Pritchard recognize, the tension between and within categories is present when the categories are viewed as independently existing forms of reality. However, this is not the way Peirce intended the categories to be viewed. Rather, he thought of the categories as inseparable yet distinct elements of reality discovered through observation. The categories are dependent upon one another and permeate all of reality. Kemp-Pritchard's suggestion that the categories be viewed as elements of reality and as inspired by Peirce's element-basic tendencies warrants serious consideration and adoption.²

¹ Kemp-Pritchard 84-85.

² Kemp-Pritchard 89.

Chapter 3 -Gracia's Method

The next stage in this analysis of Peirce's theory of individuality is to subject it to Gracia's method for assessing theories of individuality. According to Gracia, a good theory of individuality addresses six central philosophical problems. Each problem is associated with a question and an attempt is made to answer it. It is my contention that Peirce's theory of individuality is consistent and plausible. This is demonstrated by showing how it passes all the tests employed by Gracia's method. The issues that are addressed in this chapter are (1) the intension of "individuality," (2) the extension of "individuality," (3) the ontological status of individuality, (4) the principle of individuation, (5) the discernibility of individuals, and (6) the reference to individuals.

The Intension of "Individuality"

The first question that a good theory of individuality must answer is, "What is the intension of 'individuality.'"¹ As Gracia puts it, this question asks "about what it is to be an individual as opposed to some thing else."²

The intension of a term is the meaning or connotation of that term. The meaning of a term consists of the set of necessary and sufficient

¹ Gracia 27.

² Gracia 9.

conditions that must obtain for anything to be considered as legitimately falling under the extension of that term. Thus, the answer to the question must entail the set of necessary and sufficient conditions for individuality.

Although this process of determining the meaning of a term appears clear and unproblematic, there are two challenges to it that should be dealt with briefly. The first challenge questions whether there is any set of features common to all the members of a class term like "dog."

The second challenge intimates that this process should start with an examination of the extension of "individuality" since it is the extension of a term that determines its intension.¹ This is certainly the case with proper names.²

These objections raise some serious questions about the nature of intension and extension and their relationship to one another. However, these are not the issues that need to be pursued. Gracia's method is being used to assess Peirce's theory of individuality. Thus, what is important is that a theory be able to address the six issues consistently and regardless of the order they are presented in. As such, Gracia's

1 This is the "Extensionality Thesis." It was espoused by nominalists, positivists, and others.

2 Gracia 10-13.

responses to these questions, while raising important philosophical questions, are not presented or defended in much detail.

Gracia suggests three responses to the first challenge. (1) Even if the objection is true, ranges of conditions can be established. (2) Although not a sufficient condition, one can know the conditions that things of a certain type should not meet. (3) One can argue that the objection works only against artificial kinds and not natural kinds.

Gracia also gives three responses to the second objection. (1) The theory of reference on which the objection rests is false. (2) The theory of reference the objection rests on does not imply the objection. (3) The necessary and sufficient conditions of at least one class term, "individuality," can be identified. Like Gracia, and in order to avoid controversy, I accept the burden of proof and move on to show that at least the necessary and sufficient conditions of "individuality" can be identified.

On Peirce's early theory of individuality, as I mentioned above, the intension of individuality is singularity. It follows from this that individuals are singulars and a singular, on Peirce's early categories, is a type of

general (CW 2.233).¹ This view did not satisfy Peirce. Moreover, it could not explain the impredicability of subjects and failed to distinguish, in any robust way, the ontological differences between generals and individuals that are obvious through experience. As Gracia claims, the only way to really give this view of individuality any teeth is to abandon its linguistic formulations and adopt a Bare-Particular View of Substance.² While the Bare-Particular View may have its advantages, it is certainly not a view that Peirce would have accepted given the generality requirements of his early theory of individuality.

On Peirce's late theory of individuality the intension of "individuality" is noninstantiability. This account of individuality is not one that can be pulled directly out of the text. This is because Peirce never used instantiability or non-instantiability when referring to generals and/or individuals. This view is different than Peirce's early view in many respects. Perhaps the most immediate respect can be seen in the

1 On Peirce's early and late view of singulars, singulars must meet three conditions. (1) Singulars can be represented in only one place at one time. (2) Singulars can be only one in number. And (3) Singulars must be general.

2 Gracia 43 and 86. On the Bare-Particular View of Substance there are two types of entities. There are the features of things and the substances in which those features inhere. Features are universal, and substances are individual. Features can be characterized whereas substances are devoid of characteristics.

relationship between singularity and individuality. On Peirce's early theory of individuality, singularity and individuality are intensionally but not extensionally distinct. On Peirce's late theory of individuality, singularity and individuality are intensionally and extensionally distinct.¹

In order to get non-instantiability out of Peirce's later writings, one must look at the late categories and especially at their metaphysical implications. The three types of metaphysical entities introduced by the late categories are real possibilities, real actualities, and real generalities. Real actualities are fully determinate and existing objects. Real generalities are features that are instantiated in one or more existing objects. Furthermore, in their material aspects, the two are opposites. Generals are indeterminate. Existing objects are fully determinate and they are subject to the law of excluded middle and the principle of non-contradiction. Thus, if instantiability is a necessary and sufficient condition for generality, then noninstantiability is a necessary and sufficient condition for individuality.

¹ For Gracia, singularity and individuality are intensionally but not extensionally distinct. However, his view differs from the view that follows from Peirce's early theory of individuality because for him the instantiated features of a thing are also individuals.

This view of individuality is often met with two objections. The first objection is that noninstantiable generals such as "round-squareness" meet the necessary and sufficient condition for individuality. The second objection, also discussed by Gracia, is that clones are individuals, but they fail to meet the necessary and sufficient condition for individuality. Thus, it seems, through these two counterexamples, that noninstantiability is neither a necessary nor sufficient condition for individuality.¹

Gracia's responses to these two objections are very much in the Peircean spirit. His response to the first is that "round-squareness" is not a real general because it fails to meet the necessary and sufficient condition for generality, which is instantiability. If "round-squareness" is not instantiable, then it is not a general. His response to the second objection is that clones are not instantiations of the thing cloned. Rather, they are instantiations of the same general that the thing cloned is an instantiation of. What is attractive, from a Peircean perspective, about these responses is that they preserve the integrity and irreducibility of the categories (CP 3.422 and 5.52).

Finally, something should be said about the intension of "noninstantiability." Gracia claims that noninstantiability is a primitive

¹ Gracia 46-47.

notion. Primitive notions are notions that cannot be analyzed into simpler concepts and notions. Furthermore, a notion is primitive if all the definitions that can be given for it are necessarily circular. A definition is circular if it (1) uses the notion it is defining, (2) uses the complement (*instantiability* in the case of noninstantiability) of the term it defines, or (3) must use terms of which the term defined is a derivative.¹ Noninstantiability appears to meet all three of these conditions for primitiveness. Thus, there is at least one good reason for considering noninstantiability a primitive notion.

A second reason cited by Gracia for considering a notion primitive is that doing so has some strategic advantage in defining related terms within a theory. Having one or more primitive terms can help greatly in organizing a theory. With respect to noninstantiability, both these reasons apply. Noninstantiation can be defined only in a circular way and this circularity is virtuous because it helps to organize the theory of individuality that is motivated by its role as the intension of "individuality." No other account of the intension of "individuality" has these advantages.

¹ Gracia 51.

Moreover, no other account of individuality is a necessary and sufficient condition for individuality across all possible worlds.¹

The Extension of "Individuality"

The next question that a good theory of individuality must answer is, "What is the extension of 'individuality'?"² In other words, what things, if any, are individuals? The extension of a term is what that term denotes.

If an entity is denoted by a term, then that term can be applied correctly to that entity. The answer to this question is somewhat restricted by the answer to the first question, "What is the 'intension' of individuality?" This is because whatever answer is given must be consistent with the answer to the first question. Thus, all entities that are in the set that constitutes the extension of "individuality" must meet the necessary and sufficient condition for individuality.

This question is different than the last question in at least one more respect. The last question was logical in nature, whereas this question and the two that follow it are metaphysical in nature. The distinction is

¹ Peirce claimed that individuality is a brute or an ultimate notion. These notions are very similar to Gracia's conception of a primitive notion. See CP 1.405, 3.613, and 8.195.

² Gracia 57.

important especially when the questions and their prospective answers seem very similar.

On Peirce's early theory of individuality there are no individuals in the traditional sense because it entails that all "individuals" are really singulars. Thus, Peirce's early theory of individuality rests on some form of Realism. Realism is here taken as the doctrine that there are no individuals.¹ There are several problems with this view. The most significant and glaring of these problems is that there is absolutely "no direct empirical or experiential support for Realism."² For the most part, Gracia would say, and so might Peirce, that humans experience the world of individuals. If experience is to be taken seriously and The Principle of Acquaintance³ to be incorporated, then any plausible account of reality should accommodate our common-sense and experientially based conception of the world.

¹ Peirce uses the term "realism" to refer to the view that generals are real. Gracia uses the term "Realism" to refer to the view that only generals exist. I will distinguish between the two by capitalizing the "R" when referring to Gracia's account and using the lower case "r" for Peirce's account.

² Gracia 69.

³ Gracia 87. "This principle stipulates that 'the indefinable terms of ontological descriptions must refer to entities with which one is directly acquainted.'"

On Peirce's late theory of individuality the extension of "individuality" is the set of all existing things. Only those things which exist are noninstantiable, and only individual things exist. However, important in distinguishing Peirce's position from Gracia's, and others, is Peirce's view that the features of an individual are generals and are not themselves individuals. This view is labeled Eclecticism by Gracia. It is the view that some things that exist are universal and some are not.¹ Before examining the merits and pitfalls of this view, an objection to this analysis of Peirce by some renowned philosophers is in order. In particular, I would like to respond to Armstrong's claim that Peirce is a particularist.

In *Nominalism & Realism*,² his highly influential book on universals, David Armstrong characterizes Charles S. Peirce as a particularist. Armstrong describes a particularist as one who believes that "the properties and relations of particulars are themselves (first-order) particulars."³ By "relations" I take Armstrong to be referring to many-place properties. Thus, in calling Peirce a particularist, Armstrong is attributing

¹ Gracia 85.

² Armstrong, D.M. *Nominalism & Realism: Universals and Scientific Realism Volume 1* (Cambridge: Cambridge University Press, 1978).

³ Armstrong 138.

to Peirce the belief that all properties (including relations) are particulars.¹

Attributing to Peirce such a view is tantamount to charging him with inconsistency.² This is because particularism, as defined by Armstrong, would have entailed a form of nominalism for Peirce. That Armstrong should attribute such position to Peirce is odd, given that Peirce demonstrated contempt for nominalism and denied he was a nominalist throughout his entire philosophical career.³

¹ Before proceeding, a comment must be made about the terminology that will be used. When talking about properties I will be referring to possible universals. For Armstrong the only real candidates for universals are properties and relations. For Peirce they are qualities and laws. Peirce called these features of objects or groups of objects *generals* in order to better incorporate his dispositional account and analysis of features. I will use the term "features" instead of "properties" because, as Gracia points out, it is more encompassing. [See Gracia 264.] Also, I will take Armstrong's particulars and Peirce's individuals to be referring to pretty much the same thing; namely, individual, absolutely determinate (at least so at some instant), actually existing objects. Thus, when referring to particulars I will be referring to this rough, concrete notion of an actually existing object that occupies a particular region of space-time and is not multiply realizable. That is, it cannot be wholly present in a multitude of different places and times.

² This is not to say that Peirce was never inconsistent. However, he was not inconsistent on this matter and certainly not in a way that is as obvious as the one suggested by Armstrong.

³ That Peirce was a self-proclaimed realist throughout the bulk of his philosophical career I take to be non-controversial. There is, however, some controversy about whether he was a nominalist early in his philosophical career. For both parts of the debate see Max Fisch, "Peirce's Progress From Nominalism Toward Realism" (*The Monist*, 51,

1868 - Modern nominalists are mostly superficial men, who do not know as Roscellinus and Occam did, that a reality which has no representation is one which has no relation and no quality (W2 239-240).

1885 - You might as well say at once that reasoning is to be avoided because it has led to so much error; quite in the same philistine line of thought would that be; and so well in accord with the spirit of nominalism that I wonder some one does not put it forward (CP 1.383).

1893 - The fault of this explanation [Preestablished Harmony] is the capital fault which attaches to all nominalistic explanations, namely that they merely restate the fact to be explained under another aspect; or, if they add anything to it, add only something from which no definite consequences can be deduced (CP 6.273).¹

April, 1967), and Don D. Roberts, "On Peirce's Realism" (*Transactions of the Charles S. Peirce Society*, Spring 1970, Volume VI, Number 2). My view of the controversy tends toward that expressed by Roberts. While I believe that there were some undeniably nominalistic elements to Peirce's philosophy, it is almost always the case that Peirce resorted to realism when attempting to meet some philosophical challenge.

The controversy over Peirce's alleged nominalism focuses primarily on his earliest accounts of probability in terms of frequencies and his idealism. While frequency accounts of probabilities may entail some form of class nominalism, and a rigorous idealism may entail, if not carefully defined, some form of conceptual nominalism, I do not see how either could entail particularism (Platonic nominalism).

Armstrong does not refer to any specific time frame when classifying Peirce as a particularist. Under normal circumstances, the Principle of Charity would keep me from taking Armstrong to have referred to all of Peirce's writings when controversy exists over part of them, albeit a small part. However, since it is not clear how particularism can be teased out of that small part and since I am interested in clarifying Peirce's notion of properties, I will ignore the Principle of Charity this one time. This is not such a bad thing given that particularism does not appear to be what the controversy in the literature is over.

¹ This passage implies that pragmatism, on Peirce's account of it, is inherently realistic.

1897 - ...[Nominalism] as it was and is formulated, is simply a protest against the only kind of thinking that has ever advanced human culture (CP 3.509).¹

1901 - It is very easy to prove in two twos that Realism is right and nominalism is wrong (SW 419).

1906 - But after physical science has discovered so many principles in Nature, nominalism becomes a disgraceful habitude of thought (CP 6.175).

1908 - ...^{2nd}, that nominalism is false in all its shades and degrees; and ^{3rd}, that it has had a baleful influence upon civilization.²

The form of nominalism that particularism would have entailed for Peirce is Platonic nominalism. Platonic nominalism, as defined by Peirce, is the doctrine that the generals exist.³ Peirce would have believed particularism a form of nominalism, because, like Platonic nominalism, it requires that generals exist in the same way that individuals do. This is

1 This passage indicates that Peirce believed science, or at least its model of inquiry, to be inherently realistic.

2 Peirce, Charles S. "Letter to Cassius J. Keyser." Sections of the letter have been reprinted in *Charles Sanders Peirce: A Life* written by Brent 71.

3 Susan Haack, in "Extreme Scholastic Realism:" *Transactions of the Peirce Society*, (Winter 1992) Volume 28, Number (Winter 1992): 119-50, describes Peirce's reality/existence distinction with specific reference to Platonic nominalism. She cites CP 5.503 and CP 5.470. In searching for other expressions of the doctrine I could find any other place where Peirce expresses the doctrine more clearly. This distinction will be discussed in greater detail in Argument 1.

problematic because Peirce drew a sharp distinction between *existence* and *reality* which runs against Platonic nominalism. That which exists is real, but not all that is real exists. Individuals exist and generals, although they do not exist, are real.¹ Thus, the claim that generals exist, as individuals do, would have been perceived as category mistake by Peirce, as well as an attempt to reduce Thirdness to Secondness. Such reductions were not permitted by Peirce on any logical or metaphysical grounds (CP 5.82 and 8.331).

Both considerations - the categorical denials of nominalism and the reality/existence distinction made by Peirce - call into question Armstrong's characterization of Peirce as a particularist. In addition, Peirce provided several strong arguments from science which he believed showed that realism, the belief that the features of individuals are generals, was more justified than nominalism.²

At this point Armstrong might be willing to strike Peirce's name off his list of "explicit" particularists. However, for the sake of clarifying Peirce's view of the features of individuals, I will assume Armstrong remains firm.

¹ CP 1.432, 1.515, 3.613, 5.503, and 6.349

² I will examine some of these arguments in Argument 2.

Immediately after attributing particularism to Peirce, Armstrong describes three arguments for and a view about particularism. He claims that the particularist must be committed to at least one of them. He does not say which of the arguments or view Peirce is committed to. In the following I will examine Armstrong's discussion of particularism. It is my contention that Peirce was not a particularist as Armstrong defines the doctrine. Although it is not my intention to quibble with Armstrong, I do wish to clarify Peirce's conception of the features of individuals using Armstrong's clear and concise description of particularism as a springboard. By showing that Peirce is not a particularist, I hope to pave the way to a realist interpretation of his notion of the features of individuals.

The first particularist argument is an attempt to reduce the realist position to an absurdity.¹ The argument is:

1. Two objects, x and y, both instantiate a property, P.
2. The realist must believe that the instantiations of P in x and y are identical.
3. THEREFORE, the realist must believe that P is wholly present in x and y.

¹ Armstrong 79.

4. 3 is absurd (obviously false).
5. THEREFORE, the realist is wrong: the instantiations of P in x and y are not identical.
6. If the realist is wrong, then the particularist must be right.
7. THEREFORE, the particularist is right.

The first thing that is striking about this argument is that it presupposes that the identity conditions¹ for a general are the same as those for an individual. In order to make the move from premise 3 to premise 4, it must first be assumed that the identity conditions for the features of individuals and individuals are the same.

Peirce did not believe that individuals and generals have the same identity conditions. However, he did believe that both have being. The difference between the two is in their modes of being. One way of looking at the distinction in terms of modes of being is the way Russell describes it in *The Problems of Philosophy*.

We shall find it convenient only to speak of things *existing* when they are in time, that is to say, when we can point to some time *at* which they exist, (not excluding the possibility of their existing at all times). Thus thoughts and feelings, minds and physical objects *exist*. But universals do not exist in this sense; we shall say that

¹ The view of identity conditions referred to in this passage is epistemological. It has a great deal to do with discernibility. For Peirce, generals and individuals are discerned differently through experience.

they subsist or have being, where 'being' is opposed to 'existence' as being timeless.¹

In this passage Russell draws the distinction in a way that captures the point Peirce wanted to make; namely, the assertion that two things can have different modes of being is motivated by the difference that is observed in their identity conditions. Things that have different modes of being need not have the same identity conditions.

Peirce made the distinction much in the same way. All through his writings he claims that² "it must be admitted that individuals alone exist" and that "quality is eternal, independent of any time and of any realization."³ Thus, if the distinction between generals and individuals is in their modes of being and, if things with different modes of being need not have the same identity conditions, then the argument cannot even get started. If this is not accepted, then the claim that they must have the

1 Bertrand Russell, *The Problems of Philosophy* (1912, Oxford: Oxford University, 1972).

2 CP 3.613 and 5.429.

3 CP 1.304, 1.420, 1.427, and 6.200. While the views of Russell and Peirce are similar in the ways cited, there is at least one way in which they are different. Namely, for Russell, entities that exist do not also subsist. For Peirce, entities that exist are also real. What motivates this distinction for Peirce is, primarily, his description of the categories of experience and the phenomenology that follows from them. Generals are cognitionary because all thought is general, whereas, individuals are reactionary because they can only be known through their reactive capacities. See CP 5.503.

same identity conditions must be argued for; otherwise, it is a straightforward case of question begging. Peirce would have looked at the requirement that individuals and their features have the same identity conditions as a category mistake of epic proportions. Furthermore, Armstrong takes this to be the response which the realist should and, most likely, will give to this argument. While Armstrong claims that this response does nothing to refute the particularist, it does show the particularist that "he has done nothing to refute the [realist] view."¹

Another way to show that Peirce's position on generals was different than that expressed by this first particularist argument is to examine which of the premises Peirce would have agreed with and which he would not have accepted. Peirce would have agreed with the first two premises of this argument. He would also have agreed with what is concluded from the first two premises (although it is not quite clear that premise 3 follows from premises 1 and 2). That is, Peirce would have agreed with the conclusion that generals are wholly present in each of the individuals in which they are instantiated. However, he would not have found the whole presence of a general in each instantiation of that general

¹ Armstrong 79.

a problem or an absurdity (contrary to premise 4). In a discussion on hardness, Peirce said that:

the property, the character, the predicate, hardness, is not invented by men, as the word is, but is really and truly in the hard things and is one in them all, as a description of habit, disposition, or behavior (CP 1.27n).

There are two things worth noting about this passage. First, it decidedly separates Peirce's view of generals from the views assumed and argued for by this first particularist argument. Second, it attributes a general character to the features of individuals.

Given the differences cited between the first particularist argument and Peirce's view of generals, we can safely infer that the view argued for by Peirce is not consistent with the view argued for in this first argument. Thus, this argument for particularism is not one which can be justifiably attributed to Peirce.

The second argument Armstrong attributes to the particularist begins with the observation that there are ways of referring to the features of individuals as if they were individuals.¹ The example he gives is that of a man's poor physical condition causing his collapse. In this example the man's poor physical condition is causally efficacious in explaining his

¹ Armstrong 79-80.

collapse. Furthermore, the efficacy of this feature of the man in explaining the collapse appears to be particular to the individual in which it is instantiated. For example, were another man to be in the same poor physical condition, he might not collapse. Hence, it must be the case that the feature in question is an individualized feature. If it is a particularized property, then particularism must be accepted.

The first feature of this argument that is a point of contention is a matter of language. The strength of the argument does not come from the possibility of referring to properties as particular to a specific object or individual. That this is possible does not reveal anything about the metaphysical nature of properties. In the case cited, the feature in question could just as easily have been expressed as a general. For example, instead of, "His poor physical condition led to his collapse," we would have, "Having a poor physical condition led to his collapse."

The strength of the argument lies in its assumption that the translation from the individualized version cannot be made without an implausible shift in the truth conditions of the sentence. However, this is not the case. The translation from the individualized-feature version of the sentence to the generalized-feature version does not require an implausible shift in the truth conditions of the proposition expressed.

Armstrong claims that this can be possible only if the notion of a state of affairs is introduced. Armstrong defines a state of affairs as "...a particular's having a certain property, or two or more particulars standing in a certain relation."¹ Looked at as a state of affairs the sentence could be expressed as follows:

A certain particular, the man, has a certain property or properties and/or relations which make it true that the man is in a poor physical condition. (The predicate 'being in a poor physical condition' need not apply in virtue of a single property). This state of affairs, together with other factors brings about the man's collapse.²

Armstrong does not believe that this line of argument proves the particularist wrong. It does, however, show him that his (the particularist's) position, on the grounds cited, is no more plausible than the realist's position.

Peirce also believed in states of affairs. One need only to examine Peirce's categories to see that it provides for a phenomenology that "indicates that all phenomena or experience whatsoever possess three modes of being or aspects, specifiable under these three categories." What these three categories constitute can be viewed as a state of affairs as Armstrong defines it. Both Firstness and Thirdness are composed of

¹ Armstrong 80.

² Armstrong 80.

real possibilities and generalities. The category of Secondness, on the other hand, is the category of real actualities, of existence. It is the category that is inhabited by individuality. In addition, Peirce did not believe that the true nature of individuals could be discovered by playing with language.¹ Rather, he believed that the true nature of generals would be dictated by the results of a "logical analysis of cognition and judgment" and the requirements of the scientific method as constrained by the pragmatic maxim. In both the early and later formulations of the categories Peirce was forced by logical and other reasons to appeal to realism. Not only did Peirce believe that logical analysis was necessarily prior to any metaphysics, he called any metaphysics that did not follow from a strict analysis of logic "foolish" (CP 8.109). However, this does not mean that he believed that the way we speak about the world has nothing to do with the truth of the propositions expressed by the sentences we utter. Furthermore, as was stated above, Peirce did believe that his arguments from science appeared to indicate that it was likely that the particularist was wrong.

¹ This is evidenced by Peirce's abandonment of the subject-predicate analysis of propositions once having fully developed his logic of relatives in 1870.

At this point it would be helpful to look at two of Peirce's arguments for the reality of generals. Both of the arguments are for the reality of laws. Peirce believed that physical laws, as well as mental/psychical laws, were generals. For him, they were general principles operative in nature and they dictated how different objects, whether actual or possible, with different features, could interact and behave. In other words, all the individuals in the universe are instantiations of one or more laws (CP 5.457).¹ However, that is not their only mode of being. There is an element of pure Secondness that forms part of the reality of an object that cannot be reduced or even understood clearly in terms of Thirdness. To forget this and to attribute to the features of a thing an haecceity is considered by Peirce a severe form of nominalism (CP 8.208).

The first of the arguments that I have in mind is in "The Laws of Nature and Hume's Argument Against Miracles (SW 275-321)." In this argument Peirce shows that the Ockhamists (nominalists) cannot explain why inductive inference is successful (SW 295). He claimed that the nominalist, asked to explain why this is so, has only three possible replies. Peirce viewed all three of these replies as non-explanations.

¹ I found Christopher Hookway's treatment of Peirce's notion of law illuminating. Hookway 242-243.

The first reply the nominalist can give is that "the conformity of future observations to inductive predictions is an 'ultimate fact' (SW 296)."

Peirce's response to this reply was that appeals to ultimate facts do not explain anything and block the road of inquiry. Furthermore, it is logic that renders this response absurd, for "the only possible justification that a theory can have, must be that it furnishes a rational explanation of the relation between the observed facts (SW 296)." By claiming that the conformity of future observations to inductive predictions is an ultimate fact, the nominalist fails to give a rational or acceptable explanation.¹

The second reply the nominalist can give is that true prognostication is possible "by the courteous revelations of the spirits (SW 296)." Peirce was being facetious when he attributed this possible reply to the nominalist.

Finally, the third reply the nominalist can give is that God wills things such that future observations conform to inductive predictions (SW 296-297). Peirce responds to this by claiming that it is trivially true. Peirce believed that the ultimate explanation for everything rests in God (CP 6.199). However, this third reply explains nothing because a fact

¹ In other words, the phenomena appealed to are not primitive in the way that nominalist's answer suggests.

already assumed (that everything is the way that it is because God wills it so) is merely being restated and adds no new information. In other words, it really does no explanatory work. Peirce said as much:

It is a right handy contrivance for explaining all past, present, and future phenomena without stirring from one's sofa, in one brief sentence which no monotheist can deny (SW 296-297).

Thus, the realist has an advantage over the nominalist because she can provide a rational explanation for why future phenomena conform to inductive predictions. It is its failure to explain prognostication that leads Peirce to call nominalism a "malady" (SW 297) that has tainted modern thinking.

The second argument is one that Peirce gave mostly in his later philosophical writings (CP 5.93ff, 5.48).¹ Holding up a stone he would ask if anyone in the audience could seriously doubt it would fall if released. If they were true nominalists of the Ockhamist stripe, then they would not expect the stone to fall. Instead they would believe that the stone had as much chance of falling as it did of floating off in any other possible direction. Hence, because we have the basic beliefs about the mechanics of the universe that we do, we cannot help believing, contrary

¹ I found Susan Haack's discussion of this most helpful. See Haack 25-26.

to nominalism, that there are universal laws that govern the behavior of the objects in our universe. If true predictions are possible, then nominalism is false.

In light of these arguments and others that Peirce provided as a justification for realism, Argument 2, like Argument 1, is not a defensible characterization of Peirce's view of features of individuals.

The third particularist argument, like Argument 1, is an attempt to reduce the realist position to an absurdity.¹ It is first assumed that if two objects, x and y, both instantiate a property, P, then P must be identical in x and y. It is then asserted that an ordinary particular is nothing but the sum of its properties. From this it is concluded that there can exist two distinct objects which possess all the same properties. The particularist then claims that the conclusion—that two distinct objects possess all the same properties—is incoherent. If two objects possess all the same properties, then they are one object, not two. From this the particularist concludes that properties cannot be universals. If they are not universals, then they must be particulars. If they are particulars, then particularism must be true. Therefore, particularism must be true.²

¹ Armstrong 81.

² In rendering the argument given by Armstrong I keep his use of the terms "particular" and "property." I switch to the terms "individual" and

There are two ways in which this argument is inconsistent with Peirce's view of generals. First, the time frame Armstrong has in mind when attributing particularism to Peirce makes a difference. In his early philosophical writings Peirce believed that a particular is nothing but the sum of its properties (CP 3.93). Moreover, during this same period, Peirce did not believe that absolutely determinate individuals could exist because the categories did not allow for it. In his later philosophical writings, Peirce claimed that an individual is more than the sum of its features (CP 1.405, 3.434, 3.460, and 6.318).¹ Second, an examination of the results of contrasting the statements about individuals in the argument with what Peirce actually claims reveals that Peirce was not committed to Argument 3.

If Peirce is viewed as committed to the characterization of individuals found in his early writings, then the argument breaks down with the claim that it is incoherent to believe that two individuals can be qualitatively identical and numerically distinct. It is a logical possibility.

"general" or "feature" when discussing Peirce's potential response to the argument.

¹ I found Murray Murphey's discussion of these two accounts of individuation in Peirce very helpful. Murphey 130-133 and 309-311.

In his early writings, Peirce did not consider individuation a problem. Given the necessarily general character of thought (W2 207-208, and 470) and the impossibility of the existence of anything that is, in principle, inconceivable (W2 208-209, and 470) the existence of an absolute, exhaustively defined individual is an impossibility. Thus, if no individuals exist in the absolute sense required by Argument 3, then the claim that two individuals can resemble each other exactly, is not incoherent. This is because the notion of an individual is just a useful way of talking about collections of generals.

If Peirce is viewed as committed to the characterization of individuals found in his later writings, then the answer to the question about whether or not he was a particularist in the way that Argument 3 suggests is "No!" Peirce, in his later philosophical writings, rejected the view that an individual was nothing but the sum of its features. At that time he developed a notion of *haecceity*. Each experience of an individual has its own haecceity or primitive "thisness." This is not a feature and it is this which allows two individuals to be qualitatively identical and numerically distinct. Thus, the exact resemblance of a pair of individuals would not be a problem for Peirce because he rejected the claim that an individual is nothing but the sum of its features.

Looking at Argument 3 in a slightly different way may bring out its dissimilarity to Peirce's view of properties. Armstrong claims that the success of the third Argument depends on the realist's accepting that the following propositions are inconsistent:¹

1. A particular is nothing but the sum of its properties.
2. Two particulars can resemble exactly.
3. The Identity (realist) view of properties is correct.

Armstrong believes that the particularist will accept (1) and (2), and reject (3). Peirce, in his early philosophical writings, accepts (1), (2), and (3). In his later philosophical writings he accepts (2) and (3), and rejects (1). Thus, Argument 3 fails, as did the first two arguments, to describe a view that Peirce was committed to.

Armstrong defines scholastic realism as the doctrine that (1) properties are universal in the mind but particular in the objects in which they are instantiated or (2) properties are more than a particular but less than a universal. He views scholastic realism as a mixture of a variety of conceptual errors and logical mistakes.² Peirce, on the other hand, was sympathetic to the scholastic tradition. He frequently referred to himself

¹ Armstrong 81.

² Armstrong 87.

as a scholastic realist and credited Duns Scotus, more than anyone else, with bringing the word "real" into its proper use (SW 420). Thus, if Armstrong is right about scholastic realism and his description of it is compatible with Peirce's view of the features of individuals, then Peirce's view was particularist to the extent that scholastic realism, as Armstrong defines it, is. Armstrong considers two versions of scholastic realism, the realism of Aquinas and the realism of Scotus.¹

Armstrong starts his examination of scholastic realism with Aquinas. He claims that essences (he describes them roughly as properties) for Aquinas were neither universals nor particulars. Furthermore, he asserts that this view was sometimes "glossed over" by characterizing essences as universal in the mind as concepts, but particular in the object in which they are instantiated. He then attacks this view as a crude mixture of particularism and class nominalism.

While it would be interesting to explore whether or not Peirce also interpreted Aquinas this way, the important question here is whether or not this position, as it is described, was Peirce's view. Fortunately for Peirce, it was not.

¹ Armstrong 87.

First, Peirce believed, as I have already pointed out, that there are features of individuals (which he believed to be generals) and that there are also real possibilities and real actualities. There is nothing other than these three.

Second, while it is true that Peirce believed that the only access we have to the features of individuals is through our conceptions of them, these conceptions, in the final opinion,¹ will contain no arbitrary or accidental elements (W2 469–471). That is, they will correspond to the reality they are intended to represent. Hence, generals will be in the mind, but only in so far as they correspond to what is real. In other words, since these conceptions are tied to and part of the world in the way described, the generals that constitute the object of these conceptions are not just in the mind, they are in the world.

It is plain that this view of reality is inevitably realistic, because general conceptions enter into all judgments, and therefore into true opinions. Consequently, a thing in general is as real as in the concrete (W2 470).

And,

When a thing is in such a relation to the individual mind that mind cognizes it, it is in the mind; and its being so in the mind will not in

¹ This is an allusion to Peirce's account of truth. "The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth...."

the least diminish its external existence... To make a distinction between the true conception of a thing and the thing itself, he [the realist] will say, [is] only to regard one and the same thing from two different points of view; for the immediate object of thought in a true judgment is the reality (W2 471).

Thus, there exists another point of departure from which there is no return. This first version of scholastic realism presented by Armstrong fails to describe a view that Peirce was committed to.

Armstrong attributes the second version of scholastic realism he examines to Duns Scotus. He claims that this brand of realism is the doctrine that "the essence of a thing is more than a particular but less than a universal."¹ This view, like the first version of scholastic realism examined, is not a view that Peirce was committed to.

For Peirce, if one knows the essence of a thing, then one knows that thing. By knowing all of the conceivable experimental phenomena the affirmation of a particular object of one's conception implies, one knows the object (CP 5.412, W3 266). There is nothing hidden in the object that, because of its nature, escapes, in principle, our ability to know it given the right conditions. Even haecceities are known to us through experience.

¹ Armstrong 87.

It [Peirce's theory of reality] will, to be sure, deny that there is any reality which is absolutely incognizable in itself, so that it cannot be taken into the mind (W2 470).

Hence, a thing's essence is not something mysterious that is more than a individual but less than a general. There is no distinction between an individual and its essence. They are the same. It is a mistake to think of an individual as nothing more than the sum of its features and qualitatively individuated in some way. As I have already mentioned in Argument 3, for the later/mature Peirce, it is haecceity that individuates, at least epistemologically, and allows two individuals to be qualitatively identical but numerically distinct. Thus, as with the first version of scholastic realism, this version fails to characterize a position that Peirce was committed to.

In summary, none of the arguments or views presented by Armstrong on behalf of the particularist describe a position that Peirce was committed to. Hence, Peirce was not a particularist given Armstrong's characterization of the doctrine. This, in turn, strengthens the claim that a realist interpretation of Peirce's view of features is warranted.

Now that the question regarding Peirce's alleged particularism has been answered, the objections to the view he actually did hold, what

Gracia calls Eclecticism, can be responded to. Although Gracia examines three different views that he considers eclectic, none of them adequately or even closely approaches Peirce's view. Thus, it is the general objections, the objections that supposedly apply to all forms of Eclecticism, which are focused on.

Gracia levels two general objections at Eclecticism. The first is that in order avoid Realism it must violate the Principle of Acquaintance. The second objection is related to the first. It charges that Eclecticism cannot subject itself to the Principle of Acquaintance without adopting or turning into some form of Realism.¹ According to Peirce's late theory of reality, these two objections, taken together, present a false dilemma. Both the generality of Thirdness and the individuality of Secondness are observed in the phaneron. Thus, there is no violation of the Principle of Acquaintance and no embracing of the universal Realism that does away with the existence of individuals.

Gracia maintains that the extension of "individuality" is the set of all existing things and their features. Peirce would have taken that view as just another form of nominalism. Of course, Gracia would not find this in the least bit disturbing as his view, by his own admission, is nearly

¹ Gracia 94.

indistinguishable from Strong Derivative Nominalism - the view that "the natures that exist as individuated have no unity and being except for the unity and being they have as individual things or as concepts in the mind of some knower."¹

Before moving on to the question concerning the ontological status of individuality for Peirce, it is worthwhile to quickly contrast Peirce's view of universals with Gracia's in order to better understand the differences between the two and why Peirce could not accept, as Gracia does, that the features of individuals are also individuals.

According to Gracia, universals are ontologically neutral with respect to existence. In addition, he claims that they are real but they do not exist.² They are real in the sense that they are not fictitious. This is somewhat similar to Peirce. Like Gracia, he believes that both individuals and generals are real, but only individuals exist. Where they differ is in their view of how generals are manifest in the universe and how they are known.

On Gracia's account, universals do not exist because their existence is not warranted by experience or by the way in which they are

¹ Gracia 83 and 115.

² Gracia 104-112.

defined.¹ For example, nowhere in the world is "human being," the universal, experienced outside of one of its instantiations. Moreover, the definition of "human being" does not entail existence. The traditional definition of "human being," as Gracia informs us, is "rational animal." For Peirce, as mentioned earlier in Chapter 2, a general has no being outside of those individuals in which it has been instantiated. Thus, the definition of a general does involve the notion of existence, albeit not its own. Also, in Peirce's late categories, Thirdness is observed in the phaneron. In this way, Thirdness is given in experience.

Another difference between Gracia and Peirce is that for Peirce generals must have a more robust reality than Gracia is willing to grant them because they are necessary for knowledge and morality. For Gracia they are required for neither. Thus, although Gracia and Peirce agree that generals do not exist, they differ in their views on how they are real and what role they play in reality, experience, cognition, and morality.

So, then, when my window was opened, because of the truth that stuffy air is malsain, a physical effort was brought into existence by the efficiency of a general and non-existent truth. This has a droll sound because it is unfamiliar; but exact analysis is with it and not against it; and it has besides, the immense advantage of not blinding us to great facts – such as that the ideas "justice" and "truth" are, notwithstanding the

¹ This means that we have no reason to believe that universals exist. It is not a reason for the non-existence of universals.

iniquity of the world, the mightiest of the forces that move it. Generality is, indeed, an indispensable ingredient of reality; for mere individual existence or actuality without any regularity whatever is a nullity. Chaos is pure nothing (CP 5.431).

The Ontological Status of Individuality

The third question that a good theory of individuality must answer is, "What is the ontological status of individuality?"¹ Ontology, defined in classical terms, is,

The branch of metaphysical inquiry concerned with the study of existence itself (considered apart from the nature of any existent object). It differentiates between "real existence" and "appearance" and investigates the different ways in which entities belonging to various logical categories (physical objects, numbers, universals, abstractions, etc.) may be said to exist.²

Thus, an answer to this question involves placing individuality into a metaphysical category. Which metaphysical category individuality falls into is determined primarily by the way in which it exists.

Gracia insists that any thorough treatment of the issue of the ontological status of individuality must address two issues. The first issue concerns the ontological characterization of individuality. The second

¹ Gracia 117.

² Flew 255-256.

concerns the relationship of individuality to the rest of the constituents of the individual.¹

Finally, before embarking on this particular project, it is important to remember that this question, like the previous one, is a metaphysical question. This, in part, is what distinguishes it from the question concerning the intension of "individuality."

On Peirce's early theory of individuality, individuality is feature. It is related to the rest of the constituents of the singular, if there are any other constituents, in the same way that any feature relates to any other feature.

As is painfully clear, this account of individuality does not satisfactorily answer either of the questions that it must. The main problem in characterizing individuality as a relation or feature of things is that features and relations are instantiable and, thus, fail to meet the necessary and sufficient condition for individuality. Even though this is a different question in many ways, its answer, like that given to the previous question concerning the extension of "individuality," is restricted by the answer given to the first question.

Another serious problem with the early account of individuality is that it separates the individuality of a thing, extensionally, from the

¹ Gracia 15 and 121.

individual. Thus, if individuality is a relation or a feature, then it must be extensionally distinct from its relata or the thing it is a feature of.¹ Thus, on Peirce's early view, Avo's individuality is extensionally distinct from Avo.

On Peirce's late theory of individuality, individuality is a mode. Individuality for Peirce is the material aspect of Secondness, which is a mode of being, considered as intensionally distinct from haecceity and outside of the semeiotic relation.² Modes, according to Gracia, "are positive determinations over and above the intension of what they modify, determining its state and way of being, but without adding to it a new entity."³ This definition of mode fits in nicely with Peirce's view of modes and, in particular, with his view of Secondness as a mode.

This account of the ontological status of individuality has several advantages. First, it is consistent with the answer given to the first question concerning the intension of "individuality." Since modes are not substances, they do not violate the Principles of Acquaintance or

¹ Gracia 124-125.

² Since, as has been argued above, haecceity is an epistemological notion, it may also be considered extensionally distinct from the individual. Haecceity is best defined as a non-qualitative disposition of certain types of experience. An individual's individuality, among other things, makes possible the experience of haecceity.

³ Gracia 135.

Parsimony. Also, because they are not features or relations, they meet the necessary and sufficient condition for individuality. Of course, this is not the case with all modes, but with the notion of individuality as a mode. Second, almost modes are intensionally distinct from the things they modify, they are not extensionally distinct from them. Thus, individuality as a mode affords individuality an ontological status without bringing with it the problems associated with locating individuality in an entity which is extensionally distinct from the individual. And finally, modes don't have any of the problems associated with other accounts of the ontological status of individuality, especially those problems encountered in explaining how the ontological type selected is related to the individual and its constituents.

Although modes appear to have all these advantages, one may still ask how they are known, especially if they are non-qualitative. According to Gracia, modes are experienced much in the same way that qualities are.¹ The examples Gracia gives are the modus operandi of the Provost of the University of Buffalo and perception as a mode of knowing. In both cases the mode positively determines the thing it is modifying without

1 Gracia 135.

adding any new entity. Moreover, the mode does extend beyond what it modifies. Thus, in knowing the thing modified, we know the mode.

For Peirce, the modes of being are discovered through the observations of phaneroscopy. However, he differs from Gracia in his analysis of the discernment of modes other than the ones associated with individuality. For Peirce, generality, as a mode, is observed as well; so are real possibilities. The question Peirce would ask Gracia at this point in the debate is, "If not through experience, how are universals known?" Gracia has not left himself a good answer to this question. Furthermore, if everything that can be experienced is individual, then how can individuality be separated intensionally or extensionally from the rest of reality?¹

¹ Both Peirce and Gracia pay homage to Scotus for coming up with the first account of individuality that relied on the intensional/extensional distinction.

The Principle of Individuation

The fourth question that a good theory of individuality must answer is, "What is the principle of individuation?"¹ According to Gracia, the principle of individuation is the set of necessary and sufficient conditions that must obtain for a universal to become an individual. In slightly different language, the principle of individuation is the set of necessary and sufficient conditions for the instantiation of a universal. The treatment of this topic in this section does away with the traditional notions of principles and causes in favor of necessary and sufficient conditions. This is done in order to eliminate confusion. However, great care is taken to maintain the distinction between the questions concerning the principle of individuation and the intension of "individuality."

Again, as with the previous two questions, this question is metaphysical. Although there might be a temptation to treat it in the same way that the question concerning the intension of "individuality" was treated, that should be avoided because that question was logical. As such its focus is different.

According to Gracia, the metaphysical investigation of the principle of individuation involves two key issues. The first issue involves the

¹ Gracia 141.

identification of the principle. The second issue is whether the principle identified is the same for all individuals.¹ Gracia also warns investigators not to let the focus shift from a metaphysical inquiry to an epistemological one.²

The way the project of this section has been stated is in some conflict with Peirce's conception of instantiation and how such a thing might take place. Peirce would not have been comfortable with the way the question concerning the principle of individuation has been phrased. Even on Peirce's early theory of individuality, universals - generals in Peirce's language - cannot become individuals. That is, genuine n -place relations, where $n \geq 2$, cannot be reduced to genuine dyadic or monadic relations. Moreover, the material aspect of one category can not be reduced to the material aspect of another.

On Peirce's early theory of individuality, the principle of individuation is the bundle of features that constitutes the individual. This type of theory is known as a bundle theory of individuation. Thus, the features that an individual possesses constitutes the set of necessary and sufficient conditions of its individuation. Given that most things do not

¹ Gracia 141 and 166.

² Gracia 19-20.

have the same sets of features, the principle of individuation cannot be the same for all individuals. However, the genuine principle could still be the same for all individuals. Of course, that this early account leads to some incompatible conclusions is not such a great surprise, given that on Peirce's early theory of individuality there really are no individuals.

Bundle theories of individuation such as the one that follows from Peirce's early theory of individuality face two severe problems that, given the irreducibility constraint imposed by Peirce's categories, are inescapable. The first is that they confuse the problem of individuation with the problem of discernibility. While bundle theories may be good for discerning individuals in certain contexts, they are no good at specifying the principle of individuation. This is because the two questions are different in character. One is a metaphysical question and the other, the one concerned with discernibility, is epistemological. The second problem involves a confusion concerning the intension of "individuality."¹ The selection or adoption of a bundle theory of individuation makes sense only if individuality is taken as distinction or difference. However, as has already been shown, these are epistemological in nature and not metaphysical. Furthermore, such theories are inconsistent with the

¹ Gracia 150.

answers given to the previous questions. As with the answers to the previous questions, the answer to this question is constrained by the answers given to previous questions.

What should be taken as the principle of individuation on Peirce's late theory of individuality is not clear given the constraints that Gracia has put on an acceptable answer. Murphey, for example, believes that haecceity is Peirce's principle of individuation.¹ However, there is good reason to question whether haecceity should be accepted as Peirce's principle of individuation.

The passages that Murphey cites in support of his claim are CP 3.434 and .3.460. In both these passages Peirce defines and characterizes haecceity in terms of its role in the semeiotic process. Haecceity is a kind of experience, although it is not a concept (6.318). Indeed, it is determined by experience. As a kind of experience, haecceity is epistemologized. Its dependency on experience renders it useless for determining the metaphysical principle of individuation because individuals can exist independently of any experience. Thus, Peirce's principle of individuation must be looked for elsewhere.

¹ Murphey 309.

The leading candidate for Peirce's principle of individuation is existence. For Peirce, existence is intensionally but not extensionally distinct from individuality (CP 3.613). Thus, it appears that existence is a necessary and sufficient condition for non-instantiability. As such, existence is the principle of individuation on Peirce's late theory of individuality.

The principle identified, the next question to ask is, "Is the principle the same for all individuals?" On Peirce's late theory of individuality, existence is the principle of individuation for all individuals (CP 3.613 and 8.195)

Gracia describes three objections to the Existential Theory of Individuation, which both he and Peirce defend. The first objection is that individuality extends to possible beings as well. Hence, existence cannot be the principle of individuation.¹ This objection does not present a problem for Peirce because possibility falls within the domain of Firstness.

Individuality falls within the domain of Secondness. Given that the categories are irreducible, there is no way that a possibility can possess individuality.

¹ Gracia 172.

The second objection is that it is possible for an individual to cease existing at one time and then begin existing at a later time. If this is possible, then existence cannot be the principle of individuation.¹ Peirce would respond to this objection much in the same way that Gracia does. Time is a feature or relation for Peirce. As such, it is neither necessary nor sufficient for the realization of a general or the existence of an individual. As Gracia puts it, a temporal interruption in existence does not imply a difference in existence. Moreover, as Gracia also points out,² this objection appears to assume that existence is a feature of individuals. This is something that neither Peirce nor Gracia can accept.

The last objection is that the Existential Theory of Individuation entails "that existence is what instantiates a universal into a noninstantiable instance."³ If this is true, then existence cannot be the principle of individuation. Rather, it becomes a principle of instantiation.

This objection poses no threat to Peirce or Gracia. As Gracia correctly points out, it confuses individuality and difference. The issue concerning individuality involves the necessary and sufficient conditions for the instantiation of a general. The issue concerning differences

1 Gracia 175.

2 Gracia 176.

3 Gracia 176.

involves determining which relations and features differentiate individuals from one another. For both Peirce and Gracia, as mentioned above, there is nothing incoherent about the conception of two identical yet numerically distinct individuals existing at the same time.

Thus, it is clear that Peirce's late theory of individuality has stood the tests of logical and metaphysical fire. It has also been shown, albeit implicitly, that Peirce's early theory of individuality is not really inconsistent, metaphysically speaking, with Peirce's late theory of individuality. The changes can be viewed as part of a natural evolutionary process in which a simple and somewhat vague phenomenon becomes more complex as well as more precise. Now it is time to move on to the epistemological and semantic portions of this investigation. As was stated at the beginning of this dissertation, its primary focus is the metaphysical account of individuality that is given in Peirce's later theory. As such, the sections that follow are more suggestive and less detailed than the previous sections.

The Discernibility of Individuals

The fifth question that a good theory of individuality must ask is, "How are individuals discernible?" Or, in Gracia's own words, "What are

the criteria that serve to identify individuals as such."¹ Unlike the previous four questions, this question is epistemological. As such, the answer to this question must provide the necessary and sufficient conditions "on the bases of which minds may know something as individual."²

Before moving on to the analysis of Peirce's theory of individuality, two objections to the discernibility portion of this project must be handled.

The first objection is that the explanation of the problem of individual discernibility assumes that it is distinct from the problem of individuation. As Gracia puts the objection, "while lack of discernment does not entail lack of distinction, lack of discernibility does."³ Thus, a slogan for this objection could be something like. "No individuality (or distinction) without discernibility."

Gracia's response to this objection is that it relies on a misguided view of discernibility. On this misguided view, discernibility is an intrinsic feature of individuals. However, discernibility is a relational feature which depends on the existence of a knower in addition to the existence of the individual discerned.⁴

1 Gracia 21 and 179.

2 Gracia 21.

3 Gracia 23.

4 Gracia 23.

The second objection is that dealing with the epistemological issues of individuality in an investigation that is supposed to be metaphysical, contributes nothing at all to the understanding of individuality itself.¹ Furthermore, one might object further that this approach also contributes to the confusion of metaphysical and epistemological understandings of individuality. Gracia's response to this second objection has two parts. First, knowing how individuals are discerned or discernible does tell us something about individuals. Second, as long as the metaphysical and epistemological issues are kept separate and not reduced to each other, this portion of the investigation can only enrich the understanding of individuality.

On Peirce's early theory of individuality, an individual, or what is taken as one, is discernible only if it is contrasted by a mind with another individual (CW 2.53). Since there are only different kinds of generals on Peirce's early theory of individuality, the only theory of individuality that makes sense is the Bundle Theory of Individual Substance Discernibility. This is the view that the bundle of features that constitutes an individual substance is the basis of individual substance discernibility among

¹ Gracia 23-24.

individual substances.¹ As Gracia indicates, the only difference between this theory and the Bundle Theory of Individuation are the conditions that they satisfy.² As mentioned above, the Bundle Theory of Individuation attempts to satisfy the necessary and sufficient conditions for a universal to become an individual. The Bundle Theory of Individual Substance Discernibility satisfies, or is supposed to satisfy, the necessary and sufficient conditions on the basis of which minds may know something as individual.

There are two serious problems with this type of theory.³ The first is that the complete bundle of features of a thing is never known. If extrinsic and possible features are included, then it is possible that this is true in principle. For example, Avo has many features. Just his intrinsic features, features that belong to him independently of any n -place relation (where $n \geq 1$) in which Avo is one of the relata and excluding certain formulations of the identity relation, constitute a potentially infinite set of features. Some of his features include his colors, height, weight, fur length, and all of his micro-sized and macro-sized anatomical and physiological features as well as the relations that exist between them.

¹ Gracia 191.

² Gracia 191.

³ Gracia 191-192.

The second problem is that, given all of the analysis of features above, it does not appear that features are the types of things that can function as distinguishers. It is always possible that two or more individuals share all the same set of features. Imagine, for example, Max Black's universe which contains nothing but two identical spheres. In that universe it is certainly not the features of the spheres that make one discernible from the other.¹

On Peirce's late theory of individuality, an individual is discernible through its reactions with other individuals. It is through these reactive experiences that haecceity is manifested. Haecceity is non-qualitative. As such it is not reducible to any feature or set of features. Thus, this account appears to be more satisfactory than the account given for the early theory of individuality because it is an individual's features in conjunction with its haecceity that make individual substance discernibility possible. However, there is some question as to whether one can be sure that they are having a genuine experience of an haecceity or whether they are hallucinating the haecceity (CP 5.503 and 6.349).² Given that haecceity is considered a kind of experience and determined by

1 Max Black, "The Identity of Indiscernibles," *Mind*, Volume LXI, Number 242, April (1952): 153-164.

2 Murphey 310 -311.

experience, this seems plausible. Humans often believe they are having a genuine experience of haecceity, while dreaming or in a drug-induced state, only to find out they were mistaken later on. Thus, while Peirce's late theory of individuality has more going for it than his early theory, it still has some deficiencies that it does not appear able to overcome. This, however, does not really hinder the metaphysical project. What it does do is show that there are certain limits to the epistemological project associated with individuality. Of course, what has been said so far does not exclude the possibility that, under the right set of circumstances, an individual may be discernible through its features. That is to say, an individual's features may be a sufficient condition for discernibility under the right conditions, but, even in such cases, they do not constitute a necessary condition.

Reference to Individuals

The final question that a good theory of individuality must answer is, "How are individuals referred to?"¹ This question, unlike any of the previous questions, is semantic. The issue of reference to individuals, regardless of the way in which it is framed, must address two issues. The first involves determining which signs can be used to refer to individuals.

¹ Gracia 21.

The second concerns a characterization of how those signs refer to individuals.

Since the question of reference necessarily involves an excursion into Peirce's theory of signs, the development of the categories and the revisions made to them in 1885 are crucial to distinguishing between Peirce's early and late theories of individuality. Gracia himself points out the importance a theory of semeiotics plays in this type of investigation.

What is important to keep in mind is that, in accordance with the examples given, referring is an act in which a symbol is used to represent an individual. Thus, strictly speaking, only beings capable of using symbols can refer, although often one also speaks about the symbols used in references themselves referring.¹

On Peirce's early theory of individuality only generals exist. Moreover, the categories are defined solely in terms of their formal aspects. For these reasons, the only vehicles available for referring to individuals are definite descriptions. Gracia contrasts definite descriptions with indefinite descriptions and proper names.

A description is a phrase that specifies certain features of something. An indefinite description is supposed to be as it were open-ended, without limits and thus general.... On the other hand, definite descriptions are supposed to demarcate, to set limits, so that the description would fit only one thing.... The distinction between definite descriptions and proper names is less difficult than the distinction between definite and indefinite descriptions, although those who hold that proper names have meaning will

¹ Gracia 202.

dispute the view.¹

As Gracia correctly points out, while definite descriptions can function adequately in certain contexts for reference, they fail miserably in others.² Again, as with answers given to previous questions, the main handicap faced by Peirce's early theory of individuality is that it entails the non-existence of fully determinate individuals. Thus, no robust theory concerning the reference to individuals can be applied on his early theory.

On Peirce's late theory of individuality, in addition to definite descriptions and because of the revisions to the categories (especially with respect to Secondness), Peirce also has available to him proper names and indexicals. With these he is able to refer directly to individuals. While there is some controversy over the nature and function of proper names and indexicals, Peirce's semeiotic is capable of accounting for any type of sign that might be agreed to as the legitimate way to refer to individuals.

Gracia goes over four different accounts of proper names. The first view is the Reference View of Proper Names. On this view, proper names do not have any connotation, they only have denotation.³ The second

¹ Gracia 227-228.

² Gracia 237.

³ Gracia 204.

view is the **Descriptivist View of Proper Names**. On this view proper names have a connotation as well as a denotation.¹ The third account is the **Causal View of Proper Names**. On this view proper names do not have a connotation, but they are initially fixed through a description or ostension.² The final view is the **Threefold View of Proper Names**. On this view, the one that Gracia defends, each of the three previous theories serves a certain function, answers a certain question, and succeeds in explaining reference to individuals within a certain context and limits.³

Peirce, like Gracia, adopted and defended the **Threefold View of Proper Names**, although for different reasons. The central principle of the **Threefold View** is that all three theories have something important to contribute to a comprehensive theory of proper names in which the strengths of each theory are maximized and the weaknesses minimized.

As with the rest of the universe, on Peirce's account of the function and nature of proper names, they are continually evolving.

A Proper name, when one meets 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

1 Gracia 209.

2 Gracia 211.

3 Gracia 217.

it as an Icon of an Index of the Individual named (CP 2.329).

Each of the three theories incorporated by the Threefold View, slightly modified, corresponds to one of the three functions of a sign. As Pape claims,

In this important passage one of the most powerful tools of the theory of signs, the threefold distinction of the way in which a sign may be related to its object, Iconically, Indexically, and Symbolically, are put to use.¹

The Index corresponds to the Reference Theory. The Icon corresponds to the Descriptivist Theory. The Symbol corresponds to the Causal Theory. The threefold view brings them all together.

Conclusion

It has been the task of this dissertation to show that Peirce's theory of individuality is both consistent and plausible. This was accomplished by carefully going through his categories, taking inventory of the metaphysical entities that they introduced, and assessing the theory of individuality that issued from them, using Gracia's method. In the final

1 Helmut Pape, "Peirce and Russell on Proper Names." *Transactions of the Charles S. Peirce Society*, Fall, Volume XVIII, Number 4 (1982): 339-348.

analysis, Peirce's Late Theory of Individuality is consistent, plausible, and probably the best theory available.

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