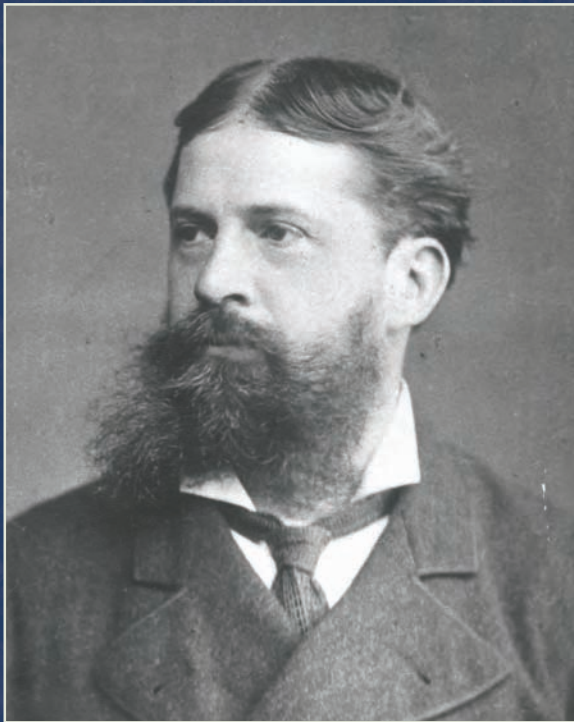


# FROM REALISM TO “REALICISM”

*The Metaphysics of Charles Sanders Peirce*



Rosa Maria Perez-Teran Mayorga



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A wholly owned subsidiary of The Rowman & Littlefield Publishing Group, Inc.  
4501 Forbes Boulevard, Suite 200  
Lanham, MD 20706

Estover Road  
Plymouth PL6 7PY  
United Kingdom

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First paperback edition 2009

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British Library Cataloguing in Publication Information Available

**Library of Congress Cataloging-in-Publication Data**

The hardback edition of this book was previously cataloged by the Library of Congress as follows:

Mayorga, Rosa Maria Perez-Teran, 1954—

From realism to “realicism” : the metaphysics of Charles Sanders Peirce / Rosa Maria Perez-Teran Mayorga.

p. cm.

Includes bibliographical references (p. ) and index.

1. Peirce, Charles S. (Charles Sanders), 1839–1914. 2. Metaphysics. I. Title.

B945.P44M39 2007

110.92—dc22

2006034407

ISBN-13: 978-0-7391-1557-2 (cloth : alk. paper)

ISBN-10: 0-7319-1557-X (cloth : alk. paper)

ISBN-13: 978-0-7391-1558-9 (pbk. : alk. paper)

ISBN-10: 0-7391-1558-8 (pbk. : alk. paper)

eISBN-13: 978-0-7391-3257-9

eISBN-10: 0-7391-3257-1

Printed in the United States of America



The paper used in this publication meets the minimum requirements of American National Standard for Information Sciences—Permanence of Paper for Printed Library Materials, ANSI/NISO Z39.48–1992.

# **Dedication**

*To my beloved family, friends, and mentors*





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## Preface

The contemporary relevance of much of the work of Charles S. Peirce, the founder of Pragmatism, is readily acknowledged by many, both in and outside philosophy departments. Scholars in such diverse fields as linguistics, cognitive science, computer science (especially artificial intelligence), sociology, architecture, business and management, criminology, topology, to name a few, have revolutionized their disciplines by applying some of Peirce's ideas, especially his logic, semiotics, and the pragmatic maxim.<sup>1</sup> Few, however, including his fellow philosophers, take seriously his metaphysics: it is either dismissed as a curious oddity and extraneous to his really "important" work, or it is ignored altogether. One reason for this oversight is probably due to Peirce's own comments on the subject, referring to metaphysics as a "puny rickety and scrofulous science."<sup>2</sup> But a closer reading of Peirce reveals that his unfavorable comments are directed to what he considered to be the actual "backward state" of metaphysics, the result of the wrongheaded motives and the mistaken methods of many of those who engaged in it. However, instead of "jeering at metaphysics,"<sup>3</sup> like many are wont to do, Peirce proposes what today would be called a "reconstruction," from an "ontological" or "religious" metaphysics<sup>4</sup> to a "scientific" or "cosmogenic" one. Contrary to many of his contemporaries (and indeed to many present-day philosophers) Peirce was convinced that metaphysics is not just of primary importance to philosophy, but that it serves as the basis of all sciences as well. Central to this view is Peirce's repeated insistence on the realism of the medieval schoolmen as the key to understanding his own system.

Fewer, still, have undertaken the task of turning back to the past in order to understand Peirce's self-proclaimed affinity with scholastic philosophy. But while Peirce's system cannot be fully appreciated in isolation from his metaphysics, his metaphysics cannot be understood if segregated from Duns Scotus's realism. It is the purpose of this book to contribute to an understanding of Peirce's metaphysics, and consequently to a better understanding of his entire system, in the context

of his Scotistic realism. In this goal, I follow the path first marked by John Boler in his 1963 seminal work *Charles Peirce and Scholastic Realism*.

My fascination with Peirce's Scotistic realism and its relevance to the rest of his philosophy led to my doctoral dissertation, and has been the central focus of my research, as evidenced by this work. I do not presume to offer, however, any new contribution to the problem of universals. My purpose in these chapters is to provide the necessary background for an understanding of scholastic realism, which, I claim, is essential for a genuine understanding of Peirce. While no longer controversial, this claim is nevertheless underrepresented in the literature; this work is meant to add to the work of those few who have undertaken the task of exploring this scholastic connection. This work is unlike previous efforts in the sense that I begin by tracing the problem of universals since its beginnings, (Chapter One) through Scotus's solution (Chapter Two), and then its manifestation in Peirce (Chapter Three). Though not an exhaustive account of all of Peirce's metaphysics (that would involve more than one volume!), it is my humble expectation, however, that this work will provide new insights for those with an interest in Peirce, be they philosophers (or students of philosophy), scholars in other fields, or those who simply want to know more about America's greatest philosopher.

# Introduction

In *Charles Peirce: From Pragmatism to Pragmaticism*, Karl Otto Apel traces the development of Peirce's famous doctrine from its infancy in Peirce's early college years to its later mature conception dubbed by Peirce himself as "pragmaticism" (in order to mark the difference with the other misguided "pragmatisms" that proliferated as the result of misunderstanding his own). In a parallel way, I propose to trace the development of Peirce's realism from its early roots in scholastic realism, to its eventual revision and consequent rift with Scotus's position, which I call Peirce's "realicism." The place to start in this journey is with the origin of the problem of universals.

The problem of universals, that is, the problem of determining what kind of ontological status universals have, has been a source of fascination and frustration for philosophers for more than two thousand years. What are universals? Simply put, they are the general concepts (or ideas or words) we develop in order to make sense of the world around us. If we want to claim to have knowledge of the world as it truly is, we need to determine exactly what kinds of things our concepts are and the connection they have with the world at large. The problem of universals deals with trying to determine the nature of these concepts, and consequently, the nature of their connection with the world.

By the 1300s, the problem had become a central one for philosophy. This was the time of John Duns Scotus, a Franciscan monk from Scotland, otherwise known as "The Subtle Doctor" because of the subtlety and profundity of his work. Duns Scotus was a proponent of moderate, or scholastic realism, as the position came to be called, which claimed that universals are somehow real. The opposing stance was nominalism, which said that universals are concepts or names (*nomina* in Latin, hence the term), or words, and therefore not real. For a while, the realist position was the more popular, but for many reasons,<sup>5</sup> the subsequent rejection of dogmatic scholastic ideas led to the acceptance of the much simpler doctrine of

nominalism, associated primarily with William of Ockham.<sup>6</sup> Scotus's (and his followers') abstruse and recondite style of writing did not help their case much either. Eventually, the realistic position came into such disfavor that the term originally used to simply designate the followers of Duns Scotus, the "dunces," as they were called, eventually came to acquire the pejorative meaning it has today.

Fast forward to the end of the nineteenth century. Charles Sanders Peirce, an American scientist and philosopher, revives the problem by claiming that its resolution is fundamental not only for philosophy, but for science as well.

The problem of universals, as will be seen in the first part, is a challenging one in itself. I will trace it, beginning with its Greek roots, through several modifications, up to Scotus's time. The solutions to the problem which Scotus and Peirce provide are no less challenging. As one would expect from someone called "the Subtle Doctor," Scotus's version involves many subtle distinctions. It is one of these distinctions, the *distinctio formalis*, or formal distinction, which allows Scotus to claim that universals are real (he is a scholastic *real* ist). Scotus writes in the difficult scholastic style of the time, and, of course, in Latin. He wrote prodigiously during a very short lifespan, and only a small part of his many works have been translated. He was greatly admired during his lifetime for his intellectual caliber, but not appreciated (to say the least), even ridiculed, by subsequent generations who found his style and distinctions too difficult to understand.<sup>7</sup>

But if Scotus's writings are dense and complex, Peirce's writings do not fall far behind. Although he writes in English, and in a more contemporary style, nevertheless Peirce too is also quite difficult to understand. It is no surprise that he has been misconstrued by many commentators. I believe there are several reasons for this,<sup>8</sup> but the main one, I am convinced, is that very few of them have actually understood Scotus's position, a necessary condition, I will argue, if one wants to understand Peirce's own.

Peirce had a rather tragic life (both personally and professionally), living his last years in dire poverty and ill health; but he never lost his passion for philosophy. He was an obsessive writer, working and reworking his theories, rarely satisfied with the results, and sometimes coming to seemingly contradictory conclusions. There are thousands of pages of manuscripts, ranging from scribbled notes to published papers, enough to fill many volumes, all of which makes the task of interpreting his position even more challenging.<sup>9</sup> Although Peirce declares, relatively early in his career, that, as to that matter of nominalism and realism, it was Scotus, and not Ockham, who got it right,<sup>10</sup> eventually he came to the conclusion that Scotus's moderate realism was not realist enough, and a more extreme version was needed. But why, in the end, did Peirce classify Scotus's realism as "halting" and in what sense did Peirce go "much further" in the direction of scholastic realism? In what way was Scotus's realism "qualified" while Peirce's was not? Why did Scotus "incline too much towards nominalism?" Peirce only alluded to the reasons for these claims, and there have been various (some misguided, I



will claim) guesses as to why he came to disapprove ultimately of Scotus's position. As I hope to show, answers to these questions will serve to clarify some of Peirce's theories, which may in turn resolve some of the polemic regarding the coherence of his system.

An investigation of Scotistic and Peircean scholastic realism will involve not only Scotus's and Peirce's take on the issue, but also what makes scholastic realism scholastic, as well as realistic, why Scotus's theory falls under that category, whether Peirce's, if in fact it is scholastic realism, is truly of an extreme kind, as he was fond of saying, and in what sense it is different from Scotus's scholastic realism. Since Peirce's system is a comprehensive one, we will need to look at his definition of the real, his categories, his synechism, his idealism, and his "pragmaticism,"<sup>11</sup> which are all related to his realism.<sup>12</sup>

I will argue that Peirce was a scholastic realist in several senses: that he recognized that "real" and "existent" are not synonymous, but that he was not a scholastic realist in a more important sense: his basis for the real was different from Scotus's. To do this, I will go into the history of philosophy in order to trace the roots of the problem of universals, and of scholastic realism, the medieval response to it. This means covering some of Plato, Aristotle, and others. This will comprise the first chapter. I will then discuss Scotus's theory, which involves universals, the common nature, real less-than-numerical unity, the individuating difference, and the formal distinction, in the second chapter. I will then deal with Peirce and his notion of the real, his categories, his idealism, and his pragmaticism in chapter three. I do not pretend to solve the problem of universals. My aim is to provide a better understanding of Peirce's theory and its relationship to Scotus's.

For Plato, I will be using B. Jowett's translations of the *Philebus* and the *Parmenides*. For Aristotle, I will be using David Bostock's and J. L. Ackrill's translation of the *Metaphysics* and W. D. Ross's translations of the *Categories*, *Posterior Analytics*, and *De Interpretatione*. I will be using Martin Tweedale's translations of Alexander of Aphrodisias's *De Anima* and *Quaestiones* and of Avicenna's *Metaphysica* and the *Logica*. For Porphyry, I will be using P. V. Spade's translations of the *Isagoge* and of the second *Commentaries* of Boethius.<sup>13</sup>

For Scotus, I will be using translations by Martin Tweedale and Allan Wolter of the *Lectura, Ordinatio, Reportata Parisiensis*,<sup>14</sup> *Quaestiones super librum Metaphysicorum*, *Quodlibetal Questions*, and Timothy Noone's translation of the "Utrum materia sit principium individuationis."

For Peirce, I will be using the *Collected Papers of Charles Peirce, The Writings of Charles Peirce*, and "The Microfilm Edition of the Charles S. Peirce Papers in the Houghton Library at Harvard University," a microfilm of his manuscripts.<sup>15</sup>



## *Chapter 1*

# **The Problem of Universals: Back to the Past**

The current explanations of the realist-nominalist controversy are equally false and unintelligible . . . they are not based on a study of the authors. “Few, very few, for a hundred years past . . . have broken the repose of the immense works of the schoolmen.” (CP 8.12, 1871)

But we shall never make so much as a good beginning of comprehending scholasticism until the whole has been systematically explored and digested. (CP 6.312, 1893)

One of the reasons why scholastic philosophy is not a popular, or even frequent, item in the philosophy curriculum is that it employs an extensive technical vocabulary, as well as a corresponding plethora of concepts and distinctions.<sup>16</sup> Many of these were invented by the schoolmen themselves (Scotus himself is probably responsible for a couple), but many others were inherited from predecessors. As often happens with inherited concepts, new generations add new layers, sometimes enriching, sometimes obscuring, other times totally changing the original concept. Many times these notions have crossed the boundaries of philosophical parlance and have made themselves at home in our everyday speech.<sup>17</sup> Any responsible scholar, of course, is aware of this phenomenon, and tries to avoid, as much as possible, anachronisms in interpretations and commentaries on others’ works. Peirce became increasingly aware of this through the course of his studies, which began with Kant, the empiricists, Aristotle, and then the scholastics.<sup>18</sup> We can even trace this increasing awareness, and as a result, modification in his theory, as he acquaints himself more with his predecessors.<sup>19</sup> Indeed, I too have gone through this process (and I am sure it is still ongoing).

If I was going to comment on Peirce’s Scotistic realism, it was obvious I had to go back to Scotus and understand his theory before I could comprehend Peirce’s (something, I have already mentioned, not all commentators bother doing). But as if these two tasks were not formidable enough in themselves, I soon realized that in order to understand Scotus I had to go further back still to make sure I was interpreting his notions correctly. And as you can probably imagine,

the same thing happened with the next philosopher in line. Happily, this regress was not infinite, but eventually had an end. The end, or perhaps I should say the beginning, was, of course, Plato.

This is why this study begins with a bit of history of philosophy.<sup>20</sup> I hope that a lot of the jargon, at least, will be a bit more comprehensible as a result of this endeavor. However, I expect to achieve more than that: a clarification of the relationship between Scotus's and Peirce's universal realism. But before we embark on this journey back in time, I want to clarify what is at issue in the problem of universals.

### **The Name and the Rose: Nominalism vs. Realism**

Stat rosa pristina nomine, Nomina nuda tenemus. (Bernard of Morlay, *De contemptu mundi*)<sup>21</sup>

While the fame of the early rose endures, We retain only its name. (translation of above)<sup>22</sup>

What is in a name? That which we call a rose, By any other name would smell as sweet. (Shakespeare, "Romeo and Juliet," act.2, sc.2, 1.43)

I have chosen these two verses because they seem to me to express, in a poetic way, the issue of nominalism and realism about universals. I associate the first with nominalism, for it expresses the sentiment that all we have are names, or words.<sup>23</sup> The second claims that names themselves do not matter and do not affect the nature of the substance itself. I associate the second with realism, for it assumes that there is one nature, that of "roseness," which persists and is real, and which provokes the same reaction, no matter what it is called.

What kinds of things are natures? What kinds of things are names? What is this relationship between words or concepts or names and natures or substances? This is the problem of universals. Let me illustrate.

How can a word or name have meaning? Take the word "rose,"<sup>24</sup> for example. It refers to a kind of plant, specifically, a flower, with a pleasant fragrance. We all know what the word means, and we all use that same word to refer not only to all those examples of that kind of plant or flower we have seen and smelled, but to all other examples, even those we have not experienced (or ever will). So if I ask, "I wonder if there are more rose gardens in Virginia than in Florida," I have asked a meaningful question, and it has an answer, even if I in particular can't find out. But the meaning of the question, and its answer, depend on the fact that when I use the word "rose," it refers to every example of the flower in the world, and throughout the past and the future. The word "rose" can be used to ask such a question only because it reaches out, beyond all my experience to every sample of a certain kind of thing.

But how does the word do that? If a word is just a sound or some sort of a written symbol, how can it reach out across time? How can you and I, who may have never met, and who have encountered different samples of roses, use the word in the same way? If we both use the word to ask the question about Virginia and Florida, it is the same question, with the same answer. Furthermore, a speaker of Spanish can ask the same question, using the Spanish word, "rosa," with the same meaning. Now the obvious answer is that behind the word<sup>25</sup> there is something else: a concept or idea or thought, which somehow reaches out to all the roses in the universe. But this raises other problems.

First, what kind of a thing is this concept? Is it in my mind, or is it something outside my mind that I somehow "tie" into? It would seem to be something that you and I and a speaker of Spanish all "tie" into, in order to mean the same thing by our words for roses. But how, with our very different experiences, do we do that? Isn't this just as hard to explain as our all being able to refer to the same vast amount of things by our use of the word? It seems there is as much of a problem about how the word means the idea or concept as there was before about how the word means the plant or substance.

But there's also a problem about how this idea or concept is related to all the samples of roses. What kind of thing is it that it can have this exclusive connection with a rose and nothing else? What kind of thing is this nature of "roseness"? But now we've added to the problem. In trying to explain the relation between the word "rose" and the rose by interposing between them the idea or concept of roseness, we've just created the further need to explain the relations between the idea and the thing.<sup>26</sup>

One difficulty seems to be that individual sounds and examples are involved in each person's use of a word,<sup>27</sup> but the word applies to something universal, or general.<sup>28</sup> How can anything as particular as the sound I make when I say "rose" mean something so general that I can use it to say, "I bet people will still be growing roses three hundred years from now?"

One explanation would be that the universal element is provided by something we all have in our minds when we use the word. But what do we all have in our minds? Is it just the word? Or is it an image of some sort in my mind, perhaps of a bush, or a bouquet, or a painting? Still, this will not help explain the generality of the meaning of the word, because any such image will be a particular image, and how does that encompass all actual and possible examples of roses? Also, even if I have a particular image in my mind when I use the word "rose," every other person will probably have a different picture; yet that does not prevent us all from using the word with apparently the same meaning.

Now some people may try to explain this by saying that language is a social phenomenon, that each person doesn't make it up for himself, that we somehow connect into a language used by millions when we first learn the language as

children.<sup>29</sup> But it would still have to be explained how my use of the word gets its meaning from all those other uses.

Let me complicate the picture a bit further.<sup>30</sup> Suppose I have a rose garden, and I decide to give a different name to each item. The sweetheart rose is Jonathan, the next one down the stem is Jennifer, and the other two unopened buds are Harry and Sally. Let's say I not only do this for every flower, but for every leaf, every thorn, every snail, every bee, indeed, to every particular thing in my environment, I give a different name. Could I have knowledge of roses, leaves, snails, etc.? How could I? If every particular thing is considered in its "particularity" only, there can be no talk of roses, no science of horticulture, for there is no name "rose" that will represent all these instances, only a Harry, a Sally, a Jonathan, and so on, *ad infinitum*. So the problem of the meaning of words is tied to whether we can have any knowledge at all of the world. There is a metaphysical, or ontological concern, as well as an epistemological one, for it seems that even though the things we encounter in the world are all particular roses, chairs, cats, etc., in order to make any knowledge claims about them, we have to think in general terms, that is, in terms of universals.

This then comprises the problem of universals, to which nominalism and realism were the rival solutions. Now I need to say something about the different kinds of realism and the different kinds of nominalism.

The term "realism" has been used since early on in the history of philosophy. As sometimes happens when something has been around for a long time, it has been used in many different ways by many different people, and as a result, has acquired several different meanings.<sup>31</sup> "Realism" is no exception to this phenomenon. The term has at least two broad meanings, and several subcategories. In the older, or classical-medieval sense, it refers to a metaphysical theory regarding the ontological status of universals.<sup>32</sup> In this sense, it is opposed to nominalism, the doctrine that claims that since only individuals exist and are real, therefore universals do not exist and are not real. In modern philosophy, it is usually associated with an epistemological-metaphysical theory having to do with the view that material objects exist independently of our knowledge or consciousness of them. In this sense, it is opposed to idealism, which claims that all things are dependent on the mind, or are, to a certain extent, mental. Since I am concerned with scholastic realism, I will be dealing with realism mostly in the first sense. However, at some point, towards the latter part of the dissertation, I will be saying something about idealism, especially in regard to Peirce, which may in turn necessitate some comments on the second sense of realism.

The ancient Greeks and the medievals,<sup>33</sup> for the most part, shared the realist view that not only particulars (such as this man and this horse) but also universals (such as the species man and the species horse), are in some sense real. The different shades of realism came about as a result of answering the following questions:

- What are universals?
- In what sense are universals real (do they exist?)<sup>34</sup>
- How are universals related to particulars?

As we will see below, there are several possible answers. Plato's kind of realism posited universals as unchanging, timeless entities, or Forms, which exist in a different realm from the spatio-temporal one in which the everyday world of particulars exist. Since they are separate from particulars, their relationship is one of "participation." This kind of universal realism is sometimes known as "transcendent," for since they are separate, universals could possibly exist without any particular instantiation of them. Aristotle's kind of realism is sometimes called "immanent" realism, for he supposed universals to have some basis in particulars (he did not make clear exactly how). They do not have a separate existence in his view. His definition of a universal is "one thing predicated of many."<sup>35</sup> Scholastic realism, which emerged, as will be seen later, as a result of incorporating Aristotle's theory into Christian theology,<sup>36</sup> is usually called "moderate" realism because, even though it posits the reality of universals, it does not go to the Platonic extreme of claiming that theirs is a separate, and superior "existence" to the being of particulars. But, as we will see, there was some variety as to the way the three questions above were answered.

The other major position on universals, nominalism, was propounded by Abelard, Roscellin, and William of Ockham, to name a few. Nominalism is the general view that universals as such do not exist. Rather, (at least in what is thought as Roscellin's version) it claims that the classifying function of supposed universals is really served by words, or names (*nomina*; hence, *nominalism*). A third alternative which is sometimes spoken of in reference to the problem of universals, conceptualism, is usually considered a version of nominalism, for it too denies the existence of universals.<sup>37</sup> Conceptualism holds that the classification of particulars is provided by particular concepts, or mental representations, or ideas. It also considers the postulation of universals as some sort of real entities as unnecessary. Ockham seems to hold some sort of variation of this view, for he does admit that we have concepts, yet does not grant them the status of real things.<sup>38</sup> However, he considered himself, and is usually classified as, a nominalist.

While still on the subject of "kinds" of nominalisms I should add that Peirce uses the term in a very *sui generis* way. As discussed in the third chapter, in his later writings, Peirce reserves the term for those philosophies (and philosophers) of which he disapproves.

Now we can go back to the beginning of the problem of universals.

### Socrates and Plato: The Beginning<sup>39</sup>

Socrates: The principle which has just turned up, which is a marvel of nature . . . [and] about which all men are always in difficulty . . . [is] that one should be

many or many one . . . and he who affirms either is very open to attack . . . [For] when the assertion is made that man is one, or ox is one, or beauty one, or the good one, then the interest which attaches to these and similar unities and the attempt which is made to divide them gives birth to a controversy . . . for how can one and the same thing be at the same time in one and in many things? (Plato, *Philebus* 14c10-15a11)<sup>40</sup>

The problem of universals can be traced back at least to Socrates (c.470-399 B.C.) and Plato (428-347 B.C.).<sup>41</sup> It arises as a result of a double concern. One can be described as epistemological, the other as metaphysical, and both are present as early as the Socratic dialogues. Socrates, concerned with arguing against the relativism of the Sophists, maintained that the object of knowledge could not be based on the transient, ever-changing everyday world of sensory objects and events, but rather had to be based on something permanent, never-changing, certain, and only then, real. This is the epistemological concern, for it was directed towards ensuring an objective basis for knowledge. This basis could not be in the everyday world, for in it there is change: what was hot is now cold, what was alive is now dead, what seemed to be true now seems to be false, and how could knowledge be based on such shifting ground?

In the early Socratic dialogues, Socrates was concerned with giving definitions of terms, for example, “piety” in the *Euthyphro*. The purpose of this dialogue is to show that individual examples of piety can never completely qualify as a definition of the term, for no actual instance captures the full meaning of piety, but rather a more general, or universal, concept which captures all these examples is needed.

This is where the metaphysical concern is apparent. If piety is not any one particular pious action, but rather something that is somehow instantiated in each of the instances, could it then be something *in* all pious actions? But if that is the case, then it would have to be the same quality that is in two different actions. But how can the piety in Euthyphro’s action be the same piety as the piety in Socrates’ action, where the two actions are obviously different? How can the *one* thing be in *many* places at the *same* time? Plato apparently considered an immanent realism (that is, the quality is in the action, or the object, depending on what is being considered, as Aristotle later suggested) in the *Phaedo*,<sup>42</sup> but decided against it. He developed instead his theory of Forms.

Plato<sup>43</sup> became convinced that whatever the explanation was, it was not to be found in the physical realm. The fact that no particular instance of piety was piety itself, for example, was probably one reason that led him to this conclusion. And the apparent disagreement in the dialogue as to what even counts as a particular instance seems to confirm this. Another probable reason was that Plato was unable to find a solution to the one/many/same puzzle. So he postulated the world of the Forms, Ideas, (later called universals) which exist in a non-physical realm,<sup>44</sup> and, since they are not subject to the changes of ordinary things, are permanent, certain, and true. In this way, he takes care of the epistemological concern. He then



has to give an account of how we gain access to these Forms. But he also needs to explain the relationship between the Forms and the individual instances. This is part of the metaphysical concern, and here he does not fare as well.

*Anamnesis*, or the process through which our unborn souls become acquainted with the Forms, only to forget them at the moment of the soul's embodiment, that is, at the moment of birth, is Plato's explanation of how we get to know the Forms. The "knowledge" that we then attain as a result of experiences of the sensory world is actually a process of recuperating or remembering what we have truly known all along.

Explaining the relationship between the Forms and their instances was a bit more of a problem for Plato. The Form Piety is what makes particular pious acts pious. In this way, Plato gets around the problem of trying to explain how one thing can be many: the one Form is somehow "shared" by the many instances, but not in a physical way, for it is non-physical. But what is the connection that reaches across two separate realms—the material, or physical, and the immaterial, or non-physical, and how does it tie two completely different kinds of entities together? It is generally agreed that Plato was not successful in explicating this, and he himself shows in the *Parmenides* his dissatisfaction with, at the very least, the terminology available to him. If "participation" is meant to explain how a particular instance of piety shares in the Form Piety, then there has to be a Form Participation which explains the connection between the particular and the Form, and then another Form to explain that connection, *ad infinitum*. A related problem arises when one addresses the question of the properties of the Forms, for example, whether the Form Beauty is itself beautiful, etc. If it is, then it seems there must be another Form which mediates between those two, and so on. If it is not, then the theory seems to serve no explanatory purpose. These objections to Plato's theory are sometimes referred to as the "Third Man" problem.

### Aristotle and the Muddle

we can see what consequence also results for those who believe in the Forms as separable substances . . . For if there are forms, and if animality is present in man and in horse, we may ask whether it is one and the same animality in each, or a different one. (I mean, of course, numerically the same. It is clear that they are the same in formula [form], for one would state the same formula in either case.) Now if there is such a thing as man-itself in its own right, which is separate and a this, then what it is composed of—e.g. animality and two-footedness—must also each signify a this and be separable substances. So this will apply to animality too. If then it is one and the same animality in man and in horse (the same in the way that you are the same as yourself), how will that one thing, present in two separate things, be one thing? . . . But all this is absurd. (Aristotle, *Metaphysics*, 1039a24-b6)<sup>45</sup>

Aristotle (384-322 B.C.) did not share Plato's belief in separate "existences."

He was obviously aware of the Third Man problem (he is usually given credit for its formulation, but actually Plato, as we saw above, alludes to it in the *Parmenides*). It is often said that Aristotle's interest in biology and what is today classified as the natural sciences inclined him towards the opinion that there is only one realm, that of the physical. But for whatever reason, Aristotle makes it quite clear he disagrees strongly with Plato on this issue. But at the same time, however, he shared Plato's concern with the objectivity of knowledge. Aristotle then had to come up with some sort of replacement for the theory of Forms.

Whether he did indeed come up with a satisfactory replacement seems to be a matter of some controversy. Some commentators claim that Aristotle did not have a theory of universals as such, but that one can be formulated fairly successfully from what he actually says.<sup>46</sup> Others think that he actually contradicts himself in what he says on the subject of universals.<sup>47</sup> It is generally agreed that Aristotle's position is problematic, however, and probably due to the fact that he is trying to make room for universals in a world of individuals. As we saw, Plato simply created another world to put them in.

I will not be undertaking the task of resolving those issues here. My main concern is the Aristotle portrayed to the medievals through commentators like Alexander of Aphrodisias and Avicenna, for Aristotle's texts were not widely circulated during medieval times.<sup>48</sup> Whether this medieval Aristotle is or is not the authentic Aristotle is not my concern at this time. Having said this, I do think it helpful for my purposes to try to explore what has come down to us as Aristotle's basic metaphysical theory, for as we shall see, it provides a framework of discussion for the scholastics. I do think that there is enough material here so as to allow me to make some interesting comments.

We have seen that Plato had both an epistemological and a metaphysical concern when he elaborated his theory of Forms. We can see that Aristotle too had these concerns, but they took slightly different turns. With regard to the epistemological one, both Plato and Aristotle were convinced that our claims to knowledge needed accounting for. But whereas Plato's efforts were directed towards finding solid grounds for knowledge (the unchanging and timeless Forms instead of the unreliable and illusory world of everyday objects), Aristotle was more concerned with explaining what it is to know something. As to the metaphysical concern, Aristotle too was plagued with "the problem of the one and the many," as can be seen in the passage at the beginning of this section. But let us look first at what he has to say about knowledge. In *Posterior Analytics*, he describes the process of acquiring knowledge:

And this at least is an obvious characteristic of all animals, for they possess a congenital discriminative capacity which is called sense-perception. But though sense-perception is innate in all animals, in some the sense-perception comes to persist, in others it does not . . . [those in which it does persist] out of the persistence of such sense-impressions develop a power of systematizing them . . . So

out of sense-perception comes to be what we call memory, and out of frequently repeated memories of the same thing develops experience; for a number of memories constitute a single experience. From experience again—i.e. from the universal now stabilized in its entirety within the soul, the one beside the many which is a single identity within them all—originate the skill of the craftsman and the knowledge of the man of science. (*Post. Anal.* 99b33-100a9)<sup>49</sup>

Aristotle is saying that our access to those objects which are around us is through our senses. The presence of these objects (individuals we can call them) trigger our sense-perception.<sup>50</sup> But sensation is not knowledge. That is why animals that merely have sense-perception, but no way of holding on to it, do not have knowledge since they have no way of systematizing that information. Those animals who have the capacity of accumulating sensory perceptions, resulting in memory, can synthesize this information, a process which ultimately terminates in the formation of the concept, or the universal. In order for there to be knowledge, then, the mind needs to generalize the information the sensations convey, and after some time, a concept is formed. For example, someone seeing a rose for the first time does not know what it is, although she has the sensations of its color, shape, smell, etc. A concept is then formed of a rose after one or more encounters: a flower, red, sweet-smelling, etc.<sup>51</sup> The concept thus formed is a general one, not of any one particular rose, but a concept which encompasses characteristics of several particular roses. Only when we have formed this general concept, can we say we have knowledge of what a rose is, and recognize the next one that comes along. Aristotle disagrees with Plato's account of *anamnesis*, or innate knowledge, but rather believes that we have the capacity, or potential to obtain knowledge through this process that begins with sense-perception. Aristotle uses an interesting analogy to describe this process:

We conclude that these states of knowledge are neither innate in a determinate form, nor developed from other higher states of knowledge, but from sense-perception. It is like a rout in battle stopped by first one man making a stand and then another, until the original formation has been restored. The soul is so constituted as to be capable of this process . . . When one of a number of logically indiscriminable particulars has made a stand, the earliest universal is present in the soul: for though the act of sense-perception is of the particular, its content is universal—is man, for example, not the man Callias. (*Post. Anal.* 100a10-b1)

For Aristotle, then, even though the world is populated by individuals, we can only come to know by universals. So there has to be room for universals in his ontology, but it seems Aristotle is not quite sure how to accommodate them. We can see his dilemma in several places:

There is a difficulty . . . If, on the one hand, there is nothing apart from individual things, and the individuals are finite in number, how is it possible to get knowl-

edge of the infinite individuals? For all things that we know, we know in so far as they have unity and identity, and in so far as some attribute belongs to them universally . . . If there is nothing apart from individuals, there will be no object of thought, but all things will be objects of sense, and there will not be knowledge of anything, unless we say that sensation is knowledge . . . But again if we are to suppose this . . . that there must be something besides the concrete thing . . . will the substance of all the individuals, e.g. of all humans, be one? This is paradoxical, for all the things whose substance is on this view one would be one. But are they many and different? This also is unreasonable. (*Meta.* 999a-b24)

If, then, the principles are universals, these results follow: if they are not universals but of the nature of individuals, they will not be knowable; for the knowledge of anything is universal. (*Meta.* 1003a14)<sup>52</sup>

We can see that Aristotle is worried about the same problem that plagued Plato, that is, how one thing is many (how “man” is Socrates, Callias, etc.), and how many things are at the same time, one (how Socrates, Callias, etc. are all men). But Aristotle does not want to give universals the status of existent entities which Plato gave them (though for the latter they “existed” in an immaterial realm, so technically they did not exist in the same sense as other things in this world), but he realizes he needs them in order to make any epistemological claims. He has to give some metaphysical account of them if they are to be in his ontology.

In *Categories*, he lists the kinds of things there are, that is, the kinds of things that have “being.” He distinguishes substances from quantity, quality, relation, place, time, position, states, actions, and passions.<sup>53</sup> But substances have priority; that is, the rest can have being only as characteristics or features of substances.

And this is when things start to get muddled. For Aristotle wants to say (at least at some point, according to some interpretations),<sup>54</sup> that only individuals exist and therefore only they are substances, but at the same time his explanation of what an individual is involves the notion of species and genera, which are classificatory terms for Aristotle (e.g. “man” is a species of the genus “animal”).<sup>55</sup> What, then, is the ontological status of these? Do species and genera exist in the same sense as particulars? And, furthermore, what role do universals play in all this?

We speak in many ways of what is . . . On the one hand it signifies what a thing is and a this, and on the other of what quality or quantity or any of the other things thus predicated. But while what is is spoken of these various ways, it is clear that the primary thing that is is what a thing is, which signifies its substance . . . Now we speak of what is primary in many ways, but substance is primary in every way—in definition, in knowledge, and in time. (*Meta.* 1028a10-31)

Substance seems most clearly to belong to bodies. That is why we say that animals and plants and their parts are substances, also natural bodies such as fire and water and earth and anything of this kind . . . But we shall have to con-

sider whether these are the only substances, or whether there are others. (*Meta.* 1028b8-15)

In these passages, Aristotle is trying to determine what a substance is, and what qualifies as such. In the *Metaphysics*, he wants to claim that substance is *what* a thing is, and “natural bodies,” that is, living beings, such as animals, but also non-living beings such as fire, qualify as substance. He also says that “what a thing is,” or a substance, is the “primary thing that is,” meaning, I think, that it is what has primary being, or existence; in other words, an individual, or particular. This seems to be confirmed by his other comment that a substance “is a this.” In the *Categories* he has more to say:

A substance—that which is called a substance most strictly, primarily, and most of all—is that which is neither said of a subject nor in a subject, for example the individual human being or the individual horse. The species in which the things primarily called substances are, are called secondary substances, as also are the genera of these species. For example, the individual human being belongs in a species, human being, and animal is a genus of the species; so these—both human being and animal—are called secondary substances . . . Of the secondary substances the species is more a substance than the genus, since it is nearer to the primary substance. For if one is to say of the primary substance what it is, it will be more informative and apt to give the species than the genus. For example, it would be more informative and apt to say of the individual human being that he is a human being than that he is an animal. (*Cat.* 2a11-b10)

Here Aristotle makes the distinction between primary and secondary substance. He explicitly identifies the individual, or existent being, as primarily, or fully substantial. He also gives what we could call a logical description of substance: “that which is neither said of . . . nor in a subject.” By this he means that we don’t ordinarily say of objects that “It’s a Socrates,” nor “Socrates is in Socrates” (if the reference is to Socrates, of course, we say “it is Socrates”). Species, and to a lesser extent, genera, Aristotle calls “secondary substances.” Species are more substantial than genera because, when trying to explain what Socrates is, it is more illustrative, and more specific,<sup>56</sup> to say he is a human being (the species) than an animal (the genus). But now we come upon a problem. In the *Metaphysics*, substance primarily is “what a thing is,” while, as we saw above, the species, or secondary substance, is what is used to describe what it is. For example, if we pointed at a rose, and asked, “what is that?” the answer would be “that is a rose” or “that is a flower” or “that is a plant.” In other words, we would give the species or genus as an answer. The same would apply to a question about Socrates: “that is a man” would be the answer. So is it primary substances, or secondary substances, or both, to which Aristotle wants to attribute a primary kind of being? And is this primary kind of being what we normally refer to as existence? Let us see what he says about individuals (particulars or singulars), and universals.

Some things are universal, others individual. By the term “universal” I mean that which is of such a nature as to be predicated of many subjects, by “individual” that which is not thus predicated. Thus “man” is a universal, “Callias” an individual. (*On Interpretation*, 17a40)

there is no difference of meaning between “numerically one” and “individual.” For this is just what we mean by the individual, the numerically one, and by the universal we mean that which is predicable of the individuals. (*Meta.* 999b32)

Aristotle seems to be dividing up the world into two camps: individuals, or those things which are one thing (what is not said of nor in a subject), and universals, which are said of many things. So it seems he wants to say:

individual thing = numerically one thing = existent thing = concrete thing = substance (at least primary) = that which is neither said of nor in a subject

In the examples he uses, he certainly gives this impression: Callias is the example given of individuals, individual human being is the example given for primary substance, and these are examples of existent and concrete things. But look at what he says in the *Categories* a few paragraphs before the selection above on primary and secondary substances:

Things that are individual and numerically one are, without exception, not said of any subject, but there is nothing to prevent some of them from being in a subject—the individual knowledge-of-grammar is one of the things in a subject. (*Cat.* 1b4-9)

Recall that in his discussion of primary substance, Aristotle mentions that a primary substance is “that which is neither said of any subject nor in a subject.” Now if we assume that by primary substance he meant individuals, this does seem to be a contradiction, for here he speaks of individuals being in a subject. But I think there may be an alternative explanation: although all primary substances are individuals, not all individuals are primary substances. There are some individual things, like Callias’s knowledge-of grammar, for example, that are “in a subject,” and therefore do not qualify as a primary substance. This seems to imply then that there are individuals that are not concrete or material things. This interpretation seems to be supported by something he says elsewhere:

By “in a subject” I mean what is in something, not as a part, and cannot exist separately from what it is in. (*Cat.* 1a23).

So Callias’s knowledge-of grammar, though individual and numerically one, is not a primary substance, does not exist separately, and, I would then venture to say, is not a concrete object.

Now, although this interpretation sounds reasonable I am not sure it can be completely borne out in the texts. For one thing, it is not clear whether Aristotle

explicitly makes the distinction between individual and concrete thing, something one would have expected.<sup>57</sup> Obviously there could be several explanations for these inconsistencies: Aristotle revised his theory over time, he overlooked these mistakes, unauthentic texts have been inadvertently incorporated, there have been layers upon layers of mistranslations, there are missing chapters, etc. I will not try to solve the issue here. However, I mention these problems because they illustrate how this muddle was only perpetuated through succeeding generations of philosophers trying to solve the problem of universals. But there is more.

Just as one gets the impression (right or wrong) that Aristotle sometimes seems to equate “individual” with concrete beings, one can also get the impression from what he says, that he equates genera and species with universals.<sup>58</sup> Indeed, this seems to be what some of his followers do, as will be seen later. We have already seen that he contrasts individuals with universals. In the following, he substitutes talk of genera and species for universals:

But if . . . there must be something apart from the individuals, it will be necessary that the genera exist apart from the individuals—either the lowest or the highest genera; but we found by discussion just now that this is impossible. (*Meta.* 999a25-32)

Also, he refers to the universal and to the genera and species as that which by its nature is predicated, or said, of a number of things. And again, the examples used are the same for both: “human being” is called a universal as well as a species. But consider the following:

But man and horse and things thus universally predicated of particulars are not substances but combined wholes of a certain kind. (*Meta.* 1035b27-30)

It is now clear that nothing at all that is predicated universally is a substance. (*Meta.* 1041a2-3)

It seems impossible for any of the things predicated universally to be a substance. For, first, the substance of a thing is peculiar to it, in that it does not belong to anything else; but a universal is common to many things, for it is precisely what is of a nature to belong to many things that is called a universal. Of which of these things, then, will this be the substance? It must be the substance of all or of none, and it cannot be the substance of all. But if it is the substance of one, then all the others will be this one; for things whose substance is one have the same what-being-is, and are themselves one. (*Meta.* 1038b8-14)

In the first three quotations, Aristotle is saying that universals like “man” and “horse” cannot be substances. What I think he means in the last quotation is this: substance cannot be “of all” because by definition, the substance of a thing is unique to it and does not belong to anything else. But if it is “of one,” then all the others are one too, and this is absurd (for there are many). Now recall that Aristotle speaks of species and genera as secondary substances, and these are common

to many things as well. So there seems to be an inconsistency here too. It could be suggested that here Aristotle was speaking of certain kinds of substance, namely primary substance only, but this does not seem feasible considering his repeated use of words like “nothing” and “impossible;” that is, if he were only speaking of primary substance, we would have expected an exception to be made for secondary substance.

To complicate matters even further, four chapters<sup>59</sup> after claiming that nothing universal can ever be a substance, he says:

Let us now take a fresh starting-point and say what, and what kind of thing, substance should be said to be . . . Let us start, then, from the fact that substance is a principle and a cause of some sort . . . It is clear, then, that what is sought is the cause—and this is the what-being-is, to speak logically . . . the question must be why the matter is so-and-so, i.e. the form. And that is the substance. (*Meta.* 1041a6-b8)

So now we are told that the form of a thing is the substance. This cannot be substance with primary being, or existence, like “natural bodies,” for then this would entail Platonism, which Aristotle vehemently rejects.

Aristotle’s doctrine of matter and form is meant to explain the causes, or principles, for what makes something the kind of stuff it is. According to him, the answer is twofold: the matter, or material constitution (what it is made of), and the shape, structure, or function, known as the form (“essence” is sometimes used synonymously). The combination of matter and form produces the composite, or concrete existent thing:

The whole thing—such and such a form in this flesh and these bones—is Callias or Socrates. They are different because of their matter, which is different; but they are the same in form—for their form is indivisible. (*Meta.* 1034a5)

The form seems to be somehow in the thing, for, in the first passage of this section, he speaks of animality, as a form, being present in man and horse.

Now, if form is substance, surely form is a universal? For is it not common to, or predicated of many (is not man predicated of Callias, Socrates, and so on)? But, as seen above, nothing universal can be substance! This is surely confusing indeed. Some have tried to explain this incongruity by claiming that Aristotle endorsed a theory of particular forms, or essences.<sup>60</sup> This would entail the claim, for example, that the (universal) form man in Socrates was Socrates’ particular form and for that reason was nobody else’s. And there are passages which seem to imply this:

[although causes may be spoken of universally, still] those universal causes do not exist, for the cause of what is particular is itself particular. Man is universally the cause of man, but there is no universal man; it is Peleus who is the cause of Achilles, and your father of you. (*Meta.* 1071a18-22)



Now this might explain the incongruity above, because it might be said that only these particular forms or essences are what Aristotle refers to as substance. But Aristotle nowhere says this explicitly,<sup>61</sup> and again, one would have expected him to have done so, especially since it seems to be a crucial point.

I cannot resolve here whether Aristotle did indeed subscribe to a theory of particular forms.<sup>62</sup> I do not think, however, that he was contradicting himself regarding what he says about universals. I suspect he wanted to make some subtle distinctions between universals and species and genera,<sup>63</sup> among other things, but was just not very clear in his explanations. This is the cause, I think, for what I call “the muddle,” for depending on what part of his work one focuses on, he seems to be a nominalist, a conceptualist, or a realist. His claims that no universal can be a substance, that only individuals exist (or can be causes), and his many mentions of universals in the context of predication, imply that he is endorsing nominalism. But his account of knowledge as the acquisition of concepts through the use of universals sounds like conceptualism. And his assertion that the form animality is present in particular men and horses, and that species and (to a lesser extent) genera, are secondary substances seems like realism. His ambivalence towards what kind of ontological status universals have, combined with the desire to be able to say that we have knowledge of the world, in other words, that the classifications of genera and species do truly apply to existent things, created what I have termed the “muddle,” which was passed on to succeeding generations.

It can be seen that Aristotle’s work proves to be fertile ground for myriad interpretations. And during the Middle Ages, when he was “rediscovered,” there were many who were only too happy to oblige.

### **Alexander of Aphrodisias: the Muddle Continues**

Note when the universal sun is done away with, it does not do away with the particular sun.<sup>64</sup>

Aristotle’s claims are a likely source of the controversy over universals which consumed the scholastics. I also want to argue that his comments could also be considered the origin of the proposed solutions: conceptualism, various realisms, and nominalism. As a result of what I have called “the muddle,” subsequent commentators, in trying to interpret Aristotle’s theory into a coherent whole, added new twists which, although never explicitly stated by Aristotle, do not seem at all inconsistent (some more than others) with what he did say. Alexander of Aphrodisias is a case in point.<sup>65</sup> In fact, everyone I will be looking at,<sup>66</sup> up to and including Peirce, has, in my opinion, put their own spin on the issue. It’s hard to say whether subsequent commentators were aware of substantially adding to, or perhaps even changing, Aristotle’s theory; maybe they thought they were merely providing a better exposition. In the case of Alexander, it seems he was really trying to reconcile Aristotle’s sometimes-confusing remarks.<sup>67</sup> In doing so, he came

up with the notion (as illustrated in the above quotation) that was handed down to the scholastics: that universality is accidental to the thing itself, that is, it is a feature that is not necessary to the thing's existence.<sup>68</sup> But like his Greek predecessor, Alexander's sometimes-perplexing, seemingly-contradictory remarks just seem to add to the muddle. Let us take a closer look:

In the case of enmattered forms, as I said, when such forms are not thought none of them is an intellect,<sup>69</sup> given, at least, that the underlying basis of their being intelligible lies in their being thought. For universals and common items have their existence in particulars and enmattered things . . . When they are thought apart from matter they become common and universal, and then they are an intellect when they are thought. And if they are not thought, they no longer exist. Thus once these have been separated from the mind thinking them, they are destroyed, given, at least, that their being lies in being thought. (Alexander, *De Anima*, p.90, 2-5)

Alexander is trying to make sense of Aristotle's notion of "form." His claim that "enmattered forms" become common and universal once they are thought, and no longer exist when they are not thought, certainly sounds like a nominalist (strictly speaking, conceptualist) view. Recall Aristotle's description of the process of how a universal is established within the soul: repeated sense-perceptions lead to memories, which lead to experience, which result in a universal concept. In *Metaphysics*, Aristotle states that the universal "man" does not exist. It seems that Aristotle wants to say that the universal is only a concept, a useful tool in thinking, but with no extramental (outside of thought) existence. Now Alexander seems to agree with Aristotle's notion of abstraction:

It is not the case that the intellect grasps the forms . . . as existing with matter, as does sense perception, but rather by separating them from all material circumstances it contemplates them by grasping them alone. For it conceives of white not by thinking of as accompanied by figure and size. (*De Anima*, p.84, 6)

However, there is an apparent inconsistency in what Alexander says. First he says above that universals (at least forms) have existence in particulars. The universal man, then, would exist by somehow being in particular men. This sounds like a realist view, which, furthermore, seems at odds with what Aristotle had said (about the universal man not existing). But then he also wants to claim that universals no longer exist when not thought about (again, a nominalist/conceptualist view). We see another example of the seemingly realist side of Alexander's approach in the following:

But if the common item were to be done away with there would not exist any of the items under the common item, since their being lies in having that [common item] in them. (*Quaestiones I*, p.22, 19)<sup>70</sup>

Here, Alexander very clearly states that the particular is somehow dependent

on the universal, or, to put this in Aristotelian terms, that particulars are “posterior to” universals (what is “prior to” is that whose being is independent of the other).<sup>71</sup> In this passage, Alexander seems to be catering to Aristotle’s concern that without universals, there can be no knowledge.<sup>72</sup> But how does Alexander reconcile these two seemingly opposing views, that is, that universals only exist when thought, but if common items (universals?) are done away with, the items under them (particulars) would no longer exist? One explanation for Alexander’s apparently contradictory remarks is that he was endorsing some sort of idealism, that is, the view that since universals depend on thought, and particulars depend on universals, then particulars depend on thought, or in other words, the “external” world is really internal, or mental, after all. But this would seem totally anachronistic, for this approach, as far as we know, was alien in Alexander’s time.<sup>73</sup>

Ancient and modern commentators alike have been confused by Alexander’s remarks.<sup>74</sup> It seems clear, however, that he was taking upon himself the task of resolving “the muddle:”

We should investigate why it is said in the first book of Aristotle’s *De Anima*: “For the universal animal either is nothing or is posterior” . . . For since genera are universal and the universal is of some items, the universal is an entity. For surely . . . there must be some thing of which the universal is an accident. That of which the universal is an accident is some thing, but the universal is not some thing in the proper sense, but rather something that is an accident of something else . . . Since, then, the genus as this sort of item is not some thing but rather an accident of a thing, Aristotle said of it: “either is nothing,” since it is not a being in the proper sense. Therefore, animal as a genus either is nothing, since it does not signify some nature of its own but is an accident that has come to be in some thing, or, if one would call even this sort of being a being, it will be posterior to that to which the accident belongs. (*Quaestiones* I, p.21, 14-22)

Here we have Alexander quoting Aristotle in saying that “the universal animal” is posterior (to the particular), a claim at odds with the view just quoted that particulars would not exist without the universal, or common item, implying that they are posterior to universals. A muddle indeed! Alexander tries to explain Aristotle’s remark by saying in what sense “universal” is nothing: that is, it is not a being in the sense that particulars are beings, yet it is an entity because it is a property of something. He then elaborates in what sense a universal is posterior to particulars:

That it is posterior to the thing is clear. For given the existence of animal, it is not necessary that the genus animal exist (for it is hypothetically possible that there is [just] one animal since universal does not belong to the substance of it [i.e. animal]). But if the genus animal should exist, it is necessary also for animal to exist. Also if ensouled substance capable of sense perception were done away with, the genus animal would not exist either . . . But if the genus animal were done away with, it would not be necessary that ensouled substance capable of

sense perception would also have been done away with, for it might be, as I said, in just one thing. (*De Anima*, p.21, 5-10)

In trying to explain what Aristotle probably meant by the universal being posterior to the thing, Alexander comes up with a very original point (original because Aristotle apparently did not explicitly say this, although he may have agreed).<sup>75</sup> It is possible that there be only one animal left in the world, but if this is so, there would be no genus “animal,” for “genus” means there are many differing in species that belong to it.<sup>76</sup> This is the point, I think, in the quotation about the sun in the beginning of the section: even though there is no universal “sun” in the sense that it is not a genus (for there is only one sun, and not many),<sup>77</sup> the particular sun still exists. And if there were no animals left, there would be no genus animal either. But if there is no genus “animal” it does not entail that there would be no animals at all, because it would be possible that only one animal exists (hence there would not be a genus for there would not be many). However, the “existence” of genus does entail the existence of particulars.<sup>78</sup> He seems to be saying something like this:

- (1) It is not the case that if one animal exists, the genus animal exists.
- (2) If there is a genus animal, then at least one animal must exist.
- (3) If no animals exist, then there is no genus animal.
- (4) If there is no genus animal, it would still be possible for one animal to exist.

But, again, there is a problem. It is in this same passage, a few lines further, while summing up his position, that he says what was already mentioned above:

Therefore, doing away with one of the items under the common item does not do away with the common item as well, because it exists in many. But if the common item should be done away with, there would not exist any of the items under the common item, since their being lies in having that [common item] in them. (*De Anima*, p.21, 18-20)

Now he seems to be saying that:

- (5) If one item (e.g. an animal) ceases to exist, there can still be a common item (as long as there are other items of that same kind).

But the last sentence, in which he says that if the common item is done away with, there would not exist any of the items under it, namely particulars, seems to be an outright contradiction of (4), which says that if the genus animal were done away with, this would not necessarily mean that all particular animals would be done away with (there could still exist one). This amounts to his saying that:

(6) If there is no common item, then there cannot exist any items of its kind.

So if there is no more of the common item, then no items under it can exist. If we assume that the “common item” and “genus” are synonymous, then it seems that Alexander is contradicting himself, saying something like:

(7) If there is no genus (or common item) then there both can and cannot be an item of its kind that exists.

Now since these seemingly contradictory remarks occur in the same passage, it is reasonable to assume that Alexander was aware of what he was saying, and that it was not his intention to be incoherent. So it would make sense to try to reconcile his claims.

One possibility that comes to mind would be that the genus and the common item are not the same thing. And there seems to be evidence of this,<sup>79</sup> as can be seen below:

For example, animal is something and denotes some nature, for it means an ensouled substance capable of sense perception, which in virtue of its own nature is not universal. For it would exist none the less even if it were assumed that animal is one in number. But it belongs to it, as this sort of being, to exist in many items differing from each other in species. Therefore this is an accident of it. For what is not in the substance of something belongs to it as an accident. (*De Anima*, p.21, 25)

Here Alexander speaks of “animal” as denoting a nature, one that of itself is not universal, for it would exist even if it were not universal, or a genus or common (that is, even if there were only one item predicated of it). However, “it belongs to it . . . to exist in many items,” that is, the nature has the potential of being a universal (predicated of many) if it so happens that there are more than one existing particulars of this same nature. That is why “the universal” is an accident,<sup>80</sup> for it is not essential to the nature, and therefore not “part” of the substance itself. I think here Alexander means “the common item” to refer to this nature (I think Avicenna saw this too, as will be discussed later):

For the definition of man, two-footed pedestrian animal, is common since it is in all the particular men and is complete in each; it is common in virtue of being the same in many, not by each [man] sharing a part of it . . . Therefore, definitions are not of common items qua common, but rather of those to which it is an accident to be common in respect of each nature. For even if there is just one man in concrete existence, the same definition of man [applies]. [It applies] not because this definition of it is in many, but because the man is man in virtue of a nature of this sort, whether there are many that have shared in that nature or not. (*De Anima*, p.8, 8-15)

It is the nature itself, I think Alexander means to say, which is prior to particulars. It is what “exists” in the particular,<sup>81</sup> and it is that without which a particular cannot exist. The nature itself is that to which the definition applies, and it is so not because the definition itself applies to many,<sup>82</sup> but because the definition describes the nature itself. Sometimes he refers to the nature as the common item, but it need not be common, for it can exist even if there is only one particular. We can then make sense of:

But if the common item were to be done away with there would not exist any of the items under the common item, since their being lies in having that [common item] in them. (*De Anima*, p.22, 19)

If the “common item” refers to the nature, and is not the same thing as “genus,” then we can understand why there could not exist things without a nature, for everything has to be something of a certain kind. We can then say that:

(8) The “common item” is the nature, and this is not the same thing as the genus.

I think that Alexander also sometimes uses the term “universal” to refer to the nature, hence his remark that “universals and common items have their existence in particulars and enmattered things.”<sup>83</sup> I will call this use of “universal” and “common item” to mean the nature as somehow “in” the thing, “U1.”<sup>84</sup> But (and here is Alexander’s contribution to the muddle) he also uses “universal” and “common” as adjectives, and it is then that they are accidental, for then they are not describing the nature itself, but the fact that there are others that share the same feature, or universality. In Aristotelian terms, universality and commonness are potential properties of the nature itself, but not essential to the nature itself. Universality and commonness are accidental, that is, are features or properties that may or may not be attributed to the nature, depending on how many items have the same nature. I will call this use of “universal,” as the feature of universality “U3.”<sup>85</sup>

I believe Alexander picks up these two concepts from Aristotle. Recall that Aristotle speaks of the form “animality” as being present in men and horses. Although he does not refer to it explicitly as a universal, it is obvious that he means something like U1. Now when Aristotle speaks of the universal as abstracted, or as what is predicated of many, he is referring, I believe, to the entity in the mind, and this use of “universal” I will call U2.<sup>86</sup>

Alexander’s discussion of Aristotle’s maxim, that “the universal animal either is nothing or is posterior” may now be seen in a different light:

For given the existence of animal, it is not necessary that the genus animal exist . . . But if the genus animal should exist, it is necessary also for animal to exist. (*De Anima*, p.21, 8-10)

What Alexander is trying to convey is that the nature of a thing (its form, or “animality,” or U1 for example) is different from the classification of it (its genus). Since in order to classify something *as* something, abstraction has to take place, and this requires several encounters, so it is possible that only one animal exists (or the nature “animal” in that animal), and at the same time there is no genus as such. Furthermore, it seems that Alexander is trying to express something that, as we will see, others later said more explicitly:

(9) Universality is the result of thought about the abstracted nature, or form.

But even if this analysis is correct, and Alexander has added and perhaps even improved on Aristotle’s theory, he still has a problem that plagued Aristotle: how can one nature be the same in different particulars? It looks as if he tried to get around this problem by hinting that “sameness” is acquired somehow like universality; that is, it comes about as a result of abstraction:

For mortal animal, if it is taken along with material circumstances and the differences that accompany its concrete reality, which are different for different [men], makes up Socrates and Callias and particular men. But if it is understood apart from them, it becomes common, not because it is not in each of the particular men (for with them are found the features peculiar to each particular), but because it is the same in all. (*De Anima*, p.8 3-8)

In this passage, as in a passage quoted earlier, Alexander seems to be saying that sameness, or commonness, as well as universality (being predicated of many), is the result of intellectual abstraction. Recall the above:

When [particulars and enmattered things] are thought apart from matter they become common and universal . . . And if they are not thought, they no longer exist. Thus once these have been separated from the mind thinking them, they are destroyed, given, at least, that their being lies in being thought. (*De Anima*, p.90, 2-5)

Like Aristotle, Alexander is trying to avoid the problem of saying that one thing can be in many. Alexander tries to get around this by saying that commonness is such not because each particular shares a part of it. It is not until the form is isolated in thought that it can be said to be the same in many. Before the abstraction, the form exists in many, but since it is in different individuals, it is a different thing.<sup>87</sup> It is not till after abstraction that it can be said to be one and the same thing in many. But this is problematic. If sameness is the result of thought, and things are really not the same in themselves, then can there be real knowledge? It seems we would then have a false picture of the world. This is obviously an unsatisfactory conclusion for an Aristotelian.

I would like to make a few more comments regarding the nature itself, for this is a concept that we will be seeing again. As seen in the passage above, Alexander

speaks of the universal no longer existing if it is not thought about. I believe this is what he means when the universal is described as an accidental entity (U3). But does the nature (U1) in the thing continue to exist if not thought about? Alexander, I think, would want to answer affirmatively.<sup>88</sup> The nature continues to exist, but only as long as there are particulars, for it is “in” them. He does not want to fall into Platonism. In speaking of definitions, he explicitly mentions that they are not of separately existing natures:

Definitions are of what is common in such a sense and in this way because they are the same for many particulars. Therefore, definitions of these sorts of items are also not of any incorporeal nature separated from the particulars. (*De Anima*, p.8, 12-15)

It sounds, then, as if the nature exists as long as there is a particular, but it doesn't have to be a *particular* particular (if you'll pardon the pun); it can be any. But at the same time, he claims that these common items or natures are indestructible, for particulars continue indefinitely.<sup>89</sup>

The common items are indestructible in virtue of the fact that the particulars they are in are everlasting by succession. For in the genesis of all particulars it stays similar and the same. For common items are this sort of item not just because they exist in particulars that simultaneously exist with one another, and are common for that reason, but because they are in all things of like form. Thus nothing prevents something which is mortal from being eternal, for although it is mortal it is eternal as particulars. (*De Anima*, p.8, 22-25)

By making this clever claim, Alexander not only avoids the pitfalls of Platonism, but he also avoids (inadvertently) those of idealism (that is, particulars are not dependent on thought). He is also able to retain a realist view, a necessary position in order to claim, with Aristotle, that there is knowledge, for knowledge is of the universal.

Alexander's point that the nature is dependent on particulars, yet independent of any particular one is a concept that we will see again in Peirce, but with a different twist. Interestingly enough, the idea of an infinite series of particulars also occurs in Peirce, though again with a very different twist, as will be seen later. I cannot say, though, if Peirce adopted this from Alexander.

As we have seen, Alexander's work is not easy to decipher, and many have been confused by his theory. Some have labeled him a conceptualist, others a realist. I think there are elements of both in his theory. But as I have tried to show, in trying to interpret Aristotle's tangled theory of universals, Alexander comes up with some rather original concepts that, although not part of Aristotle's original theory, nevertheless add to its richness. His claims that universality and commonness are accidents, his identification of the nature itself as a different use of the term “universal,” and the observation that the nature is independent of a particular, but yet dependent on particulars, are examples of this. We can see his



contributions in the thoughts of those who followed. Let us now look briefly at Porphyry and Boethius.

### **Porphyry and Boethius: The Three Questions**

I have answered three questions, and that is enough . . . Do you think I can listen all day to such stuff? (Carroll, *Alice's Adventures in Wonderland*, chap. 5)

Unlike the character in Carroll's novel, Porphyry (c.232-306), a Greek neo-Platonist, famously does not answer three questions in the introduction to the *Isagoge*. As a result, there was much controversy over universals from the Middle Ages on. Let me explain.

The *Isagoge* was intended as an exposition of Aristotle's *Categories*, and as such was widely read during the Middle Ages. It discussed what came to be known as the five predicables: genus, species, difference, property, and accident. A "predicable" is a term that has the relation of a grammatical predicate to a subject. For example, in "Socrates is white" "Socrates" is the subject and "white" is the predicate. "White" is a predicable because it can be said of (is "sayable") of many things. Since the term "white" is predicable of many things, it is a universal according to the Aristotelian definition. The scholastics held that there were five predicables, or five types of relations of predicate to subject: genus, species, accident, property, and specific difference.<sup>90</sup> We have already encountered the genus and species. A property is a feature that always accompanies a member of a species, while an accident is a feature that an individual belonging to a particular species may or may not have.<sup>91</sup> The specific difference is that property that differentiates the species from the genus. For example, Socrates is an animal (genus), a man (species), white (accident), risible (property), and rational (specific difference).

But the most important influence of the work lies more on what it does not say, rather than on what it actually says. For Porphyry raises three questions regarding universals, and then humbly declines to answer them, saying that they should be the object of another study. And indeed it was, for it was this brief paragraph that provided the framework on which subsequent medieval discussions were based.

Porphyry's refusal to discuss the theory of universals does not allow us to say whether he was a nominalist or a realist (or a conceptualist). I have included him in this brief account because it was Boethius's translation of Porphyry's work from Greek to Latin in the sixth century, and the two commentaries that he wrote on the *Isagoge* that provided much of the occasion for these discussions.

Porphyry begins his *Isagoge* (the word means "Introduction") by addressing his student, a Roman senator named Chrysaorius:

Since, Chrysaorius, to teach about Aristotle's *Categories* it is necessary to know what genus and difference are, as well as species, property, and accident . . . I shall give a brief account . . . [But] I shall abstain from deeper inquiries . . . For

example, I shall beg off saying anything about (a) whether genera and species are real or are situated in bare thoughts alone, (b) whether as real they are bodies or incorporeals, and (c) whether they are separated or in sensibles and have their reality in connection with them. Such business is profound, and requires another, greater investigation. (Porphyry, *Isagoge*, VI.3.1)<sup>92</sup>

Notice that in his framing of the problem, Porphyry does not use the word “universal.” Rather, he speaks only of whether genera and species are real or not. “Real” seems to mean extramental existence, for he contrasts it with “in thoughts,” or mental “existence,” which he does not seem to consider real. But as can be seen in (b), and as would be expected during this time, “real” also includes incorporeals, or immaterial beings, examples of which would be God, angels, souls, etc. In (c), the choice seems to be whether genera or species are “separated” in the sense of Platonic Forms, or if they are actually in concrete, or material things and derive their reality through a relation with these.

I believe Porphyry adds to the muddle in at least two ways: first, although obviously speaking of the subject of universals but using the terms “genera” and “species,” he gives the misleading impression that these two exhaust the use of the word. As we have seen with Alexander, “universal” can have at least another different meaning. Secondly, he unknowingly creates (or continues) false dichotomies. As we will see with Scotus, and later with Peirce, there is at least one more way in which something can be considered to be “real.”

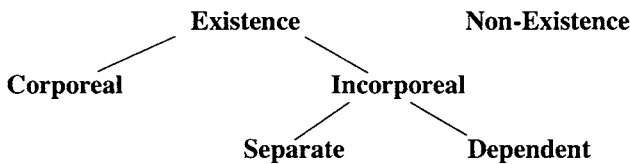
Boethius (c.484-524) knew both the Greek language and culture, at a time when this knowledge was disappearing in the Latin world. He translated most of Aristotle’s works into Latin (although only the *Categories* and *On Interpretation* circulated before the twelfth century). He also translated Porphyry’s *Isagoge* and wrote two commentaries on it.

Boethius tackles the questions Porphyry shied away from, and in so doing provides even more precise conditions for what a universal should be. But like Porphyry before him, he speaks of genera and species in reference to these questions, continuing the muddle. Like those before him (and like those after him), he adds, I think, his own original twist to the problem. I quote this long passage in order to illustrate his position:

Do we think of species and genera as things which exist and from which we take a true thought? Or do we delude ourselves by forming for ourselves in vain mental activity things that do not exist? If we establish that they do exist, and if we say the thought of them is drawn from things that do exist, then another, greater and more difficult inquiry engenders a question . . . For since everything that exists is necessarily either corporeal or incorporeal, genus and species will have to be in one of these groups . . . But even when this question has been resolved, there still remains some uncertainty . . . whether they subsist<sup>[93]</sup> in and around bodies themselves or seem to be incorporeal items that subsist apart from bodies. Obviously, there are two forms of incorporeal items. Some can exist apart

from bodies and exist in their own incorporeality as separate from bodies, like God, the mind, and the soul. Others, although they are incorporeal, cannot exist apart from bodies, for example, lines, planes, numbers, and particular qualities. Although we declare them to be incorporeal because they are not at all extended in three dimensions, nevertheless they exist in bodies in such a way that they cannot be torn away or separated from them, and if they were separated from bodies they would in no way continue to exist. (Boethius, *Commentaries* VI 4.1)<sup>94</sup>

Here Boethius further distinguishes two kinds of incorporeal items: those that can exist without any connection to corporeal, or concrete items, like spiritual creatures, and those that are “in” concrete items in such a way that their “existence” depends on the existence of the bodies they are connected to. The examples he gives of these are lines, numbers, and particular qualities.<sup>95</sup> We can illustrate this with the following chart:




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**Chart 1-1**

Boethius then elaborates what could be called a nominalist argument against the existence of genera and the like, and consequently that thought about them is not “true thought.” It is reminiscent of the ancient Greeks’ concern over the “one and the many.” First he considers why genera cannot be one item:

Everything that is common to several items at one time cannot be one item. What is common belongs to many items chiefly when one and the same thing is as a whole in many items at one time . . . From this it follows that the genus which is posited as a whole in several particular [species] at one and the same time cannot be one item. For it cannot be the case that although it is a whole in several things at one time, nevertheless in itself it is one in number. And if it is the case that a genus cannot be one item, then it is utterly nothing. For everything that is is because it is one item. (Boethius, *Commentaries* VI 4.1)

He then considers why genera and species cannot be multiple items, and comes up with an argument like the “Third Man:”

But even if genera and species do exist, but each is a multiple item and not one in number, there will be no last genus . . . For just as several animals require a genus, since they have something similar but are not the same, so also, since a

genus, which is in many items and thus a multiple item, has its own likeness because it is a genus, and is not a single item because it is in many, another genus must be sought for this genus . . . And so the argument must go on to infinity. (Boethius, *Commentaries* VI 4.1)

In this next passage, he gives an account of commonality, and why a genus (a universal), if it is one thing, cannot be common:

If a genus is one in number, it cannot be common to many. For if one thing is common, either (1) it is common in virtue of its parts, and then it is not common as a whole, but rather each of its parts belongs to its own particular; or (2) it is common in that over the course of time it is used by different owners, as a well or a fountain, or a slave or a horse; or (3), as a theatre or show is common to all who watch it, it is common to all at one time but not so as to constitute the substance of the items it is common to. But a genus cannot be common to its species in any of these ways. (Boethius, *Commentaries* VI 4.1)

Here, Boethius is trying to come up with a definition of what it means to be a universal, or as Aristotle stated, one thing predicated, or common, to many. He has already said what it means to be “one:” everything that is something, is one thing. We will see this notion of “numerical unity” or “oneness” again in Avicenna and Scotus. He then enumerates the different ways something can be common: by sharing its parts, as an apple is shared by those who take a piece; by successive possession over time, like a house with several owners; by all of it being present at the same time, but only in a superficial sense, like a movie in a theatre.<sup>96</sup> Rather, a universal must be one thing that is common as a whole, simultaneously, and must be the *metaphysical* core of the items it is common to.

The conclusion to this line of argument is that since genera are neither one item (for they have to be common), nor common (for they are not common in the way they should be), nor multiple items (for then there is an infinite regression), then it seems that they do not exist at all, and our thoughts about them yield false information as to the way things are.

But Boethius is not a nominalist. He says the problem can be resolved “in accord with Alexander.”<sup>97</sup> Like Alexander, he gives an account of abstraction, or “division and abstraction,” as he calls it:

For we say that not every thought which is from a subject but not as that subject itself is must be viewed as false and empty. For false opinion, as opposed to thinking, occurs only in what comes to be through composition . . . [putting] together in thought what nature does not allow to be joined . . . For example if someone joins in the imagination a horse and a man so as to make a centaur. But if this occurs through division and abstraction, even though the thing does not exist in the way it is thought, still that thought is not at all false . . . [W]hen the mind takes into itself from the senses confused things mixed with bodies, it distinguishes them by its own power and mental activity. For the senses transmit

to us with the bodies all the incorporeal things of this sort that have their being in bodies. But the mind, which has the power both to put together what is separate and dissolve what is composite, so distinguishes what is transmitted by the senses as confused and joined with bodies that it may look and see the incorporeal nature by itself without the bodies in which it concretely exists. (Ibid.)

As an example of division and abstraction, Boethius talks about a line, and how it cannot be separated from a body. In the passage in the beginning, he mentions properties as examples as well. He is referring here, I think, to what has been called before “accidental entities,” or beings, whose existence is tied to the existence of other, concrete things. Recall that Aristotle spoke of “individual knowledge of grammar.”

Consequently, let no one say that, since the line cannot exist apart from the bodies, we think of the line falsely when we grasp it mentally as though it existed apart from the bodies . . . things of this sort exist in corporeal and sensible items, but they are thought of apart from sensible items so that their nature can be perceived and their property understood. (Boethius, *Commentaries VI* 4.1)

In the same way, genera and species are abstracted:

genera, species, and the others are found in incorporeal things as well as corporeal ones. If the mind discovers these in incorporeal things, it immediately has a thought of a genus of incorporeal items; but if it has observed genera and species of corporeal things, it removes, in its usual way, from the bodies the nature of incorporeal items and views that as alone and pure, as it is in itself the form itself . . . Thus these [genera and species] exist in particulars but are thought of as universals. (Boethius, *Commentaries VI* 4.1)

Genera and species exist in particulars (U1), but once abstracted, the nature is viewed as pure, which then can be predicated of many (U2). I think that Boethius considers himself a realist,<sup>98</sup> for he speaks of genera and species as being found “in” things. This is reminiscent of Alexander’s view of the universal conceived as a nature which is somehow “in” things, or U1. Boethius can then claim that genera and species exist. But it is not the kind of separate existence concrete items enjoy; rather, they are dependent for their existence on these concrete items. But is Boethius’s view truly realistic? I think he is trying to argue that the mind perceives the genus as one and common through the acts of division and abstraction, but that that is not how the genus is found in nature. It seems that in nature it is not one, but many. It is the work of the mind that makes it one and common. So then we have a false picture of the world as it truly is. However, on Boethius’s behalf, it could be said that what could be considered an inaccurate representation of the genus in the mind does not mean that the representation is totally worthless. Abstraction lifts the “pure” genera from the bodies where they reside, making it possible for the mind to “gaze” upon them. In this way, our thoughts are then not false and empty.

But are genera and such “one” in their pure form, or are they many? How are they common “as a whole” and “at one time?” Why are they common only when the mind works on them? It seems that when genera and such are joined to bodies, they are altered because of this union: “For incorporeal items that are mixed with bodies have different properties even when separated from bodies.”<sup>99</sup> Boethius makes an attempt at answering some of these questions. He speaks of a “likeness” among particulars:<sup>100</sup>

For this reason when a genus or a species is considered, a likeness of it is gathered from the particulars in which they exist, for example a likeness of humanity from the particular humans which are dissimilar to each other. This likeness when considered by the mind and perceived in a true way becomes a species . . . A species should not be considered anything but the mental activity that is gathered from the substantial likeness of individuals that are numerically dissimilar, while a genus is the mental activity gathered from a likeness of species. But when this likeness is in particulars it becomes sensible; when in universals, intelligible. Likewise, when it is thought of, it becomes universal. Therefore, they subsist in and around sensibles, but are thought of as apart from bodies. (Boethius, *Commentaries* VI 4.1)

Note that Boethius now uses the term “likeness” to mean something like Alexander’s “common item,” or “form,” or what I have called U1, for it is what is detected by the mind. But according to him, this is what turns into the species U2, which, as we have seen before, would also be considered U1, for he spoke about it as being in the particulars.<sup>101</sup> This certainly adds to the muddle.

Further, Boethius’s position above leads to a rather strange conclusion. It seems he wants to claim that only when abstracted or “thought of apart” can the true nature of a thing be properly understood. This is why we do not think “falsely” in thinking of it separately, even though it cannot actually exist separately. In this way, he salvages the claim to knowledge, one of the Aristotelian concerns. The nature exists in the particular, and in this way the metaphysical aspect is taken care of. But in the particular, it has a distorted, or contaminated, existence, for only when it is grasped mentally is it in its true or “pure” form. It’s kind of a no-win situation: its true form cannot exist by itself, and it can only exist in an impure way in the particular. So, we can very well ask, which is the real genus, the distorted one in the particular, or the pure abstracted one?

Boethius does seem to be aware of this problem, for he uses an ingenious analogy to describe this dual aspect of the universal. This duality is probably the result of the double concern (the epistemological and the metaphysical) that Aristotle inherited, and that was passed on to those who followed him. The preoccupation with salvaging knowledge leads to the claim that in abstraction the universal,<sup>102</sup> the basis for generalities and therefore for science, is captured in its true and pure form. The necessary ontological basis is provided by the claim that

the universal actually exists in the particular. But let us see how Boethius deals with this duality:

For nothing prevents two things in the same subject being different in definition, as, for example, a convex and a concave line.<sup>1103]</sup> Although these things are delimited by different definitions and the thoughts of them are different, still they are always found in the same subject; for it is the same line that is concave that is convex. And so it is with genera and species i.e., while there is a single subject for singularity and universality, still it is universal in one way, when it is thought of, and singular in another, when it is sensed in those things in which it has its existence. (Boethius, *Commentaries* VI 4.1)

Although it is true that a line can be both convex and concave depending on one's perspective, it is not quite the same with the singularity and the universality of a "likeness." For in the latter, one thing is supposed to be both one and many at the same time, an impossibility. If it is truly one thing, then the thought that it is in many is an illusion, and there is no basis for knowledge. If it is truly in many, then it is not one thing. A more detailed discussion is needed. Boethius does not provide it, and like Alexander before him, does not quite seem to solve the problems generated by Aristotle's theory. His worthy attempts at defending the theory do not clear up the muddle.

### **Avicenna: "A Horse is a Horse, Of Course, Of Course"**

Horseness is just horseness, neither of itself one nor many, neither universal nor particular. (Duns Scotus, *Ordinatio* II, 3,1, no.7)

Duns Scotus cites Avicenna's famous dictum (sometimes translated as "Equinity is just equinity") in his discussion of universals. Avicenna (980-1037) adds to what eventually will become the position of moderate or scholastic realism by trying to fine-tune some of the problems handed down by his predecessors, especially that of the common nature. Avicenna's discussion of the common nature is another link in the theory of universals: one that tries to solve the problem of the one and the many that Aristotle, Alexander, and Boethius, to name just a few, struggled with.

As we have seen, the problem arises in trying to reconcile the different ways universals have been used: the universal as a nature, or form, or essence in the thing (U1), and the fact that this same one universal, is in the mind (U2).

Avicenna introduces another way of speaking of universals, which I will call U4. The nature of horseness in the horse is what I have called U1. The concept of horseness in the mind, which is applied to all individual horses is U2. This feature of U2 being applicable to many is U3. The following table helps illustrate these notions:

U1	The nature “somehow in” the thing
U2	The abstracted entity in the mind which is predicated of many
U3	The feature or property “universality,” or being predicated of many
U4	The nature “in itself;” neither universal nor singular

**Table 1-1**

There is an incongruity in applying the two expressions “horseness” and “horse” in the same way, just as there is a problem in trying to reconcile U1 and U2. For example, we say of Bucephalus that it is a horse, not that it is horseness. Avicenna recognizes this:

[W]hat is universal is something which in thought it is not impossible to predicate of many. The logical universal and whatever is similar to it must have this feature. Thus a universal, just from being a universal, is something, and from being something to which universality happens to belong it is something else. (Avicenna, *Metaphysica* V, 2B; fol.87v1)<sup>104</sup>

Avicenna seems to recognize these different senses of “universal.” He calls U2 the “logical universal.” He then acknowledges that this universality (U3) happens to belong (is an accident of, in other words) to that “something” which is “just . . . a universal.” But we saw that there is a problem in claiming that one thing can be in many individuals. Avicenna tries to solve the problem of the one and the many by describing the universal in an additional way, what I will call U4. Let us see what he says about this.

Let us take an example of a genus: animal is in itself something. And it is the same whether it is sensible or is apprehended in the soul by thought. But in itself it is neither universal nor singular. For if it were universal in itself in such a way that animality from the fact that it is animality is universal, no animal could possibly be singular; rather every animal would be universal. But if animal from the fact that it is animal were singular, it would be impossible for there to be more than one singular, viz., the very singular to which animality is bound, and it would be impossible for another singular to be an animal. (*Logica*, III; fol.12 r1)

What Avicenna claims is that the nature “in itself” is neither singular nor universal. This is the next logical step from Alexander’s claim that universality is an accident.

Avicenna claims that the nature-in-itself or the nature considered “absolutely,” as Scotus will refer to it, or *per se*, is neither one nor many, neither particular nor universal. But what does “in itself,” or “absolutely” mean? I think Avicenna meant something like “considering the nature in an indeterminate manner, without paying attention to particular details.” This sounds like what we do with U2, but Avicenna is making a further point: he is claiming that the nature itself (not



just our way of conceiving it, which is what U2 is), has these features of what we could call, neutrality, or as some referred to it, “indifference.” But what purpose is served by saying that horseness in itself is neither particular nor universal? Let us take the concept “animal.” It is predicated of a horse; in other words, a horse is an animal. Now if the nature “animal” in the animal (U1) involved in itself universality, then a particular horse, because it is an animal, would be a universal, for the characteristic of universality would be passed down from genus to species to individual. On the other hand, if the nature “animal” in itself involved singularity, then it would be identified with one particular only, and could not be predicated of any other particular. Not only universality, but also singularity, is then accidental to the nature-in-itself, or U4. He says this expressly:

Animal can be considered on its own [per se] even though it exists with something other than itself, for its essence is with something other than itself. Therefore its essence belongs to it on its own. Its existing with something other than itself is something which happens to it or something which goes along with its nature, for example this animality and humanity. Therefore, this consideration precedes in being both the animal which is individual on account of its accidents, and the universal which is in these sensible items and is intelligible. (*Logica*, III; fol.12r1)

Avicenna’s, is, I think, the claim that the nature-in-itself is not only not universal in itself, but also not singular, or individual. In other words, it has no numerical unity.<sup>105</sup> In order for the nature to exist, it has to exist in an individual (“something other than itself”), which is something “that happens to it” (an accident) and which the nature-in-itself does not reject, since it is neutral.<sup>106</sup> To ask whether the nature-in-itself is one (or many) is an improperly placed question,<sup>107</sup> perhaps like asking whether a gene is red or blue. Only when the nature is considered with accidents should the question be asked. For example, if one asked whether horseness in Dobbin is different from horseness in Bucephalus, the answer would have to be a qualified “no,” for one is asking about horseness in an absolute sense. Horseness is not different in each, but this does not mean that Dobbin and Bucephalus are the same individual. It is the “same” horseness in the sense that it is the same universal (U2), (recall that this universal comes about as the result of abstraction),<sup>108</sup> but the U1 nature-in-Dobbin is not the same as the U1 nature-in-Bucephalus. Another way of saying this is that they have the same nature, but are numerically different. But why not say that the U1 is the same, and what makes Dobbin and Bucephalus different is that they have different properties (location, size, etc.)?<sup>109</sup> The reason, I think, is that old problem of the one and many: one nature (U1) cannot at the same time be in many places and still be one. And since the numerical differences of the two horses are extrinsic to the nature-in-itself,<sup>110</sup> they do not prevent it from being the same horseness in the sense of U2 as well. Avicenna offers an explanation:

An individual does not become an individual until outside properties, either

shared or unshared, are joined to the nature of the species and this or that particular matter is designated for it. However, it is impossible for properties apprehended by thought to be added to the species, no matter how many they are, because in the end they will not succeed in showing the individuating intention<sup>111</sup> on account of which an individual is created in the intellect. For if you say that Plato is tall, a beautiful writer, and so on, no matter how many properties you add still they will not describe in the intellect the individuality of Plato. For it is possible that the intention which is composed from all of them is possessed by more than one item and shows you only that he exists, and is a pointing to the individual intention. (Ibid)

Numerical unity, that property which only individuals have, then, is an accidental property, extrinsic to the nature-in-itself.<sup>112</sup> And, as we have seen, so is universality:

For the definition of horseness is outside the definition of universality, and universality is not contained in the definition of horseness. Horseness has a definition which does not require universality; rather universality happens to belong to it.<sup>113</sup> (*Metaphysica V*, 1A; fol.86v1)

But even though Avicenna denies unity and universality to the nature-in-itself, he claims it has a certain kind of being. He claims that a nature has two kinds of existences, in the mind and in particulars. But in itself, it has a certain kind of being, an *esse*, one that is prior to being in particulars and being in the mind:

The essences of things either are in the things themselves or are in the intellect. Thus they have three relationships: One relationship of an essence exists in as much as the essence is not related to some third existence nor to what follows on it in virtue of its being such. Another is in virtue of its existing in these singulars. And another is in virtue of its existence in the intellect. (*Logica*, III; fol.12 r1)

Therefore, this consideration precedes in being both the animal which is individual on account of its accidents, and the universal which is in these sensible items and is intelligible. (*Metaphysica V*, 1A; fol.86v1)

Avicenna speaks as though the nature-in-itself (U4) has its own proper being, which is not the being of the particular thing, nor the being in the intellect. It is this nature that is neither one nor many, neither existent in particular things nor in the intellect. It is merely what it is in itself, the “proper being of essence.”<sup>114</sup> It seems that Avicenna wants to have his Platonic cake and eat it too, for he wants the nature-in-itself to have a special kind of being, but stops short of claiming existence for it.

But there was a problem for the schoolmen with accepting Avicenna’s concept of nature-in-itself. The scholastics had by this time developed the theory of transcendent properties of being,<sup>115</sup> a set of properties that all beings have: unity, truth, and goodness. Now Avicenna claims that a nature has being, but no unity.

This was impossible according to the accepted scholastic notion. Part of the problem was that in denying numerical unity, Avicenna did not mention other possible kinds of unity, implying that numerical unity was the only kind. And this is where Duns Scotus comes in. His particular contribution to what is converging as the moderate realist position was in claiming that there are other kinds of unity, while at the same time accepting that the U4 has a certain kind of being.<sup>116</sup>



## *Chapter 2*

# **Duns Scotus**

The debate concerning “universals” was interrupted by the bringing back to light of Aristotle’s *Metaphysics* . . . but the effects of that debate, as far as it went . . . was that all the world was convinced of the realist position. Scotus, however . . . toward the end of the XIIIth century . . . created so complex and puzzling a doctrine that Ockham . . . joined a group of Nominalistic thinkers. (Peirce, MS 648, 1910)

By the time John Duns Scotus (c.1266-1308) joins the discussion of universals in the late thirteenth century there is an already-established and quite elaborate terminology and conceptual framework, going back to the time of Aristotle. As we have seen, Boethius’s presentation of the problem set the stage for subsequent discussions during the Middle Ages. He also contributed greatly to the terminology; although many of these terms had been used by others in their own texts or in translations from Greek texts into Latin, it was largely due to Boethius’s use of them and the meanings he attached to them that they became part of the technical vocabulary.<sup>117</sup> This does not mean, of course, that the terms were always understood or used in the same way. There were disputes then, no less than now, over the meanings and the proper use of these expressions. But unlike now, the results of these disputes then had an unparalleled importance: there could be dire consequences, from excommunication from the Church to the death penalty, for proponents of the wrong theory. The reason is that all these issues had profound repercussions on theological matters, which in medieval times were matters of vital importance. This was an age when theology was the “queen of the sciences” and philosophy its “handmaiden.” Philosophical doctrines on individuation, for example, as will be seen below, had an impact on such Church dogmas as the Trinity, original sin, the immortality of the soul, and the nature of angels.<sup>118</sup> It is important to try to understand the intellectual environment of Scotus’s time, especially since it was over seven centuries ago and quite different from the more contemporary one of Peirce.

The thirteenth century is often considered the “Golden Age of Scholastic Philosophy.”<sup>119</sup> It was the time of the great syntheses between theology and philosophy. There were three main factors that contributed to this achievement: the rise of the universities, the creation of the mendicant orders and their involvement in the universities, and the “rediscovery” of Aristotle, whose works reached the Latin West through two channels: in the previous century, Arabic translations (mostly by Avicenna) from the original Greek and Syriac became available to both Spanish and Italian scholars through their contact with Muslim culture (especially in Spain, where the Moors established themselves). By the early 1300s, Byzantine texts became available and Averroes was the main interpreter in these. The study of Aristotle gradually took prominence in the curriculum of the University of Paris, and of Oxford, and eventually became a prerequisite for theology. These two schools received royal and papal charters at about the same time, which protected them from local authorities and granted them autonomy in licensing teachers, regulating educational conditions, etc. It also supposedly gave them some independence from local clerical authority, but this was not always the case, especially if the Pope was called on to intervene, as sometimes happened. Besides the Bible, the curriculum included the study of the *Four Books of Sentences* by Peter Lombard, a collection of patristic (early Christian theologians) texts in the format of “Sic et Non” (incorporating objections) brought from law into theology by Peter Abelard. There were two types of instruction for students: the lecture and the disputation. The latter was a debate in which students and masters tried to resolve difficult questions. The university sponsored public disputations on feast days and twice yearly there were “open” or quodlibetal disputations where important issues were discussed.

It is interesting that there was such an eagerness to learn about Aristotle, especially since this was not welcomed by many prelates and theologians. Many times what Aristotle said seemed to contradict basic Christian doctrine, and this led to bitter and ultimately life-threatening confrontations. But Aristotle, as we saw above, was ambiguous in at least a few of his doctrines, so this provided flexibility in interpretation and promoted combination with other influences, like Neoplatonism, Augustinianism, etc.

As discussed in the first chapter, “the problem of universals” arises out of both a metaphysical and an epistemological concern. We seem to acquire knowledge of the world by a process of generalization: the intellect detects what appear to be certain common, or shared characteristics among sensory objects and then forms a concept of these objects comprising these distinctive features. This process is repeated continuously, so that countless concepts (each called a “nature” or “essence”) are “stored” in the intellect. When a sensory object is encountered, if the characteristics match the ones in an already-formed concept, it is recognized as such; if not, a new concept has to be formed. The process, as we have seen, is called abstraction,<sup>120</sup> and the nature abstracted in the mind, the universal (U2). An important implication of this is that what the intellect knows about the sensory

object (called a “supposit” or “thing,”<sup>121</sup>) is not what is uniquely individual about it, but rather knows only those common characteristics. In other words, all I know about this book in front of me is that it is red, big, heavy, old, etc.; that is, features shared by many other things. I do not know its inherent “this-bookness” as such. We seem to find in the world, then, both individuality and community (commonness). So there are at least three general metaphysical questions that, by the time of the scholastics, needed to be answered:

- (1) What is the ontological status of the universal? Is it just a relation that we manufacture between the thing and our thoughts, or concepts? Or is it a nature somehow “in” the thing itself?
- (2) What is the ontological status of the individual? If the common nature is “in” the thing, how can the thing be an individual as well?
- (3) How does the nature become “universalized” through abstraction? And how does something become “individualized?”

But there are important epistemological implications of the answers to these questions, which lead to a further question:

- (4) Since we do not know the individuality of things as such, and since our knowledge is based on the universal, if the latter is merely a creation of our minds with no basis in the thing, then can we really say we have any true knowledge of the world?

The various positions thus formulated by the scholastics, depending on the answers to the above, were classified, as we have seen, under the classic options of nominalism or realism.

Scholastic realism, as we know, refers specifically to the doctrine that universals are real. It was also known as moderate realism, because it was considered an intermediate position between two extremes: the claim that universals exist (Platonic, or extreme realism) and the nominalist claim that since only individuals exist, universals don’t, and therefore are mere words, at best concepts (conceptualism), but still mind-dependent. The ingenuity of the scholastic claim lay in its compromise: the recognition that although only individuals exist, universals can still be considered real. This position evolved, as already mentioned, from interpretations of Aristotle’s teachings with the appropriate accommodations for Christian dogma.<sup>122</sup>

The classic protagonists in the nominalist-realist debate were John Duns Scotus for the realist side, and William of Ockham for the nominalists, even though they probably never met, and the issue was hotly debated way before they ever came into the picture.

Since the focus of the debate between the nominalists and the realists is usually their disagreement, it is sometimes overlooked that they shared a substantial

area of agreement as well.<sup>123</sup> I want to emphasize this not only because it promotes a better understanding of their positions, but also because it will help clarify some of Peirce's stands on the issue as well.

Both nominalists and realists subscribed to the Aristotelian-based notion that nature itself, independently of our understanding, is divided into the biological classes of genera and species of individuals.<sup>124</sup> But it is, as mentioned before, what this "realism" requires that is the source of the debate. For example, must there then be an extramental entity in each individual that makes it belong to a certain genus, a certain species? Or is it that there is simply a "similarity" among members of a certain group, as nominalists would say, and simply leave it at that?<sup>125</sup> Nominalists and realists also agree that the answer that a Platonist would give, namely that genera, species, and differences as well as universals in general existed as such independently not only of our thoughts but also of individuals themselves, was not the proper answer. For both camps also shared the belief that only individuals have "real" existence.<sup>126</sup> Also, any type of "Christianized" Platonism of the kind suggested by others, whereby universals, or Plato's Forms were ideas in God's Mind, as Augustine suggested,<sup>127</sup> was also eventually rejected in favor of the more "modern," or Aristotelian approach.<sup>128</sup> Both sides also agreed that a universal could not have existence as such (not the Platonic kind, nor in the individual itself, which is what the realists proposed) if there were no actually existent individuals.<sup>129</sup> Also, both sides considered that although there is such a thing as universality (in the sense of our using general terms in language and thought), it is therefore confined to the intellect since numerically one thing cannot be in many things at the same time (recall the one/many problem). We can summarize the points of agreement into the following:

- Universals are mind-dependent
- Everything that actually exists is individual

Now, if realists conceded these points to the nominalists, then in what way were universals "real?" Scotus gives an elaborate explanation of this, as well as how we can still claim to have knowledge of things. Ockham shared with Abelard, an earlier nominalist,<sup>130</sup> the opinion that universals are mental signs with no extramental correlates. Ockham considers the claim that individuals are similar and therefore classifiable, as sufficient by itself to ground these generalizations, which do have a sort of being in minds as a "quality" of the mind, that is, as an act of a thinking being:

a universal is not something outside the soul. Also it is certainly not nothing. Therefore, it is something in the soul . . . and consequently is a true quality of the mind. (*Quodlibet* V, q.13)<sup>131</sup>

Recall that Aristotle speaks of universals and singulars in terms of the logical relation of predication:



Among things, some are universal while others are singular. By “universal” I mean what is apt to be predicated of many, by “singular” what is not. For example, man is a universal, Callias a singular. (*De Interpretatione* 17a40-17b2)

But subsequent generations spoke of them in varying ways: as in the supposit, or in the mind, etc. These notions of the universal, the logical and the metaphysical, then, were present during the Middle Ages (this does not mean that they were always recognized as separate notions).<sup>132</sup> This eventually led, however, as seen above, to the obvious question: Is this relation of predication created by the mind, or is it, besides, a reflection of a corresponding metaphysical structure and therefore “discovered?” Nominalism (at least Ockham’s) allowed that there were similarities in things that were somehow recognized by the intellect. But he refused to admit that there were entities of the kind the realists proposed as an explanation. Realists (especially Scotus) claimed that there was an actual intelligible structure, a “nature,” or “essence” in things, which through the complicated process of abstraction was imprinted on the intellect and was therefore the basis for the relation of predicability, or universality, and, perhaps more importantly, for the claim to knowledge of things as they really were.

In general, the schoolmen (both nominalists and realists, as we saw above) held that only individuals exist. The realists, however (specifically Scotus), were concerned to guarantee the truth of our conceptions, including this relation of predicability, and thereby safeguard the integrity of our knowledge of the world. This is why it was essential for realists to show that there were entities in things such that, when abstracted, the result is true conceptions of our surroundings, and not mere fictions created by our minds.

Scotus’s efforts focused on trying to find a coherent view of universals which protected our claims to knowledge while at the same time preserving the integrity of the individual thing. He built on the framework of Avicenna’s theory, getting rid of the problematic elements while adding his own solution.

Scotus treats of the universal and of individuation in at least five different places: in *Lectura* II d.3, q.1-6, *Ordinatio* II, d.3, q.1-6, *Reportata Parisiensia* II d.12, q.3-8, *Quaestiones super librum Metaphysicorum* VII, q.13 and 18, and a dispute with William Godinus, “Utrum materia sit principium individuationis.”<sup>133</sup>

He begins his *Quaestiones* by asking “Utrum universale sit aliquid in rebus?” (Whether universals are in things?) Being “in things” (*in rebus*) is meant to contrast with “being in the mind,” that is, “existing” as an object of a mental act or state. The latter is called having “objective being” (*esse objectivum*).<sup>134</sup> The question is, then, whether universals have, besides objective being in the mind as objects of mental acts, an existence in extramental things as such. Scotus identifies three basic types of opinions: the first is Plato’s response, which he claims is contradictory (“the same numerical thing is the quiddity of a multitude of diverse things, and at the same time exists outside them”).<sup>135</sup> He then identifies two “ex-

treme” views which he suggests are derived from Aristotle. The first of these is the claim that “the universal is in the thing” and the second claim is that “the universal exists only in the intellect.”<sup>136</sup>

### Unpacking the Universal

You see it’s like a portmanteau—there are two meanings packed up into one word. (Carroll, *Through the Looking-Glass*)

Scotus was well aware of the muddle that had resulted from several centuries of well-meaning, but confused discussion of universals. He also recognized that the term “universal” had been equivocated by many. He took it upon himself to unpack assiduously the portmanteau of universals:

First we must distinguish the senses of “universal,” for it is taken or can be taken in three ways: It can be taken for a second intention which is a certain relation of thought in the predicable directed to that of which it is predicable. The noun “universal” signifies this relation concretely just as “universality” does abstractly. In another sense “universal” is taken for that which is denoted by that intention, which is a thing of first intention, for second intentions are applied to first intentions. In this sense it can be taken in two ways: In one way for that which is denoted by this intention as a sort of remote subject. In another way, for the near subject. In the first way a nature taken absolutely is called universal, because it is not of itself this; and thus it is not contrary to it of itself to be said of many. In the second way only that is universal which is actually indeterminate in such a way that numerically one intelligible is sayable of every suppositum. This is the complete universal.<sup>137</sup> (Scotus, *Quaestiones Subtilissimae super Libros Metaphysicorum Aristotelis VII*, qu.18)<sup>138</sup>

Now is the time to say something about Scotus’s use of the Avicennian notion of “intentions.” Let me backtrack a little. Recall that for Aristotle what is knowable about material objects in the world is their form, which is that character of a thing that makes it what it is (a type or species) and which is distinguished from its material manifestation (its matter). The intellectual soul becomes aware or “informed” of a thing when it receives its form, also called an “intelligible species.”<sup>139</sup> Avicenna called this form in the soul *ma’na*, Arabic for meaning, or notion. The word was translated into the Latin *intentio* which meant “natural sign in the soul.”<sup>140</sup> Thus we see how the form, or essence, of an extramental thing (*extra animam*), what makes a thing what it is, is also the intelligible species, abstracted into the intellect (*intra animam*), and is what becomes the basis for predication.<sup>141</sup>

A first intention, then, is thought about a thing (an extramental thing, or thing in the “real” world).<sup>142</sup> The direct object of a first intention is a thing, or supposit. For example, thought about a rose is first intentional. A second intention is thought about a first intention, or a thought about a thought, or a word, or a concept. Thought about the word “rose” is second intentional. The object of a second

intention is the first intentional object itself. Notice that although both intentions are *entia rationis* (mental “beings” or things), the direct object of a first intention is a real being (*ens reale*) while the object of a second intention is another *ens rationis* (being in the mind). So while an *ens reale* can be an *ens rationis* or “have existence in the mind” simply by being known, an *ens rationis* can have existence only in the mind.<sup>143</sup> While both *ens rationis* and *ens objectivum* (intentional object) fall under *esse cognitum* or “known being,” and seem almost synonymous, I suspect that the former is used to indicate that that being cannot have existence independent of mental acts or states. An “object of thought,” although also dependent on a mental act, can refer to something that has extramental existence as well.<sup>144</sup>

Scotus is speaking of the logical relation between a predicate and a subject when he speaks of the first sense of “universal.” This is the U3. It is a second intention because it is thought about a concept (that is, predicability). It is an *ens rationis*, and “universality” is another name for this relationship. This corresponds to Aristotle’s definition, and with the Aristotelian tendency of speaking of universality in logical terms. Nominalists would recognize this universality or predicability of terms, that is, the U3, without recognizing U1, or U4 (a conceptualist might recognize the U2 as long as it is limited to a mere concept, but not the U2 as abstracted real entity). This first sense of the universal is the “extreme” opinion Scotus identifies as the claim that the universal is in the mind only.

Scotus then suggests that the other “extreme” opinion, the claim that the universal is somehow in the thing (U1), can be further analyzed in two ways, as between two kinds of first-intentional universality: the “remote subject” and the “near subject.” This is a case of first intentions since here we are dealing with the metaphysical aspect—the nature as such, and not the relation of universality (as in the first sense). Let me go over the “near subject” or the “complete” universal first. This is what I have called U2; it is the abstracted indeterminate essence without the particular features, which we use to classify and understand the manifold of individuals in the world. Let me make another parenthesis in order to review the process of abstraction and the medieval account of how we acquire knowledge.

As we have seen, the scholastic theory of abstraction has an Aristotelian-Avicennian framework. Scotus modifies it to incorporate Christian tradition. According to this tradition, humans are creatures midway between beasts and angels.<sup>145</sup> The respective cognitive powers reflect this: beasts rely on their senses and hence perceive only sensible things due to their nature as material substances while angels have direct access to the natures or essences of things due to their spiritual or immaterial makeup. Humans’ proper intellectual (immediate) object is the essence, or nature, or quiddity (*quidditas*) of what is sensible or material, but the path to this knowledge is through the senses: they grasp the material or accidental features of the sensible object, and with the aid of the phantasm and passive and agent intellect, are then able to grasp the immaterial aspect (the nature, which is transformed into the universal in the mind).<sup>146</sup> It should be remembered, however,

that though the path is indirect, the knowledge of the nature or essence attained is of the nature; it is not a representation only, but rather the phantasm captures its true essence. This is what we've seen as abstractive intellection. But Scotus distinguished a second, or intuitive, kind of intellection as well:

It is helpful to distinguish two acts of the intellect at the level of simple apprehension or intellection of a simple object . . . [One is an] act of understanding, which can be called "scientific,"<sup>147</sup> because it is a prerequisite condition for knowing the conclusion and understanding the principle, can very appropriately be called "abstractive" because it "abstracts" the object from existence or nonexistence, from presence or absence. But there is another act of understanding, though we do not experience it in ourselves as certainly, but it is possible. It is knowledge precisely of a present object as present and of an existing object as existing . . . This is so when it is attained in itself and not just in some diminished or derivative likeness of itself [i.e. an intelligible species]. (*Quodlibetal Questions* VI, q.19)<sup>148</sup>

Intuitive intellection (*visio*) is a form of existential awareness in which an object is grasped as present "here and now." In the case of angels, it is direct knowledge: it relies on no intermediaries such as phantasms and intelligible species, hence it is the means by which immaterial beings acquire knowledge. Human beings, as composites (matter and spirit) on the other hand, attain most of their knowledge through the indirect or "derivative" way, that of abstraction through the intelligible species formed in the intellect. Abstractive cognition, as discussed already, is how humans understand the world, although in this life, there is a limited access to the intuitive or nonderivative knowledge of immaterial beings: the awareness of self, and certain simple impressions, like that of color:<sup>149</sup>

There is some knowledge of the existent as such, such as that which grasps the object in its actual existence, e.g., the sight of color and in general of any sense perception involving the external senses. (*Quodlibetal Questions* XIII, q.27)

However, it must be remembered that humans are also composed of immaterial substance (the soul), which according to Christian belief survives death. Those who lead good Christian lives will be rewarded by being allowed into heaven, that is, the place where God and the angels reside. Now since our primary means of attaining knowledge is through sense perception and abstraction because of our actual state (in a material body), once the body is no longer there, we lose this capacity for sensation and abstraction. There has to be a way by which these blessed souls can have a "vision" of God after having lost their sense of sight.<sup>150</sup> The answer is that they, like the angels, will then have full use of this intuitive capacity, one that is more "perfect" because it results in immediate, direct knowledge of all aspects of things.<sup>151</sup> As we will see later, our inability to have full use of these intuitive powers and because we must rely on sense-dependent processes is the reason why we cannot know the "haecceity," or the "this-

ness,” or the singularity, of a thing as such.<sup>152</sup>

Since most of our knowledge in this life is attained through abstraction, or “derivatively,” all real knowledge begins with the senses: *Cognitio nostra oritur a sensu*.<sup>153</sup> The process of knowing according to Scotus goes like this: the first time the sensation of say, whiteness, is experienced, the intellect does not recognize the color since it has not seen it before. Before the mind is able to define it, or even to begin to say what it is, it is in the stage of “confused knowledge.”<sup>154</sup> Now what seems like an oxymoron is a technical term; it refers to the act of knowledge itself, and not to the confused object. That is, it does not mean that the object is perceived in a blurred way. Rather, it is opposed to what the scholastics called “scientific” knowledge, or knowledge by way of definition. A gardener, for example, may know a lot about the care of her plants, but unless she can give philosophical or biological definitions for the plants, her knowledge is confused. We know something distinctly, Scotus claims, when we are able to define it; we know it confusedly when our notion stands for the object in much the same way that a name does.<sup>155</sup> Just as a name can stand for the entire thing and not tell us much about it at all, the confused concept may include a lot of data, but since it is unanalyzed, it is not distinct knowledge. Our first knowledge, then, will be of something confusedly known. Our first knowledge is that of “being,” or “something.”

The process continues: a sensory object excites our senses which detect its accidental features (size, color, shape, etc.). An image, or phantasm is then created in the phantasy or *imagination*.<sup>156</sup> The “passive” intellect<sup>157</sup> abstracts the form or nature in the thing, creating an intelligible species or likeness that has only the common features of the sensible object.<sup>158</sup> The “active” or “agent” intellect then interacts with the intelligible species to create the universal in the mind. It is the agent intellect in conjunction with the intelligible species that produces the complete universal, the U2. Since the only way we can know is through this process that results in the complete universal, our knowledge of the world is a product both of our mind and of the world at large. This point will be crucial for understanding Peirce’s brand of realism.

Therefore, the agent intellect in conjunction with a nature which is in some way indeterminate of itself is the whole effective cause of the object in the possible intellect in respect of its first being. And this is the case as regards the complete indetermination of the universal. (*Quaestiones VII*, q.18)

Back to Scotus’s analysis of the different senses of the universal. Recall that Scotus between the “near subject” and the “remote subject” when speaking of the two senses of first intentionality in which a universal is spoken of as being “in the mind.” Recall that since we do not grasp the object’s singularity, it is the likeness that carries the information about the sensible object and then acts as proxy for that sensible object, becoming the *ens objectivum* (object of thought). things existing as objects of thought have *esse objectivum*.<sup>159</sup> Since the *ens objectivum* is a product of cognition, it is the “near subject,” the universal as it “exists in the

mind,” the “complete universal,” or what I have called the U2.<sup>160</sup> It is not the nature taken absolutely or in itself (U4), for the latter is the “remote subject” of which the U2 (the “near subject”) is the nature-as-thought. Both the U4 and the U2 are indeterminate; the former in the sense that it is neither singular nor universal in itself and can have being in either way. The indeterminacy of the U2 means that it is non-specific enough to apply to all the individual instances of the common nature that would fall under it. It is one concept (it has numerical unity) that applies to many things because it is indeterminate enough that it covers all that it applies to (hence the problem of the one and the many is resolved). It is not a Platonic entity, for it is the product of the human mind; nor, for the same reason, does it exist as such in the sensible object. But if the U2 or complete universal is a product of our intellect, then is it not a fiction? Scotus argues vehemently against this.

It is the U4 or the “remote subject,” the third sense of “universal,” which is, I want to argue, what provides the “tie” to the real world that Scotus needs in order to claim that we are actually apprehending the nature in the sensible object. This is what is abstracted from the sensible object and is what is eventually transformed, through the work of the agent intellect, into the complete universal in the mind. It is the “remote” subject because that is what is directly abstracted, or brought “near” to the mind.

But remember that the universal does not actually exist in the thing, for everything that exists in the individual is individual.<sup>161</sup> How then can the nature (a universal in Scotus’s third sense) be in the individual? First of all, the nature in the individual is an “individuated,” or “contracted” nature that is unique to each individual.<sup>162</sup> For example, the humanity that is Socrates’ is not the same humanity that is Plato’s (one thing cannot be in more than one place at the same time). This is why what I have called U1 cannot be Scotus’s “remote subject.” I have been using the term U1 to describe the fuzzy notion that Alexander and others struggled with: a common nature somehow “in” the thing. For Scotus, the common nature is not something that is in the thing in addition to the thing’s individuality. The nature as existent in the individual is individual; the common nature and the individual’s individuality are both conjoined, a unity, yet distinct only in a formal way. We could say that the individual consists of an individuated nature, or an individuated U4 (I-U4) and a haecceity, although these are really one (I still use the term “U4” although once individuated it is an individual). The I-U4 is what is formally distinct from the haecceity in the individual and is what is abstracted and synthesized into the U2:

there is some real unity in things, apart from all operations of the intellect, which is less than numerical unity or the unity proper to a singular, and this unity belongs to the nature in virtue of itself. In virtue of this unity that is peculiar to the nature as it is a nature, the nature is indifferent to the unity of singularity; therefore, it is not of itself one by that unity, i.e. by the unity of singularity. (*Ord.* II d.3 p.1.q.1)

But then does that mean that Socrates and Plato have nothing in common,

that there is then only numerical difference, and therefore universality and our knowledge of the world is a fiction? Scotus would want to answer that in the negative. The nature (U4) has two modes of “existing:” in the individual it is individual; in the mind it is universal:

And just as the nature is not of itself universal in virtue of that being, but rather universality happens to that nature in virtue of the first character of it on account of which it is an object, so also in things outside where the nature exists with singularity the nature is not of itself determined to that singularity; rather it is naturally prior to the character that contracts it to that singularity, and insofar as it is naturally prior to that contracting factor it is not repellent to it to be without that contracting factor. And just as the object in the intellect in virtue of that entity of it and universality has true intelligible being, so also in reality the nature has in virtue of that entity true real being outside the soul (*Ord.* II d.3 pl ql)

But then would it not be contradictory for something to be able to be both individual and common at the same time? Again, Avicenna had provided the solution to this dilemma: individuality and universality are accidents of the nature;<sup>163</sup> the nature-in-itself or “taken absolutely” is neither universal nor individual. It is “indifferent” to all these qualifications, and hence it is “common,” meaning that it can take on an infinite number of individual differences and create infinite individuals with individuated natures. It is “not contrary” nor is it “repugnant” nor “repellent” to it to be said of many. It can belong to many because it is not of itself (*de se haec*) a “this.”<sup>164</sup> The nature-in-itself (U4) cannot have numerical unity since it is not “one.” When contracted by the haecceity into particularity it becomes one individual. When abstracted by the human intellect, however, it becomes a numerically one universal (U2) that applies to many. The universal which is predicated of many has to be a single thing which many are said to be, for otherwise the single meaning of the predicate which applies over all the particulars would vanish. But recall that numerical unity is the kind of unity that individuals, or singulars have. So hold on! Since the complete universal is one and therefore has numerical unity does that mean that the universal is an individual or a singular? Scotus has the proper subtle answer: the complete universal is singular because it exists in a single intellect.<sup>165</sup> As we will see, Peirce will be at odds with this claim that the universal (the source of knowledge) is in a single intellect.

Everything that is an individual (one) contains only individual things. That in an intellect the nature is also universal does not contradict this, because universality is a second intention (suited to be predicated of many), whereas the complete universal is a first intention; they are different modes, so there is no contradiction.<sup>166</sup>

But recall that there was a problem, however, with Avicenna’s notion of the nature-in-itself. Avicenna did not ascribe numerical unity to the common nature because of the problem of the one and the many (one thing could not be in many things at the same time). However, he claimed that it had its own “proper being”

that was not the kind of being things in the world have nor the kind of being things in the intellect have. This was a problem for the scholastics, as I briefly mentioned before, because by their time the doctrine of transcendentals, which they subscribed to, had been developed. Let me explain briefly what this was.

According to Scotus, being (*ens*) is a simple concept and hence cannot be defined. Because of this, it is not a genus but rather transcends all genera. For Scotus (but not for all scholastics) being is a univocal (applying to all beings, including God) concept common to all things (created and uncreated). Because of this univocity, there must be a way in which being is “contracted,” or determined into the many things it encompasses. The intrinsic modes are the way in which beings are differentiated. For example, that by which God and creatures are differentiated are the intrinsic modes of infinity (God) and finitude (creatures). The former is not subdivided, for it is the absolute, which exists for and of itself. The latter is what eventually is subdivided into the ten Aristotelian categories (the *genera generalissima*): substance, quantity, quality, relation, action, passion, place, time, position, state. However, prior to this division, being has certain transcendent attributes which do not subdivide further but which are common to all. Scotus identifies two kinds: the ones that are “convertible,” or applicable, with all being: unity, truth, and goodness, commonly known as “the transcendentals,” and the ones that are not convertible, but which can be predicated of all in disjunction: infinite/finite, eternal/temporal, necessary/contingent, actual/potential. Every being, then, has unity, and is, true, good, and is either infinite/finite, eternal/temporal, etc.<sup>167</sup>

Now Avicenna, as we saw, while allowing that the nature had of itself being, denied it unity. This was not acceptable to a scholastic. Aquinas, who develops his notion of essence in *De Ente et Essentia* in an obvious Avicennian tradition, carefully frames his position in a way that circumvents any implication of being in the essence considered in itself so as to avoid embarrassment.<sup>168</sup>

It is obvious there are not many possible ways to modify what the scholastics considered Avicenna’s *faux-pas*: either the nature in itself has being and unity (unacceptable because then it is one thing in many), or it has being and no unity (Avicenna), or it has no being but has unity (Aquinas), or it has no being and no unity (not possible because being encompasses everything, so there is nothing that has no being). The following table illustrates these:

	Being	No being
Unity	Unacceptable (problem of one and many )	Aquinas
No Unity	Avicenna	Not possible

**Table 2-1**



Scotus comes up with an ingenious solution: he claims the nature in itself has being (but only in a certain sense) and unity (but only in a certain sense). He develops his celebrated theories of the real “less-than-numerical” unity and the formal distinction as a result.

Scotus claims that if all real unity were numerical, then everything would be equally diverse; the world would be made up of totally different things, with no common features among them. The intellect then could not abstract anything more common from Plato and Socrates than it could from “Plato and a line.” The uniformities reflected in our concepts would then all be false. The only way, then, for it to be true that Plato and Socrates share the same common nature is for that nature to have a unity “less than numerical.” This way, our claim to knowledge about the world is again safeguarded. The intelligible species is not just a representation or mirror image of the nature. It is the nature, or essence itself (separated of its individualizing features) that is grasped directly into the intellect through the abstractive process described above. Hence, we can truly claim to have knowledge of the object, since we have knowledge of its essence, or *quidditas* (what it is).

But what is the ontological status of this real “less-than-numerical” common nature? Does it exist? Scotus would want to say that it is real in the sense that it is “prior” or independent of the workings of the human intellect, since it is actually in the thing; it therefore has unity, although not numerical unity. But he will insist that it can only exist either in a particular with real (existent) being,<sup>169</sup> or in the intellect (as a universal) with objective being. As contracted in a particular it is particular in the sense that it is opposed to universality: that particular nature cannot be predicated of many, to put it in logical terms. We do not predicate “Platoneity” of anything else but Plato. The nature-in-itself is still “common,” however, in that it is not predisposed towards any nor does it reject any particular individual. Universality is only a way (the human way because of how our sense-dependent intellect functions in this life) of conceptualizing the nature; it is not a feature of the nature-in-itself just as singularity or particularity is not a feature of it as such either.

It seems to follow, then, that if there are no particulars, or individuals of a certain nature, that nature no longer exists (since it only exists in the particular as an aspect of that particular). If all the roses in the world are destroyed, “roseness” will not, as John Boler says, “hang around like the smile of the Cheshire cat.”<sup>170</sup> But which universal does Boler mean? Is he talking about the “incomplete” universal (the “remote subject,” nature-in-itself, U4), or is he talking about the complete universal (the “near subject,” U2)? Certainly the instances of nature-as-individuated (I-U4) would be destroyed if all individual roses were destroyed, but would the roseness-nature-in-itself be destroyed as well? It seems Scotus would want to say “yes;” he was no Platonist, and he repeatably said that the nature can only exist as particular in the supposit or as universal in the mind (U2). In other

words, the nature-in-itself manifests itself in only two ways: it can be present in the intellect in the sense that it is what gets processed by the agent intellect into the complete universal, and it can be present in the particular when it is contracted by the haecceity into one numerical unity, the individual. But while in this latter manifestation, it is “one” with the individual, that is, inseparable from the individual’s individuality. An individual, recall, is not a sum of two parts, a nature plus a haecceity; rather, it is a numerical unity, one whole, which can be conceived as but is not composed of two components.<sup>171</sup>

It sounds, then, as if Scotus would deny that the nature-in-itself would somehow persist if uninstantiated; at least he is usually interpreted this way (it seems Peirce interpreted him this way also, as will be seen). But it is not clear to me that this was Scotus’s position, for he admits in the *Quaestiones* of at least the logical possibility of a nature-in-itself without individual instantiations:

A nature in itself does not reject these [individual grades], and yet the nature given as existing or occurring does reject them [other individual grades besides its own], just as it rejects non-existence and non-occurrence. Likewise, perhaps the nature in itself does not reject being separated from all individual grades, since in thinking the nature without those we do not think of contradictories. (*Quaestiones* VII, q.13)

Peirce recognizes, I will argue, the mode of being of the nature-in-itself in his first category, potentiality, but chides Scotus, I will argue,<sup>172</sup> for making the nature-in-itself dependent on the particular thing and on the particular mind thinking it. But I am not sure that Scotus, if confronted, would not agree with Peirce. He does say that the nature-in-itself is “prior” to the work of the intellect, and I think this might mean something like a potentiality that perseveres even when it is not manifested in the two possible ways (in the thing and in the mind). It is also important to remember that Scotus, like Avicenna, grants that it has the proper being of essence. Scotus also seems to allow for at least the logical possibility in the passage above, when he says that “perhaps” the nature can exist apart from all individual characteristics, and that when we think of it as such it does not seem logically impossible. He also seems to allow for this possibility in the *Ordinatio* passage quoted above, when he says “and insofar as [the nature] is naturally prior to that contracting factor *it is not repellent to it to be without that contracting factor*” (my emphasis).

So much for the U4. But what about the complete universal (U2)? Would roseness in that sense be destroyed if all roses died off? Again, I am not sure that it would necessarily be destroyed. Once the universal is created (and for this the individuated nature does have to be around to be abstracted, of course),<sup>173</sup> since the universal is a product of the human intellect, it will persist, I want to claim, as long as that concept is passed along (I am thinking here of something analogous to Alexander’s claim of the U1 continuing through infinite individuals; in this case, the universal would persist in the intellect of infinite number of individuals).

Let us take the example of the Dodo bird. It is extinct; there are no more particular Dodos, and therefore no more individuated Dodo-nature as such. But I claim there is still the universal (U2) Dodo. I for one have never seen a live Dodo; however I have the concept of one because I saw a reproduction of one in the Museum of Natural History at Oxford. And as long as that concept is passed along somehow to succeeding generations (even if no more Dodos come along), that universal will survive, it seems to me. But its survival will depend on the survival of rationality in general, not necessarily on the survival of the particular Dodo. Now it could be argued, of course, that the concept I have, since it was based on a reproduction, and not on the existent Dodo, is not really a universal of the Dodo, but rather a universal of the reproduction of a Dodo and therefore does not contain knowledge of the bird at all. But then we would have claim to know much less than we would want to, for then most knowledge would have to be by direct acquaintance only (in order to abstract the nature directly). Obviously, there had to be some direct acquaintance at some point (e.g. the person doing the first drawing on which the reproduction was based) in order to extract or abstract the common nature and process it, through the agent intellect, into an intelligible species. But what if the drawing is not quite accurate, e.g. the Dodo was drawn with three toes instead of four?<sup>174</sup> This might be a problem, for what would I then say about the universal which I think I possess about Dodos? Even though I am not aware of Scotus treating a problem such as this, I think there is room in his theory to get around it.

Even when we do abstract a nature from an object that is immediately present, we do not have a conscious awareness of all the pertinent details. For example, even if I have only come across only one tiger in my whole life, I think I would (provided I survive that encounter) still recognize a tiger the second time I met with one even if I failed to notice the first time that it had rounded instead of pointy ears.<sup>175</sup> In the same way, it can be allowed that one need not have awareness of every aspect in order to form a universal about a thing.<sup>176</sup> The problem, of course, arises in determining what the minimum amount of details must be included in order for the correct universal to be formed in the mind; i.e. the number of toes might not be relevant for an adequate universal to be formed of a Dodo bird, but the general shape of its beak might be important. The answer that a scholastic (and an Aristotelian) would give, I think, is that only what is in the essential definition (the genus, species, and specific difference of the thing) would be included. But that would be circular. The basic problem lies in the assumption of both scholastics and Aristotelians, that there is an underlying isomorphism between the thing and our knowledge of it.<sup>177</sup> There is an entity (the nature) that is in the thing and that is what gets abstracted into the mind and it is transformed into the intelligible species and then generalized into the universal. Since the universal depends on the thing for its formation, there is a minimum requirement not only for the thing's being present (or an adequate substitution for that presence) but also, I think, a minimum requirement for how much of the thing needs to be perceived. For

reasons of space, I am not going to analyze the merits or flaws of the system of abstraction.<sup>178</sup> For my purposes, it will suffice if I can identify a Scotistic answer to whether a universal, either U4 or U2, can survive without existent individuals. I think Scotus would say that a universal could survive in some circumstances. We saw he didn't discount the possibility for the U4, and in the *Quaestiones* he seems to take a similar approach regarding the U2: "For a universal can also be destroyed in respect of its actual existence, if all its singulars are destroyed."<sup>179</sup> Note that he says in *respect of its actual existence actual existence*, which is only one kind of existence, the kind singulars have.

In the case of the Dodo, he might say I have a misconception of the Dodo if the intelligible species was abstracted from an inaccurate drawing. But if the artist who rendered the drawing captured the essential characteristics of the Dodo (whatever these are) that make it a Dodo (what would then be the essential definition of the bird), then I have a grasp of an adequate general concept and therefore the universal would still "exist" in my mind. If I passed this information on to succeeding generations, or if others saw the same Dodo drawing, the universal would survive. But what if I die before I communicate this knowledge and the only drawing gets destroyed as well? Since in Scotus's ontology there are other rational beings (God, angels, saints, the blessed, etc.), could we not say that the universal would still persist through them? I do not think Scotus would want to say that it would persist through God because God's knowledge is not abstractive (He does not have to go through the process of perception, and abstraction in order to form the universal). Neither do the angels. I think it could be said, though, that universals would persist in the memories of the blessed (and even perhaps of the damned and those in purgatory and limbo as well), for all these formed universals through abstraction.<sup>180</sup> So then, we could say the U2, as well as the U4, could survive as well.

But what then would be the ontological status of the U4 nature-in-itself? Peter King refers to it as the "uncontracted" nature, as opposed to the "contracted" one in actual existence in the thing.<sup>181</sup> He proposes that since it is neither one nor many, and "does not meet the metaphysical requirements for real existence . . . it is no object at all." I agree with him that the nature-in-itself does not have actual existence as itself in the particular nor does it have objective (in the medieval sense) "existence" in the mind in the sense of being the actual universal.<sup>182</sup> I disagree with him, however, in that it is no object at all; I think that the nature-in-itself, what he calls the "uncontracted nature" is really the remote subject, the U4, which, when combined (and thereby transformed) with the "individual differentia" (or the haecceity, or the contracting factor) is the individual.<sup>183</sup>

If the nature-in-itself is the remote subject, as I claim, and since as remote subject it can only actually exist, not as itself, according to Scotus, but in (as) the individual,<sup>184</sup> then if all individuals of its kind are destroyed, it seems as if it too will be destroyed; but only in a sense. As I argued above, I think it consistent with

Scotus's position that the U4 would still retain a sort of being, akin to a potentiality.

Let us review. The nature-in-itself can only have existence in the mind when processed (or abstracted) as a universal, and in the particular when individuated (or contracted). In itself it cannot exist, yet it has being prior to both of these (Scotus does not go into detail as to what this being entails, but I have tried to give a possible account). We have knowledge of the world because the nature is abstracted and becomes the universal in our minds. This universal, which is one concept, is predicable of many. Questions (1), (4), and part of (3), (that is, the ontological status of the universal, its relation to the nature, the process of abstraction, and the claim to knowledge) at the beginning of the section have been dealt with. What is left is to talk of the particular, or individual, or singular. But before I do that, I need to do as promised and mention something about the use of these words.

### The Many Senses of Individuality

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 (to atomon) and singular (to kath' hekaston); 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. (CP 3.93, 1904)

An early impression human beings have of the world is that it is composed of individuals. Trees, chairs, Socrates, the paper in front of me, and my own self seem to be clearly individual. Yet, when we reflect on what seems to be this immediate intuition,<sup>185</sup> we run into serious conceptual difficulties: how can we explain, for example, what individuality is? What are its causes or principles? What are the criteria of identification of individuals? Is individuality a quality, a relation, or something else? Which things are individual and which are not? How do we refer to individuals? In other words, these are questions dealing with the intension of individuality (a logical issue), its extension, its ontological status, the principle of individuation (metaphysical issues), and of course reference to individuals (a semantical issue).<sup>186</sup>

The problem of individuation, as we can call this cluster of issues, was, during the Middle Ages in particular, regarded as a fundamental subject of philosophical discussions. In more recent times, there has been interest in problems related to individuality, though framed, of course, in contemporary contexts.

Most of us use the terms "individual," "singular," and "particular" synonymously, but they were not always used cointensively (and perhaps not coextensively either), as Peirce expresses above. The etymology of the word gives us clues as to the slightly different meanings: for example, particularity has to do with an individual's "participation in" or "partaking of" a nature, or universal. It is a "part" of something else. Thus Socrates is particular in that he participates in

man, which is not particular. A “singular” is not many. A singular tree, unlike the species “tree” is not a plurality, but a “single” thing. “Individual” refers to the fact that the object described is indivisible: that is, it cannot be divided and still remain the same thing. If, to use a rather unpleasant example, we cut up Socrates into little pieces, each little piece will not be Socrates, but rather only a small piece of him. For the purpose of this paper, however, I will use the terms interchangeably, as is the custom nowadays.

Jorge Gracia has identified at least three different problems subsumed under “the problem of individuation.” One is the “principle of indivisibility” which deals with what Woosuk Park refers to as “indivision,” the notion described above which expresses the fact that the individual cannot be divided further.<sup>187</sup> The other problem is the “principle of distinction,” which can be described as the cause of numerical distinction, that is, why one individual is distinct from the other. I think this can also be described in terms of divisibility as well: distinction is what divides up the species into numerically different individuals. Another aspect endemic in the notion of individuality which is not usually treated as separate from the other two is the ontological status of the entity, if there be one, which results in individuality. Park claims that individuality means indivision for Scotus,<sup>188</sup> and that though he does not isolate these different aspects, Scotus almost inadvertently solves, with the notion of haecceity,<sup>189</sup> both the problem of distinction and the ontological status of the entity.

I agree that Scotus does define individuality mainly as indivisibility, as will be seen below. But even though Scotus does not explicitly differentiate the problems as Gracia and Park do, I suspect that Scotus was aware that there were several aspects to individuation. I say this because of Scotus’s use of the words “individual,” “particular,” and “singular;” I think he chose which to use depending on what he wanted emphasized. In the following, for example, he is speaking of a single (one, “unique”) thing, so he speaks of “singularity:”

[What we are looking for] is the reason why a material substance is singular by this determinate or unique singularity that is the reason why a stone is just this stone and could not be any other stone. (*Quaestiones* VII, q.13)

In the *Quaestiones*, when Scotus sets out the path he will follow, he asks: “Is a material substance of its nature ‘this,’ that is, singular and individual?” Notice how, by way of explaining what “this” means, he adds both the word “singular” and “individual.” Gracia does not think Scotus makes any distinction in the texts in question between the meanings of the two terms,<sup>190</sup> and Park seems to labor under the same assumption. I disagree with both, for I believe Scotus uses both words on purpose, to illustrate that the concept he is trying to get a grip on somehow includes both meanings. This is even more evident as he elaborates:

I am not asking by what is a nature singular and individual, if those words signify a second intention . . . Also I am not asking about the real numerical unity by

which a nature is one in this way, for by numerical unity a thing is formally one . . . Rather, because among beings there are some that are indivisible into subjective parts, i.e. to which it is formally repellent to it . . . Here then is the meaning of the question concerning this topic: What is it in this stone that is that by which, as by a proximate and intrinsic basis, it is unqualifiedly repellent to the stone to be divided into many items each of which is it? (*Quaestiones VII*, q.13)

Here, Scotus is saying that he is not interested in a definitional explanation (a second intention) of singularity nor of numerical unity (notice again he shows that he is aware of at least these two aspects in the notion of individuality).<sup>191</sup> What he wants to identify is the entity (the “proximate and intrinsic basis”) whereby an individual is made indivisible, and here he emphasizes that by “individuality” he means indivision. Unlike genera which are divisible into specific parts (species) and unlike species which are divisible into subjective parts (individuals), individuals, as we saw above, cannot be further divided into parts “each of which is it.” The following is another example from the disputation with Godinus, where Scotus points to indivisibility as the feature he thinks is most important in the question of individuality:

Against this [i.e. Godinus’s] position: the singularity about which we are asking in this discussion is being a something per se one among other beings to which it is repugnant to be divided into subjective parts; of this repugnance there can only be a single cause. (“Utrum materia” E f.73v.)<sup>192</sup>

Scotus will want to argue that an individual is such by a “positive” (not through a lack of something) entity intrinsic to the individual itself. But recall that intrinsic to the individual is what I have called the individuated nature.<sup>193</sup> How, then, can there be something in each individual that accounts for its being what kind of thing it is (its nature) and at the same time something that makes it be only this? In other words, in an individual there is something that is, in a sense, in common with all other members of the same species and also something that is unique to each: complete opposites. Is it possible that both these things be present in the same object at the same time? Scotus’s theory of individuation consists of the individual differentia, or difference (sometimes referred to as *haecceitas* or haecceity) and the formal distinction. Let us turn to that now.

### Scotus’s Angels

But all who live make a mistake: they draw distinctions too sharply. Angels (they say) often cannot tell whether they move among the living or the dead. The eternal torrent whirls all ages through either realm, forever, and drowns them out in both. (Rainer Maria Rilke, *Duino Elegies*, translated by J. Knoblock)

We naturally make all our distinctions too absolute. We are accustomed to speak of an external universe and an inner world of thought. But they are merely vicinities with no real boundary line between them. (CP 7.438, 1893)

John Duns Scotus is known for his distinctions. But it cannot be said, I think, that he drew them “sharply.” Rather, his were subtle (as befitting the “Subtle Doctor”) distinctions, drawn, as already mentioned, as a result of his trying to reconcile Aristotelian notions to Christian theology, for he was, like most if not all of his fellow philosophers, a theologian.<sup>194</sup> The subject of angels provides a case in point.

Aristotle does not speak of angels. Scotus does, and there is a very important reason for this—besides the obvious fact that there are many scriptural references to them, and therefore they are part of the belief system of a Christian, Scotus’s predecessors framed several metaphysical questions in the context of angelology, so Scotus was following an established format when he did the same. We are also told that the famous Condemnation of 1277 was due in part to theologically dangerous conclusions regarding angelology, and since Scotus was writing immediately after this time, he had to address this question.<sup>195</sup> Part of the difficulty arose as a result of Boethius’s definition of “person” as “an individual substance of a rational nature.” Peter Lombard then pointed out in his *Sentences* that an angel had four substantial attributes: a simple essence, i.e. indivisible and immaterial, a distinct personality, a rational nature, and a free will. But Aristotle was interpreted as having said that “all individuation stems completely from matter.”<sup>196</sup>

How, then, could all these claims be reconciled? Since angels were spirits and therefore lacked matter, then they could not have individual differences. This meant they had to differ as species, and could not be “persons.”<sup>197</sup> Aquinas accepted the Aristotelian interpretation of individuation and claimed that each angel was a species unto itself.<sup>198</sup> It was impossible, then, for there to be more than one angel per species. This impossibility applied to God’s action as well: not even He could multiply angels in one species.<sup>199</sup> This claim was reconciled with God’s omnipotence by arguing that impossibility was not considered to be a limit to God’s power because He acted within the law of logical contradiction; he could not create an “unliftable” stone, nor could he “unfound” Rome.<sup>200</sup> But the difficulty did not end there. Angels were not, like God, omnipresent;<sup>201</sup> they had to have location, and any object that has location occupies space. Hence the centuries-old joke about scholastics debating about how many angels can dance on the point of a needle. Actually, Aquinas, in question 52 of the *Summa Theologia* asks “Whether a multiplicity of angels can coexist in the same place?”<sup>202</sup> These were not frivolous questions; rather they were the “thought experiments” of their time with the important difference that the answers were really taken seriously. Aquinas, as a result, got into very serious trouble: in 1277 the Bishop of Paris, Stephen Tempier, condemned 219 doctrines and books which were seen as heretical in that they portrayed God’s omnipotence as limited. Among these propositions was #42A: “That God cannot multiply individuals of the same species without matter.”<sup>203</sup> Scotus, writing in the midst of these accusations, tries to resolve the problem without compromising God’s power nor the individuality of angels (nor his own life).<sup>204</sup>



Scotus deals with angels in several places, and in relation to several metaphysical problems. The problem of individuation, (what mostly concerns us here), is introduced in the context of angels in the second book of his several commentaries on Peter Lombard's *Sentences*, a collection of opinions of Fathers of the Church that served as a university textbook.<sup>205</sup> Scotus tells us distinction 3 in Lombard's book "treats of the personality of angels" and it was this that prompted him to raise the six questions about the individuation of a material substance.

Concerning the third distinction (which treats of the personality of angels) the first question raised is about the singularity in material substances. For it is on the basis of the divergent views about the cause of individuation in material substance that their proponents think differently about the personality of the angels,<sup>206</sup> and about their personality or unity in one species. The first question then is whether a material substance by its very nature is a "this," that is, singular and individual. (*Ordinatio* II, d.3 p.1q.1)

Scotus approaches his subject in typical scholastic fashion: by examining what others have said, commenting on that, presenting his view and possible objections, and then a conclusion. He summarizes competing theories on individuation in the first five questions. The first position is the nominalist one which claims that things are of themselves singular, so it is not necessary to explain that singularity; what does need explanation, the nominalist says, is universality, and this can be accounted for by simply posing similarities among individuals. Scotus argues that if there are only individuals, then we would be at a loss to explain the repeating elements in our experience, like Socrates and Plato (both men). It would be difficult to account for why there are degrees of similarity among things: why Socrates is more like Plato than a line. If the object is by its very essence individual as the nominalists claim, then knowing it as we do (through the universal) is knowing it as it is not, since this is opposed to its singularity. Therefore science, or our knowledge of the world, is mere figment.<sup>207</sup>

The second question deals primarily with Henry of Ghent's "double negation theory." Henry said that all "individual" means is a lack of division and a non-identity with anything else. Scotus dismisses this as a definition of individuality, but not an explanation, which is what he is after. He concludes that there must be a positive entity, or feature, of a thing that accounts for its being "repugnant" to further instantiation.

The third question deals with the theory that existence is what individuates. Scotus objects to this by giving two arguments: first of all, there are individuals that are not existent; imaginary things, like centaurs, for example, can be distinguished. And what distinguishes these from each other is not existence. Secondly, existence is common; there is nothing per se distinctive or individual about it, so it cannot be the individuating entity we are looking for.

The fourth and fifth questions are related, since they both have to do with Aristotelian notions. One says that quantity is what individuates. Recall that for

Aristotle all being can be described in terms of his ten categories. Substance is the first; Aristotle is interpreted as subsequently breaking this category up into primary and secondary, where primary substance is the individual and genera and species are substances only in a secondary sense. The rest of the categories are considered accidents, and as such are distinct from substance. Quantity and quality, however, though accidents, are “absolute” whereas the remaining seven are relational.<sup>208</sup> There is a good reason for this medieval distinction. Now, as mentioned before, a substance and its accident are distinct: e.g. the quantity of water can change through evaporation without a substantial change in the water. How then can quantity (or quality) individuate a substance if it is distinct from it and therefore not intrinsic?<sup>209</sup> Since not intrinsic and distinct from the substance, neither quantity nor quality can be the principle of individuation. As far as matter (primary matter, or pure potency with respect to substantial form) is concerned, it cannot be a principle of individuation either because it is “indifferent” to being in this or that. Also, matter was supposed to remain the same when there was what we would call a physical change, e.g. fire changing into ashes. And if matter were the cause of singularity, then the singularity of fire would have to be the same as the singularity of the ashes, something that was obviously inadmissible.

We come now to the sixth question, where Scotus lays his cards on the table:

I reply then to this [sixth] question that a material substance is determined to being this singularity by something positive and to other diverse singularities by diverse positives [i.e. other haecceities]. (*Ordinatio* II, d.3 p.1q.6)<sup>210</sup>

First, Scotus gives two arguments as to why there must be something like an individual differentia, or haecceity.<sup>211</sup> Let me begin with the less important of the two. It is based on a distinction that Aristotle made. Two things differ, he said, only if they have something in common. Hence the terms “specific differentia” and “individual differentia:” members of the same genus (e.g. animals), differ according to their species (e.g. horses, men); while individuals of the same species (e.g. Socrates and Plato) differ according to their individual differentiae.<sup>212</sup> Now Scotus argues that, in the last analysis, this difference must be something that is “primarily diverse,” that is, it must be primitively and radically unlike any other. Now this entity obviously cannot be the nature, for though one nature is not that of the other (recall that Socrates’ humanity is not Plato’s; it is only when it is a universal “in the mind” that it can be predicated of each other), they are specifically “one” with the less-than-numerical unity of the species.<sup>213</sup> Consequently, there must be something else in the individual that accounts for this primary diversity. It is not privative, not existence, nor an accident, but rather has to be something positive, intrinsic, and in the category of substance. It is the *haecceitas*, or haecceity.

His other argument is this: individuals have numerical unity. We have seen

that each individual has a “common” nature. Now that common nature (the U4) has less-than-numerical unity (in itself ) because it cannot belong to many if it is numerically one or has real numerical unity (i.e. existent in itself as an individual). Hence there must be something else in the individual that gives it numerical unity. This must be both a positive and an intrinsic entity, as we have seen. It must also be distinct from the nature since it must be individual itself since it is the source of individuality while the common nature-in-itself is neither individual nor universal (though common, meaning that is indifferent to being in any particular individual). As seen before, the nature is common because, even though it does require an individual differentia for actual existence, there is no particular individual differentia it requires. But at the same time, though distinct, this individual differentia, or haecceity must form with that nature a per se unity, since both entities comprise the one individual. Having established that there must needs be such a thing as an individual difference, Scotus is at pains to describe it. However, there is a problem: the haecceity is ultimately unique, primarily distinctive since it is what makes something individual. But we can only grasp or understand things in general terms. So we can only understand haecceity as a second intention, that is, we can understand the general concept of singularity. But we cannot grasp each haecceity itself, so Scotus cannot describe it.<sup>214</sup> We cannot know things in their individuality:

Generally speaking no one in this life knows an individual difference . . . The answer is evident that now the singular is never ideated. Hence the most complete science possible to us now concerns a most specific species, and there it stops. (*Quaest. VII, q.13*)

At best, Scotus can try to clarify, by way of a triple analogy,<sup>215</sup> what this individual differentia is. He does this by comparing it to the specific difference, which we can know. Just as specific differences contract the genus by dividing it up into different species, individual differences contract the species by dividing it up into individuals. But the analogy is not perfect: the species is not “repugnant” or “abhorrent” to further numerical division; i.e. there can be many individuals with the same specific difference (hence specific difference has a lesser, or less-than-numerical, but still a, unity: all humans are “denominatively one” in their species).<sup>216</sup> There cannot, though, be more than one individual with the same individual difference (hence individuals have numerical unity: each human is per se one individual). So the individual difference does repel other instances of it.

### A Formal Affair

Intelligit idem ipse Avicenna per aliam intencionem quod ego dico per aliam formalitatem. (*Reportata Parisiensi 1d 1a.6*)

This same thing which Avicenna understands by an intention I designate it differently as a formality. [my translation]

How can there be so many unities (generic, specific, numerical, etc.) present in one individual? The answer lies in that glorious achievement of scholasticism: the formal distinction. The formal distinction also endeavors to explain, as alluded to before, how there can be in the same thing an entity that accounts for its being an individual and at the same time another entity that accounts for its being a universal:

As there are diverse formal perfections or formal entities, then, in one and the same thing (such as whiteness) from which a generic intention can be derived (such as the intention of color), and another formal entity from which the intention of the difference (white) is derived . . . so too there is a formally distinct entity from which ultimate individual difference is derived, one which is completely a “this,” to which any sort of division is abhorrent. (*Lectura* II, q.3)

Now we may think it a bit of a waste of time to be concerned with something as abstract and complicated as this plurality of things supposedly present in individuals. But this was actually of the utmost importance during the Middle Ages, for this relates directly to the Christian notion of the Trinity: there are supposed to be three persons in one God. How can this be explained? The formal distinction comes to the rescue. It allows for three formally distinct Persons to make up the real numerical unity which is one God.

Though Scotus made brilliant use of the formal distinction, it was not his invention. The scholastics generally recognized three distinctions:<sup>217</sup> (1) the real distinction (*distinctio realis*) that is present between individuals in the external (or extramental) world, (2) the logical, or mental distinction (*distinctio rationis*) created by thought, and (3) the formal, or virtual distinction (*distinctio formalis*) which is somehow in-between: it occurs in thought, but has a basis in the thing.

The real distinction implies that the distinct things are “separable” physically in the sense that at least one actually exists without the other. For example, the *Lectura* and the *Ordinatio* are two of Scotus’s works. They are really distinct since they are two separate individual things. The mental or logical distinction implies that the “separability” is purely mental: e.g. Duns Scotus and the “Subtle Doctor” are logically, or mentally distinct, but not really distinct since they are one and the same individual, even though they are different concepts (*ens rationis*), with each having slightly different properties. The formal distinction stems from the observation that individuals have certain features which, although not physically separable from the individual (not even by God), nevertheless can be conceived of separately, with one concept not including the other. This serves the epistemological purpose of safeguarding the objectivity of certain concepts,<sup>218</sup> for it is not something the thing has only because we happen to be thinking of it: the nature that is abstracted is actually present (numerically one with, but formally

distinct from the haecceity). For example, Scotus's "Scotaicity" (what makes him and only him Duns Scotus) is formally distinct from his humanity (what makes him a member of the species "man"). In arguing for the formal distinction, Scotus writes:

In such notions as these, does the intellect, I ask, have as object something in the thing? If not, we have a mere fiction of the mind. If it is the same thing, then the object of both concepts should be identical unless you grant that one and the same extramental thing formally generates two objects in the intellect. But in this case, it does not seem that the thing or anything of the thing is the object of my knowledge, but that the latter is something produced by the thing. But if the intellect knows something different in each concept, then our thesis is granted, since a difference is there prior to the concept. (*Quaestiones VII*, q.19)

Grajewski, in *The Formal Distinction of Duns Scotus*, defines the formal distinction as

a distinction from the nature of the thing occurring between two or more really identical formalities, of which one, before the operation of the intellect, is conceivable without the others though inseparable from them even by divine power. (Grajewski, p.122)

This definition brings out several important features: the distinction is grounded in the thing itself, and the two or more things being compared are "really identical" but can be conceived as different through "the operation of the intellect." Each formally distinct feature Scotus calls a "formality" (*formalitas*).<sup>219</sup> Now although the formal distinction predates Scotus, he seems to have coined this term (*formalitas*) himself, as the passage in the beginning of the section implies. Wolter interprets Scotus this way, remarking,

The neologism "formalitas" or "little form" invites comparison between the properties of a formality and those traditionally ascribed to the Aristotelian "form" (such as its being the principle of intelligibility and actuality, or its being equated with essence). (Wolter, *The Philosophical Theology of Duns Scotus*, p.32)

Synonymously with formality, Scotus also used the term "reality" which, if Wolter is correct regarding the origin of *formalitas*, by the same token, can be interpreted as "little real" (*realitas*).<sup>220</sup> This will prove to be a crucial bit of information when we look at Peirce.

There can then be several formalities in one thing without the thing losing its unity or integrity (for they are really the same). Every individual thing has no less than two formalities: its haecceity and its quiddity; in an individual these two are joined as one, hence they are only formally and not really distinct (really the same). It is important to realize that even though the formal distinction is grounded in the thing, it is relative to thought; nowhere does Scotus suggest that it can be defined or described without reference to the fact that formalities, or reali-

ties,<sup>221</sup> can be separated only in thought. Actually, the fact that Scotus says this is a type of distinction of reason (*distinctio rationis*) should make this clear. We can then extrapolate and say that if no intellect existed there would be no formal distinction,<sup>222</sup> for though it is “prior” to the act of thinking, it occurs only in thought. But could it be said that the possibility for the formal distinction would still be in the thing even if no intellect were ever around to distinguish it?<sup>223</sup> While Scotus does not say something like this, his insistence that a formality is something that is discovered rather than created might indicate that he would accept that type of claim.<sup>224</sup> Grajewski’s definition implies that he interpreted Scotus this way as well, for he says that one formality is conceivable without the others “before the operation of the intellect.” Boler has even suggested that we see Scotus as “approaching an ‘objective idealism,’” because Scotus considers these conceptions (the formalities) “real” in the sense that, again, they are prior to the operation of the intellect.<sup>224</sup> I think this is probably why Scotus called them “little,” meaning “not quite” reals; while less than “things” (*res*), “realities” are more than simply ideas. Although it would be terribly anachronistic to classify Scotus as an idealist, it is, I think, fair to say that Peirce did find in Scotus some basis for his own idealist (as well as realist) claims, as we will see in an upcoming chapter.

But the notion of the formal distinction is not without problems, as the following serves to illustrate. Woosuk Park, in his “Common Nature and Haecceitas” claims that commentators do not make clear whether it is the common nature-in-itself (U4) or the individuated nature (what I have dubbed the “individuated U4,” or “I-U4”) that is formally distinct from the individual difference. Park concludes that it must be the individuated nature or I-U4 (the nature as actually existent) that is formally distinct from the haecceity, and not the nature-in-itself. The reason he cites is that the nature has its own proper being, and hence cannot be really identical with the individual difference, as the definition of formality demands.<sup>226</sup> Peter King, however, claims that “the uncontracted nature [U4] and the individual differentia are really the same but formally distinct.” So is it the U4 or the individuated U4 that is formally distinct from the individual?

Park, I think, brings up an important problem: if the U4 is only formally distinct from the haecceity, then it is really the same thing and then cannot have its own proper being. If it cannot have its own proper being, then it cannot be “common” to many. On the other hand, if the U4 is really distinct from the haecceity, as Park seems to claim, then it sounds as if the U4 is a Platonic Form, existing by itself. And then what would be the relationship between the U4 and the individuated U4? Robert Goodwin brings up a version of this same problem, I think, when he compares (not quite accurately, though), Peirce’s and Scotus’s principle of individuation:

there is agreement in regard to individuation. In the metaphysics of neither does the principle of individuation intrinsically modify the positive essential constitutive entity. The presence of haecceitas in a *res* may be said to allow one to declare

it to be a singular. It does not, however, individuate the nature. This latter remains de se general in the individual. Peirce, too, insists on the reality of real generals, which are his possibilities considered from the point of view of individuation. The possibilities remain de se general in the individual. (Goodwin, p.509)

I do not think Goodwin is right when he says that the haecceity does not individuate the nature. If it didn't then there would be two really distinct (and contradictory) entities in the individual and it would not be a numerical unity. Furthermore, I do not think that Peirce interpreted Scotus as making this claim; on the contrary, I will argue that Scotus's notion of contraction was one of the reasons Peirce saw him as a nominalist.

This discrepancy, however, brings out a fundamental problem which is in need of one of Scotus's subtle distinctions. I think Scotus would want to say that the U4 and the individuated U4 (I-U4) are really the same in one sense because it is the U4 that gets abstracted and transformed into the complete universal or U2. But then he would have to give some sort of account as to how the U4 can have its own proper being, especially the kind of being of potentiality, which I have argued he seems to want to claim. This problem is exacerbated when we think that if the U4 and the I-U4 are really the same, once one instance of the I-U4 is destroyed (e.g. Socrates), then the U4 is also destroyed. Obviously, Scotus would not want to admit that. The U4 is common in the sense that it can exist in numerically many individuals, even if one is destroyed. So he needs to say that in another sense the U4 and the individuated U4 are not really the same. This is perhaps what he is trying to resolve when, in the context of a discussion of the Trinity,<sup>227</sup> he makes a distinction between adequate and non-adequate identity, or sameness:

the essence and the property are not the same by an adequate identity . . . rather each is exactly the other, neither more nor less, as in the case of a definition and what is defined. Items are said to be the same by a non-adequate identity where one of them goes beyond the other, or the unity of the one goes beyond the unity of the other, as is the case with animal in relation to human. But the essence and the property are not adequately the same, because one does go beyond the other and vice versa. But . . . the term "non-adequately" can be understood in two ways: (1) in respect of predication and non-convertibility, and in this way animal and human are inadequately the same, because animal is predicated of more items than human is. (2) in respect of power and perfection . . . It is clear, then, that the essence goes beyond the property . . . since it [i.e. the property] is not the same as it [the essence] by an adequate identity. But this does not prevent their being able to be unqualifiedly and absolutely the same. (*Reportata* I, dist. xxxiii, q.2).

I cannot hope to resolve the issue here, for it merits a more involved analysis and would take me too far astray. I venture to say, however, that Scotus would try to answer this problem by saying that the U4 and the individuated U4 though unqualifiedly and absolutely the same nevertheless have non-adequate identity

since they are defined differently.<sup>228</sup> The same, I think, could be said for the haecceity and the individuated U4. For our purposes, however, the important point is that Scotus wants to emphasize that in the individual, the individuated U4 and the haecceity are really (unqualifiedly and absolutely) the same.

It should be obvious by now that Scotus uses the formal distinction to uphold both the truth of our sensory perceptions of the world (we perceive it as consisting of individual things) and the objectivity of our knowledge (we understand it through general concepts, but these have been directly taken from the individual thing). The basis for both these claims is simultaneously present in the individual thing: the nature and the haecceity. We have seen that Scotus contends that the nature-in-itself has real being apart from thought. This does not mean that it can actually exist on its own, like a Platonic entity. And this must also not obscure the over-all importance Scotus gives to the individual and his contention that the haecceity contracts all the other formalities, or realities, in the existent thing. But again the existent thing must not be considered a collection of numerous formalities,<sup>229</sup> held together by one more added formality—that of *haecceity*, as some of Scotus’s fellow Franciscans held. Rather, the existent thing, or supposit, is one, integral, individual:<sup>230</sup> “[the individual reality] is never taken from an added form, but precisely from the ultimate reality of the form.”<sup>231</sup> What does this “ultimate reality” mean? It seems Scotus wants to say that the individual difference is the actuality (an “act”) of the nature-in-itself, or U4:

As for the case at hand, the individual reality is analogous to the specific reality, for it is (as it were) an act that determines the reality of the species as though possible and potential (*Ord.* II, d.3 p.1q.5).

But will not that mean that existence is what individualizes, something Scotus argued against? I think Scotus would say existence is too general, applying across the board to all supposits, and that is why it cannot be what makes the individual unique. The relation of act and potency is subtly different: an actualization is a fulfillment of what the potential is. Since there are different potentialities, there will be different actualizations.<sup>232</sup>

If indeed the haecceity is the actualization of the U4 (we can call it “potential” nature), then it could be said that Scotus recognizes real possibility in the potentiality of the unindividuated nature.<sup>233</sup> If this is so, then we have more evidence for thinking that Scotus would recognize real possibility in the earlier discussions of noninstantiated (e.g. Dodo) universals and possible (but not actual) formalities-in-things in a world with no intellects. This may prove important in the discussion of Peirce.

The formal distinction is Scotus’s defense against possible charges against him of Platonism or of nominalism. However, it is a difficult position to take: he must find a place for these not-quite-but-still-somewhat-real entities in a world where he wants to say only supposits exist. And he is as committed to safeguard-



ing our claims to knowledge as to maintaining the importance of the individual; it is this last point which Peirce will criticize. There are probably philosophical as well as religious reasons for Scotus's commitments. The philosophical advantage of an epistemological realism is obvious; but what could be the religious advantage?

Scotus gives a clue in the seventh question, where he returns to the question of angelic natures. Here, he takes the "theologically correct" stance and claims that just as God created many individual persons with human nature, He too could create several persons with angelic nature.<sup>234</sup> The issue of the angels' immateriality and location Scotus solves by claiming that an angel must occupy determinate space (for only God can occupy infinite space) but in an indeterminate way: it can be as small as a point, or as large as a quadrangle approaching, but not reaching, infinity.<sup>235</sup> But why would God want to create many individuals (or angels)? Scotus claims that by doing so, He expresses

His goodness as something befitting His beauty . . . And in those beings which are the highest and most important, it is the individual that is primarily intended by God (*Ord.* II, d.3 p.1q.5)

The haecceity would show not only that each individual is "singularly wanted" and valued by God, but it also ensures that each is singled out to receive the proper reward or punishment not only in this life but the next.<sup>236</sup>

Ultimately, though, Scotus cannot prove that the haecceity is anything more than a theoretical construct. We cannot understand it (although we can experience it),<sup>237</sup> for it is "primarily diverse" and therefore has no shared common characteristics which means that we are unable to grasp it in our intellect. Even though we perceive individuals (that *is* what we perceive in the world), we do not perceive each individual difference as such, or *per se*.<sup>238</sup> When we see a white rose, for example, we do not see it as just *this* white rose in its individuality; rather, we see it as *a* white rose. Scotus offers a "thought experiment" and an actual instance to illustrate this point. In the *Reportata* he claims that if God decided to superimpose two identical white objects in the same place, we would see the two objects as one because we would not be able to detect each haecceity. There is a real example of this phenomenon in the actual world, Scotus claims, in the way we perceive the sun's rays. According to medieval beliefs, as the sun moves across the sky, its rays move with it, continually superimposing one ray over the other, with no interruption. We, however, do not see each separate ray, but rather perceive them as continuous.<sup>239</sup> Had we this intuitive capacity to detect the haecceity in real life, we would be able to see each ray separately, just as, if one person were miraculously bilocated, we would not mistake this individual for a pair of identical twins. But since we are dependent on sense perception, we cannot grasp the haecceity of the "two" individuals and recognize it as one, just as we cannot see each sun ray as distinct from the other.

But is the haecceity unintelligible in itself (*per se*)? It would make no sense to claim that it is by definition unintelligible, for, because of their natures, God and angels can intuit haecceities. Then why is it that we cannot? Scotus claims, as we saw, that we must have the potential for this intuition after death if the promise of the beatific vision which St. Paul speaks of is to be fulfilled:

For now we see as through a glass, darkly; but then face to face: now I know in part; but then shall I know even as also I am known. (I Corinthians, ch.13, v.1)

But couldn't God simply add this intuition as an accident to our souls when we die so that we can intuit after death? Scotus answers in the negative; that would change the soul's simple nature. It makes more sense for the soul to have this potential all along. Besides, the fact that we do seem to have this intuition in a limited sense in this life (Scotus argues we do have immediate, intuitive knowledge of certain internal states),<sup>240</sup> shows that we have an intrinsic capacity for intuition as well. But why are we limited in this life? Scotus sometimes speaks as if it is because of man's fallen state (as punishment for Adam and Eve's sin). Other times, it sounds as if it is the natural consequence of having a material body. Nevertheless, even though man's intellect at present is limited to abstracting its primary data from the phantasm which is the result of perception by the senses of accidental features of things, in terms of intrinsic capacity, or potentiality, man's intellect is no different from the angels' themselves.

Thus we see how Scotus deftly handles the different problems that he inherited from the Greeks, through Avicenna, all the while maintaining a steady course while avoiding the dangers of heresy and philosophical mediocrity. I am not sure he was completely successful in his attempt: he had too many masters to please and too little time to do it; he was still revising his position when he died at age forty-two.

## Chapter 3

# Charles Peirce

what distinguishes [pragmatism] from other species is . . . its strenuous insistence upon the truth of scholastic realism. (CP 5.423, 1905)

I have never been able to think differently on that question of nominalism and realism. (CP 1.20, 1903)

Whereas just a few years ago Charles Sanders Peirce (1839-1914) was considered a minor figure in the development of American Pragmatism,<sup>241</sup> increasingly, his central role is being recognized. There are at least two reasons, I think, for this past mistake: one was simply due to a lack of physical accessibility to his work: although Peirce published a few articles and reviews throughout his career, he left behind a huge corpus of unedited work consisting mostly of handwritten notes and manuscripts, which are not readily available nor physically accessible.<sup>242</sup> The first attempt at deciphering and organizing this material, the *Collected Papers*, though still the standard,<sup>243</sup> was not the optimal one, for it is divided by topics and not according to dates and stages of development. A second reason, I think, has to do with intellectual accessibility: Peirce is a difficult writer, well-versed in the history of philosophy, with a wide range of interests, a tendency to coin new words, to give uncommon meanings to common ones, and prone to creating new syntheses of doctrines based on his encyclopaedic knowledge.

Peirce himself seems to acknowledge that he looked at, and understood, and explained, things in an uncommon way. Like Scotus,<sup>244</sup> he was not unaware of the difficulty many had in comprehending his writings, as can be seen in the following comments in his letters to his friend Lady Welby:

The greatest analyst of thought that ever lived might spend an indefinite amount of time in endeavoring to express his ideas with perfect accuracy . . . But he never would perfectly succeed. He would only make his thoughts so involved that they

would not be apprehended. (Weiner, p. 381)

[My] studies have done much to broaden my ideas of language in general; but they have never made me a good writer, because my habits of thinking are so different from those of the generality of people. Besides I am left-handed (in the literal sense) which implies a cerebral development and connections of parts of the brain so different from those of right-handed people that the sinister is almost sure to be misunderstood and live a stranger to his kind, if not a misanthrope . . . yet probably my intellectual left-handedness has been serviceable to my studies in that science [of logic] . . . It has caused me to be thorough in penetrating the thoughts of my predecessors, not merely their ideas as they understand them, but the potencies that were in them. (Weiner, p. 415)

Indeed, because he concentrated more on what he saw as the “potencies” of the ideas as opposed to the standard interpretations of the works of those he most admired, it is sometimes difficult even to recognize the doctrines that he refers to. This explains, at least partly, why Peirce has been variously accused of contradicting himself and misunderstanding others’ works. It also explains why he could combine (coherently, I will argue, if not totally successfully) seemingly opposed philosophical positions, such as, for example, pragmatism and scholastic realism. Given the relationship between concepts of meaning and concepts of reality, and given that pragmatism is supposed to be concerned with the practical (experiential) consequences of the meaning of concepts, one would expect that what follows is that only experimental phenomena are real. This seems hard to reconcile with the scholastic doctrine, which Peirce also insists on, that some universals are real. A similar situation occurs with idealism, as also will be seen in later sections.

For all the above reasons, it should come as no surprise that finding unity in Peirce’s work is no easy task,<sup>245</sup> and that, as a result, commentators have differed widely in their interpretations of his work. The earliest accounts are of one strand, the “split personality” view,<sup>246</sup> as we can call it, which claimed that there was a basic conflict in Peirce’s thought. Justus Buchler, in *Charles Peirce’s Empiricism* (1939), claimed there were two identifiable strains in Peirce’s thought: the empirical and the metaphysical. Buchler focuses on the empirical side, dismissing the other as secondary. Thomas Goudge’s *The Thought of Peirce* (1950) proposes there were “two Peirces: a no-nonsense empiricist and a speculative metaphysician,” and holds that it is difficult to reconcile them both. Manley Thompson disagrees with this approach, and in *The Pragmatic Philosophy of C. S. Peirce* (1953) argues against the claim that there was an inner conflict. Rather, he examines the connections between the different elements in Peirce’s thought and connects them with his pragmatism.

This has since been the general trend of the newer generations of Peirce scholars: to try to find some coherence in Peirce’s work, usually by identifying

some dominant theme. James K. Feibleman's book, *An Introduction to Peirce's Philosophy* (1960), also attempts to show that there is a recognizable system in Peirce's philosophy. In *The Development of Peirce's Philosophy* (1961), Murray Murphey uses a developmental approach to trace changes in Peirce's conception of logic and shows how this provoked a series of adjustments in the rest of his philosophy. W. B. Gallie's *Peirce and Pragmatism* (1965) uses pragmatism as a guiding theme to explain Peirce.

The trend of more recent books has been to continue the view that there is unity in Peirce's thought, and that apparent conflicts arise not out of inconsistency or indecisiveness, but rather from his trying to adjust the different components of his system to new developments in others. Since it is now generally acknowledged that Peirce was devoted to the task of creating an all-encompassing philosophical system à la Aristotle or Kant, it would make sense that he would be particularly fastidious about revisions and readjustments. Most focus on one particular aspect of Peirce's philosophy, and as interest and as a result scholarship increases, approaches become more narrow and focused. Self-explanatory are the following in their focus: Nicholas Rescher's *Peirce's Philosophy of Science* (1978), Karl-Otto Apel's *Charles S. Peirce: From Pragmatism to Pragmaticism* (1981), Vincent Colaprieto's *Peirce's Approach to the Self* (1989), Michael Raposa's *Peirce's Philosophy of Religion* (1989), C. J. Misak's *Truth and the End of Inquiry* (1991), and Sandra Rosenthal's *Charles Peirce's Pragmatic Pluralism* (1994).

There is one more group of books on Peirce that I want to mention, and these all have in common, though in differing degrees, the claim that in order to understand Peirce properly one must try to understand his scholastic realism. John Boler was one of the first to recognize this, examining Peirce's scholastic leanings in *Charles Peirce and Scholastic Realism: A Study of Peirce's Relation to John Duns Scotus* (1963). Robert Almeder's *Philosophy of Charles Peirce: A Critical Introduction* (1980) addresses Peirce's realism in contrast with his idealism. Peter Skagestad's *The Road of Inquiry: Charles Peirce's Pragmatic Realism* deals with the connection between pragmatism and realism. Christopher Hookway, in *Truth, Rationality and Pragmatism* (2000), agrees with the basic premise that realism is a fundamental element in the Peircean picture. Carl Hausman, in *Charles S. Peirce's Evolutionary Philosophy* (1993), goes further, arguing that the realist dimensions of Peirce's thought are an integral part of what Hausman calls his evolutionary metaphysics. I will add myself to this list of commentators who believe that scholastic realism was a common thread throughout all of Peirce's philosophical system, and should therefore be studied, for I have found that many commentators are not truly aware of the specific claims that Scotus made and with which (for the most part) Peirce so enthusiastically agreed. Like Boler, (and unlike the others who only give a cursory glance to the past) I am convinced that the clue to understanding Peirce's special brand of realism is to look at Scotus's. But unlike Boler, who "does not . . . put much emphasis on the question of 'ism'"

and who stops just short of determining “whether Peirce is *really* a realist,”<sup>247</sup> my concern is not only whether he really *was* a realist, but whether he really was of the *kind* he claimed to be.

Any treatment of issues regarding Scotus’s and Peirce’s realism should begin with some account of realism, and I have already dealt with realism of universals from Plato to Scotus. After some analysis and comparison of Peirce’s brand of realism with others, I will then look at how this realism manifested itself in the other components of his system.

Peirce himself is very earnest about the importance of the issue, effusively praising Scotus’s work:

[Scholasticism’s] greatest glory was in the first half of the fourteenth century. Then Duns Scotus, a Briton . . . first stated the realistic position consistently, and developed it with great fullness, and applied it to all the different questions that depend upon it. His theory of “formalities” was the subtlest, except perhaps Hegel’s logic, ever broached. (W 2.467, 1871)

During the period of the decorated Gothic, we have the writings of Duns Scotus, one of the greatest metaphysicians of all time. (CP 4.27, 1893)

But then, towards the end of his life, Peirce remarks that even Scotus, the supreme scholastic realist, was too nominalistic after all, and that he, Peirce, was an even more extreme scholastic realist. I include all the relevant passages:

I should call myself an Aristotelian of the scholastic wing, approaching Scotism, but going much further in the direction of scholastic realism. (CP 5.77, 1903)

So far as a modern man of science can share the ideas of those medieval theologians, I ultimately came to approve the opinions of Duns, although I think he inclines too much toward nominalism. (CP I.560, 1905)

Even Duns Scotus is too nominalistic when he says that universals are contracted to the mode of individuality in singulars, meaning, as he does by singulars, ordinary existing things. (CP 8.208, 1905)

In the fourteenth century Nominalism was rendered a respectable opinion by the halting realism of Scotus and by the extravagant unpragmatism of his followers. (CP 6.175, 1906)

I am myself a scholastic realist of a somewhat extreme stripe. (CP 5.470, 1906)

In the *North American Review* for October, 1871, (in a notice of Fraser’s edition of Berkeley), I undertook to formulate Scotus’s conception of Reality . . . In that notice I explained approvingly the qualified Realism of Duns. At present, however, I am an unqualified realist. (MS 641, 1909)

But why was Peirce’s scholastic realism “extreme” while Scotus’s was “halt-

ing?” In what way was Scotus’s realism “qualified” while his was not? Why did Scotus “incline too much towards nominalism?” Why did Peirce go “much further” in the direction of scholastic realism? As I hope to show, answers to these will serve to clarify some of Peirce’s claims, which may in turn resolve some of the polemic regarding, for example, the relationship between his realism and his notion of reality, his realism and idealism, and his realism and pragmatism. It should also resolve the question of whether Peirce was a nominalist at first, which Max Fisch has claimed, or whether he was a realist all along, which, as seen above, Peirce himself seems to claim. I will begin, then, with the question of whether Peirce can be considered a realist at all.

### The Hair<sup>248</sup>

Duns Scotus, a Briton . . . first stated the realistic position consistently, and developed it with great fulness and applied it to all the different questions which depend upon it . . . and he was separated from nominalism only by the division of a hair. (CP 8.11, 1871)

As we have seen, it is not surprising that there has been a considerable amount of disagreement among commentators regarding the interpretation of much of Charles Sanders Peirce’s philosophy, especially when one considers the vastness of the subject matter he covered, the prolific amount of work he produced, and the fact that he revised some of his views more than once, as is often the case, particularly in longer careers. But there has been pretty much of a consensus by those Peirce scholars who have commented on the issue,<sup>249</sup> that Peirce was a realist early on, that at least by the time he wrote the Berkeley review in 1871,<sup>250</sup> Peirce had declared unquestionably for realism, and remained a realist (and an increasingly “extreme” one at that) until the end. Indeed, Peirce’s realism became so extreme that he ultimately (by 1905) came to regard Scotus, originally categorized (in 1869) as “the chief of . . . the most consistent realists” as being “too nominalistic.”<sup>251</sup> It seemed reasonable, therefore, to interpret, as most commentators have, the “hair” passage cited above as an early criticism of Scotus which, through the years, just became more pronounced. Max Fisch, however, in his “Peirce’s Progress from Nominalism Toward Realism” argues against the prevailing view that Peirce was a realist throughout his life, claiming rather that Peirce was a nominalist “at first.” Consequently, Fisch’s interpretation of the “hair” passage is different:

In 1871, as in 1868, the great virtue of Scotus’s realism is that it is “separated from nominalism by the division of a hair.” (Fisch, 1986, p. 188)

Was the “hair’s” difference between Scotus’s realism and nominalism seen by Peirce at the time as a “great virtue” or rather as a great vice, as those who are acquainted with Peirce’s later criticisms tend to conclude? Was Peirce’s supposed

shift towards realism a clear one, or was it a part of a more involved, gradual process? Was Peirce ever a nominalist? Was he ever a realist? This is a “hairy” problem indeed, but it gets even more tangled.

Fred Michael, in “Two Forms of Scholastic Realism in Peirce’s Philosophy” agrees with Fisch, that Peirce was a nominalist before he became a scholastic realist, against the standard view. However, he denies that the shift from nominalism to realism took place in the late 1860s and then gradually progressed to an extreme realism in his later years, as Fisch believes. Rather, Michael claims that Peirce’s early conversion to realism was, if you’ll pardon the pun, more “nominal” than real:

inasmuch as the transition is accomplished with no change in ontology. As a nominalist, Peirce maintained that there is no generality outside of language and thought; as a realist, he continued to maintain this. It is only after 1883 that he gives up his nominalist ontology, apparently because he comes to see it as incompatible with the logic to which he is by that time committed; and then, but only very gradually, he develops a new form of scholastic realism. (Michael, 1988, p.318)

I will argue in this section that there were three shifts in Peirce’s thought, and not just one. One involved a shift in Peirce’s understanding of Scotus’s realism, which then provoked a second shift in the labeling of his own philosophy. Almost simultaneously with this second shift, we can see the seeds of what later became Peirce’s extreme version of scholastic realism, which turns out to be the third shift. Fisch focuses on one shift, without noticing that there are two others. Michael recognizes one, but misunderstands Scotus’s brand of scholastic realism, so he misses the other two.

Here, I will try to resolve the issue of whether Peirce was a nominalist or a realist during the early years of his career. In later sections, I will try to resolve the issue of whether Peirce can truly be called an extreme scholastic realist, as he himself claimed.

### *The Standard View*

Besides his pragmatism (or pragmaticism, as he later liked to call it) and his semiotics, Peirce is perhaps almost as famous for his doctrine of extreme scholastic realism. His repeated insistence (through many years) on the importance of this position is probably one reason why most commentators have seen him as always being a realist, but developing into a more extreme one in his later years. All these, to name a few, see what I call the third shift. For example, Thomas Goudge says that Peirce’s realism early on was “not as extreme as it subsequently became.” Thompson sees Peirce as defending “scholastic realism in his 1868-69 papers.” Murphey sees Peirce as a realist “even in 1867.” John Boler, who devotes



his book *Charles Peirce and Scholastic Realism* to the question of Peirce's realism, finds that it "appears in every major stage of his writing." Charles McKeon, in "Peirce's Scotistic Realism" speaks of "Peirce's extreme realism" as being more extreme than Scotus's. Claudine Tiercelin claims the principle of vagueness "is what is really involved in Peirce's scholastic realism." In "The Real Issue between Nominalism and Realism, Peirce and Berkeley Reconsidered," Cornelis de Waal analyzes Peirce's realism in the context of what was meant by the term "real." Lesley Friedman considers that at least "the late Peirce was a universal-realist." Susan Haack, in "'Extreme Scholastic Realism: Its Relevance to Philosophy Today,'" considers that Peirce was "obliged to adopt, in his mature philosophy, what he described as 'a scholastic realis[m] of a somewhat extreme stripe.'" <sup>252</sup>

Don K. Roberts, in "On Peirce's Realism," written in response to Fisch's position, sides with the standard view, against Fisch. Roberts agrees with Fisch that there is "an important chronological development in Peirce's thinking on the issue of realism-nominalism," and that there are some "nominalistic elements" in the early Peirce, but denies that this suffices to stamp the early Peirce a nominalist. <sup>253</sup> A compelling reason (one based on a rather good authority, one would think) for agreeing with the supporters of the standard view (i.e. that Peirce was a realist all along) is what Peirce himself said. In the 1903 Lowell Lectures Peirce reminisces about and comments on his past views:

In a long notice of Fraser's Berkeley, in the North American Review for October, 1871, I declared for realism. I have since very carefully and thoroughly revised my philosophical opinions more than half a dozen times, and have modified them more or less on most topics; but I have never been able to think differently on that question of nominalism and realism. (CP 1.20, 1903)

But even more importantly, I think, there seems to be evidence that Peirce saw himself as a realist at that time during those early years. In MS 921, among several papers dated July 25, 1859, there is what looks like a large note card that says the following: <sup>254</sup>

List of Horrid things I am  
 Realist  
 Materialist  
 Transcendentalist  
 Idealist

Furthermore, the July 25, 1859, paper "Of Realism" (the rest of the title "and Nominalism" was scratched out), states

It is not that Realism is false; but only that the Realists did not advance in the spirit of the scientific age. <sup>12551</sup> Certainly our ideas are as real as our sensations. We talk of an unrealized idea. That idea has an existence as neumenon [sic] in

our minds as certainly as its realization has such an existence out of our mind. They are in the same case. An idea I defined to be the neumenon of a conception. (MS 921)

How does Fisch account for this supposed avowal of realism “from the horse’s mouth,” as it were, when Peirce was supposed to be “at first” a nominalist? This is dismissed by Fisch (much too hastily, I think) as “unpublished juvenilia” and not worth too much of our concern. I will come back to this point.

### *Fisch’s View*

Against this common view of Peirce as a realist from the beginning, is Fisch’s position that Peirce was a nominalist at first and gradually progressed to a more extreme realism. One of the first indications of Peirce’s nominalism, Fisch claims, can be seen in the former’s review of John Venn’s book *Logic of Chance* published in 1867. Peirce says:

Mr. Venn remarks, with great ingenuity and penetration, that this theory has had its realistic, conceptualistic, and nominalistic stages . . . This last is the position of Mr. Venn and of the most advanced writers on the subject. (W2:98, 1867)

Since “the arguments on the modern side are overwhelming,” while someone who, like John Stuart Mill, originally a proponent of the nominalistic view, is described as someone whose “head became involved in clouds” and as a consequence “relapsed” into the conceptualistic opinion, Fisch thinks it is obvious that Peirce considers himself, as well as Venn, in the “most advanced” category, and therefore a nominalist in this regard.<sup>256</sup> Fisch sees as further proof of his claim the fact that Venn himself never refers to his own theory as nominalistic, but rather calls it “Material or Phenomenalist.”<sup>257</sup>

Besides being a nominalist “by avowal,” (the above is provided as evidence of this) Peirce is one “by repute” as well, Fisch claims. There were contemporaries of Peirce who also considered him a nominalist. On January 1, 1868, Peirce began a correspondence with William Torrey Harris, editor of the recently established first philosophical journal in America, *The Journal of Speculative Philosophy*.<sup>258</sup> Harris published Peirce’s comments on Hegel’s *Being and Nothing* along with editorial replies under the title “Nominalism versus Realism,” that is, the nominalism of Peirce versus the realism of Harris. Peirce wrote several letters to Harris during that same year, disagreeing, in a detailed and systematic way, with many of Harris’s comments, but it is obvious that at no time does he consider himself a realist (at least under Harris’s definition), nor does he object to Harris’s characterization of him as a nominalist.<sup>259</sup> One would have expected Peirce to protest the imposition of the label of nominalism upon him if it had been undeserved, and nowhere is there evidence of this.

*Peirce's Hair*

I agree with Fisch that Peirce was a nominalist, in a sense, in the beginning, as will be seen below. But I believe that he was also a realist, in a sense, from the beginning (and there I agree with Roberts as well).<sup>260</sup> I concur with Michael in that Peirce's shift in labels from nominalism to realism did not involve a fundamental change in ontology. But the reason for this is that it was unnecessary: both nominalists and realists agreed that universals are of the nature of cognition and that only singulars exist. Peirce's shift in labeling his philosophy came about when he discovered, after a thorough study of the scholastics, that this was indeed the case. That is why I disagree with Michael's claim that Peirce became a realist only after 1883 as a result of his new logic. Peirce was a realist all along: before he studied the scholastics, he had a vague conviction that ideas were real in a sense, although, as a materialist, he did not want to say they existed. When he discovered Scotus, this realist tendency now had a framework and a label; he could use Scotus's notion of reality to develop his own, and it is then that he labels his philosophy as realistic.

I believe Peirce's list of "Horrid Things I am," instead of being "juvenalia" and therefore dismissable, as Fisch suggests, is actually a rather accurate self-description. I believe Peirce, from early on, had all these leanings, as a result of his extensive readings in the history of philosophy:

Before I came to man's estate, being greatly impressed with Kant's *Critic of the Pure Reason* . . . I was led to an admiring study of Locke, Berkeley, and Hume, and to that of Aristotle's *Organon*, *Metaphysics*, and psychological treatises, and somewhat later derived the greatest advantage from a deeply pondering perusal of some of the works of medieval thinkers, St. Augustine, Abelard, and John of Salisbury, with related fragments from St. Thomas Aquinas, most especially from John of Duns, the Scot . . . and from William of Ockham. (CP 1.560, 1905)

By the time he wrote his list, Peirce was already acquainted with Kant, and hence his "realism" in the Kantian sense that our ideas are real. He was also acquainted with idealism,<sup>261</sup> and even though not particularly partial to Hegel, did absorb, as will be seen in a later chapter, some idealistic notions. As a "man of science" even at this early age, Peirce probably felt compelled to subscribe to materialism, the claim that only material things exist, and he probably associated materialism with nominalism. But why was materialism "horrid?" We can see why in an oration, "The Place of Our Age in the History of Civilization" Peirce delivered in 1863, when he was twenty-four, his first public appearance as a philosopher:

The most striking tendency of our age is our materialistic tendency. We see it in the development of the material arts and the material sciences; in the desire to see all our theories, philosophical or moral, exemplified in the material world, and the tendency to value the system only for the practice . . . Materialism fails on the side of incompleteness . . . it is necessarily one-sided. (Weiner, p.10)

It is this same objection, that it does not recognize but one mode of being (and is therefore incomplete) that he later levels against nominalism. But I am getting ahead of myself. In this same passage, there is another interesting revelation: what we will see develop later into his realistic views, are here called idealistic:

This [materialist] tendency often seems opposed to another great movement of our age, the idealistic movement. The idealist regards abstractions as having a real existence. Hence, he places as much value on them as on things. Moreover . . . he has proved that the knowledge of things can only be attained by the knowledge of ideas. (Weiner, p.10)

Although called “materialism” and “idealism,” I think it is obvious that versions of these views were held by Peirce early on, and eventually became his “nominalism” and “realism.” We can even see the tendency to combine different elements from each into one whole: “But if materialism without idealism is blind, idealism without materialism is void.”<sup>262</sup>

Actually, if examined closely, we can see the seeds of most of Peirce’s ideas, like his notion of the real, his pragmatism, the importance of community for knowledge, his idealism, etc., by the late sixties. Peirce’s extensive knowledge of the history of philosophy, coupled with his desire to combine the philosophies of those he admired into one grand system, I think best explains the different elements in his own. The rest of his career was spent on filling in the details and making adjustments to fit all these in.

The wording itself of the “hair” remark seems to support Fisch’s view that Peirce was not offended then by Scotus’s so-called almost-nominalism.<sup>263</sup> After describing Scotus and his theories in a favorable tone, Peirce then adds “*and* (my emphasis) he was separated from nominalism only by the division of a hair,” whereas had Peirce’s comment been made in a more critical tone, one would have expected “but”—that is, something like—[but] “he was separated from nominalism by the division of a hair.”

Another possible problem I see for the claim that the “hair” passage was an early criticism of Scotus is one of chronology. During this time (up until the 1890’s) Peirce speaks highly of Scotus, as he admits later on, as he reminisces:

In the North American Review for October, 1871, (in a notice of Fraser’s edition of Berkeley), I undertook to formulate Scotus’s conception of Reality . . . In that notice I explained approvingly the qualified Realism of Duns. At present, however, I am an unqualified realist. (MS 641,1909)

If Peirce did not begin to distance himself from Scotus’s position until much later in his career, it would be difficult to explain why the “hair” remark, made in 1871, early in his career, should be seen as a criticism, as indeed many commentators have, and as Joseph Margolis does in “The Passing of Peirce’s Realism:”

Peirce affirms . . . Scotus’s . . . conceptual blunder that betrays realism in the

direction of nominalism: Scotus, Peirce says, “was separated from nominalism only by the division of a hair.” (Margolis, p.299)

But there seems to be evidence of Peirce’s implicit (if not explicit) nominalism even before Fisch’s date of 1867. In a series of lectures on the logic of science which Peirce gave at Harvard in 1865, he comments on the falsity of scholastic realism:

A symbol not only may have information but it must have it. For every symbol must have denotation that is must imply the existence of some thing to which it is applicable. It may be mere fiction; we may know it to be fiction; it may be intended to be a fiction and the very form of the word may hint that intention as in the case of abstract terms such as whiteness, nonentity, and the like. In these cases, we pretend that we hold realistic opinions for the sake of indicating that our propositions are meant to be explicatory or analytic. (W1:287, 1865)

Also in 1865, in “An Unpsychological View of Logic . . . and other subjects” he writes:

Corresponding to the matter of phenomena we have the supposition of external realities or things; and corresponding to the form of phenomena we have qualities. Of these, representation is not altogether hypothetical since we have at least something precisely similar in consciousness. Things are legitimate hypotheses, as we shall see when we have developed the logic of hypothesis. Qualities are fictions; for though it is true that roses are red, yet redness is nothing, but a fiction framed for philosophizing; yet harmless so long as we remember that the scholastic realism it implies is false. (W1:307, 1865)

And later in the same passage:

What are such words as blueness, hardness, loudness, but fictions of this kind? It has been said that these “abstract names” denote qualities and connote nothing. But it seems to me the phrase “denoted object” is nothing but a roundabout expression for a thing. What else is a thing but that which a perception or sign stands for? To say that a quality is denoted is to say that it is a thing. And this gives a hint of the veritable nature of such terms. They were framed at a time when all men were realists in the scholastic sense and consequently things were meant by them, entities which had no qualities but that expressed by the word. They, therefore, must denote these things and connote the qualities they relate to. To use them now, then, (and no philosophical doctrine is possible without their use) is to make use of a fiction, but one which is corrected by a steady avoidance of all realistic references. (W 1.311, 1865)

These passages show that during this very early stage, Peirce believed that the scholastic realists were basically Platonists: he thought they believed that universals, or qualities (“fictions”) such as “whiteness” were existing things. Because these terms are now part of the language, we need them to communicate, Peirce

explains. However, we should not be misled into believing, he says, as those who coined these terms did, that there really are such things as “redness” or “hardness” which exist as such by themselves with no other accompanying qualities, or accidents (like quantity, place, etc.). Consequently, Peirce advises, scholastic realism is a mistaken view, and it should be avoided. We can summarize Peirce’s claims in 1865 thus:

- (1) Things are external realities.
- (2) Qualities, such as redness, hardness, are fiction (not real).
- (3) Scholastic realists believed qualities were things (external realities).
- (4) They were mistaken; scholastic realism is false.

It seems, then, as Fisch claims, that Peirce, in claiming the falsity of scholastic realism, is endorsing nominalism, the other option, at this time. But by 1868, there is a noticeable change—Peirce begins to study the scholastics, and his position starts to shift.<sup>264</sup>

Harris challenged Peirce to show how, on his nominalistic principles, the validity of the laws of formal logic could be justified, and the result was a series of three articles published in the *Journal*, known as the “Cognition Series.” In a draft of the first article, called “Questions concerning Reality,” published under the title “Questions Concerning Certain Faculties Claimed For Man” 1868, Peirce writes:<sup>265</sup>

But logic cannot stop here. It is bound, by its very nature, to push its research into the manner of reality itself, and in doing so can no longer confine its attention to mere forms of language but must inevitably consider how and what we think . . . For the real is the object of an absolutely true proposition. Thus we obtain a theory of reality which, while it is nominalistic, inasmuch as it bases universals upon signs, is yet quite opposed to that individualism which is often supposed to be coextensive with nominalism. (W2:175-180, 1868)

What does Peirce mean by the “individualism” that is coextensive with nominalism? Here, I think, lies one source of confusion regarding Peirce’s loyalties, for although he accepted some claims which he considered nominalist, he also disagreed with others which he labeled “nominalist” as well. For example, we have seen that Peirce identified and accepted the claim that universality, or generality, is a mental phenomenon, as nominalistic. As a scientist, he also accepted Ockham’s Principle of Parsimony:

The burden of proof is undoubtedly upon the realists, because the nominalistic hypothesis is the simpler . . . It appears therefore that in scientific method the nominalists are entirely right. Everybody ought to be a nominalist at first, and to continue in that opinion until he is driven out of it by the force majeure of irreconcilable facts. (CP 4.10, 1898)

And, as we have seen, he was opposed to what he thought was scholastic realism, so a natural tendency would be to side with nominalism. But at the same time, however, he pointed to what he considered several undesirable consequences of nominalism, and called these “nominalistic” as well. These undesirable consequences result, he believed, from the nominalist’s preoccupation with the individual (hence “individualistic”). We can see why he made the connection: nominalists claimed that only individuals existed, and only existent things were real. The nominalist fixation with the individual, according to Peirce, led to such subsequent mistaken views as the recognition of only one mode of being (existence), and ultimately, to the unknowable thing-in-itself:

the sectators of individualism, the essence of whose doctrine is that reality and existence are coextensive, [hold] that “real” and “existent” have the same meaning. (CP 5.503, 1905)

Recall my earlier comment regarding his early materialism and the possible connection with nominalism. In the passage below, Peirce seems to again connect the two. Peirce then labels as nominalists (in an unfavorable way) all those which, in one way or another, make such “individualistic” claims:

Like Mill, the Epicureans were extreme nominalists . . . The Stoics advocated the flattest materialism . . . Of course the Stoics could not but be nominalist . . . the Sceptics were nominalists . . . Descartes was a nominalist. Locke and all his following, Berkeley, Hartley, Hume, and even Reid, were nominalists. Leibniz was an extreme nominalist . . . Kant was a nominalist; although his philosophy would have been rendered compacter, more consistent, and stronger if its author had taken up realism, as he certainly would have done if he had read Scotus. Hegel was a nominalist of realistic yearnings . . . Thus, in one word, all modern philosophy of every sect has been nominalistic. (CP 1.18-19, 1903)

Although Peirce accepted part of Ockham’s nominalistic teachings (i.e. that only individuals exist, that universals function as signs),<sup>266</sup> at the same time he rejected other so-called “nominalist” doctrines which he attributed to non-scholastic, or “modern” philosophers such as Locke, Kant, etc.<sup>267</sup>

By 1868 Peirce was studying the scholastics, as mentioned above. There is no doubt that Peirce actually read Scotus and not just secondary sources. In the “Charles S. Peirce Collection” in the John Hopkins library, are Peirce’s personal volumes of Scotus’s works: the *Opera Omnia*, ed. Lucas Waddingus, London, 1639; *Joannis Duns Scoti in VIII Libros Physicorum Aristotelis*, ed. Franciscus De Pitigianis Arretino, Venice, 1618;<sup>268</sup> *Joannis Duns Scoti in Universam Aristotelis Logicam Exactissimae Quaestiones*, ed. Constantius Sarnano, Venice, 1590; *Petri Tatarati Commentaria in IV Libros Sententiarum Joannis Duns Scoti*, Venice, 1583. We can even see the scholastics’ influence in his writings in late 1868:

Hence every cognition we are in possession of is a judgment both whose subject and predicate are general terms. And therefore, it is not merely the case, as we saw before, that universals have reality on this theory, but also that there are nothing but universals which have an immediate reality . . . To [singulars] I have denied all immediate reality. Now the nominalistic element of my theory is certainly an admission that nothing out of cognition and signification generally, has any generality; and therefore this seems to imply that we are not affected by a real external world. But this is not a correct consequence of what I sought to establish . . . With reference to individuals . . . the reader may here inquire whether I believe that there is any reality other than those things which are only in one place at one time. Why certainly, I should say, there is blackness, if the testimony of our senses is to be credited. But is the blackness of this, identical with the blackness of that? I cannot see how it can help being; the determinations which accompany are different but the blackness itself is the same, by supposition. (W2:175-180, 1868)

Look at what has happened. Peirce reiterates the doctrine (accepted by the scholastics) that all our thoughts (and therefore knowledge) is of the general. This theory is identified as nominalistic, because “it bases universals upon signs” (as Ockham, the scholastic nominalist does). This is not the bad kind of nominalism. But this is the unexpected part—Peirce now claims that universals, and only universals, have immediate reality. How different, is it not, from the claim, three years before, that qualities such as color are mere fictions! Peirce’s statement that only universals, and not singulars, have immediate reality has baffled many.

But Peirce’s claim, however, is not as outrageous as it first sounds. Peirce is referring to the notion (going back at least to the scholastics) of an immediate object of thought, which is a thought as well. By saying that only universals have immediate reality, he is expressing the same (identified by him as nominalist) claim that universals are of the nature of cognition or of thought; but now he affords universals, like the scholastic realists, reality as well. But Peirce still emphasizes the “nominalistic element” and as yet does not explicitly label himself a realist. These are now Peirce’s claims:

- (5) The real is the object of a true proposition.
- (6) Universals are based on signs (a nominalistic, but not “individualistic” claim).
- (7) Nothing out of cognition and signification has any generality (nominalist claim).
- (8) Only universals have immediate reality.
- (9) “Singulars” have no immediate reality.
- (10) “Individuals” have reality.

I should mention here that Peirce makes a distinction between singulars and individuals. An individual is that which can only be in one place at one time.<sup>269</sup>



Individuals are the objects of the general terms we use in cognition. In this sense, they are not opposed to generality. A singular, on the other hand, is what is “absolutely determinate.” When an image is said to be singular it means that every possible character, or the negative thereof, must be true of it. For example, a singular image of a man must be one of a tall or short one, thin or obese, straight or crooked, with his mouth open or closed, in short, all the infinite details must be filled in. This being so, Peirce claims that there is no such image in cognition when we think of “man,” or any other general term for that matter, and therefore singulars in their singularity cannot have immediate reality as an object of thought. But singularity, as a general term, can. More on this later.

By the time Peirce’s article is published that same year under its different title, Peirce gives a modified definition of reality and finally declares for realism, Scotus’s kind—

And what do we mean by the real? . . . The real, then, is that which, sooner or later, information and reasoning would finally result in, and which is therefore independent of the vagaries of me and you . . . Now this scholastic realism is usually set down as a belief in metaphysical fictions . . . The nominalist[’s] is the metaphysical figment. Modern nominalists are superficial men who do not know, as the more thorough Roscellinus and Occam did, that a reality which has no representation is one which has no relation and no quality. That, however, does not affect the realism of Scotus. (W2:239, 1868).

Besides an unconventional definition of reality,<sup>270</sup> there is another difference between the two versions of the article; a subtle, but very noteworthy shift—in the first draft Peirce speaks of the doctrine that “blackness in general, is shown to be real” as being related to his nominalism; indeed, he adds, “If this seems a monstrous doctrine, remember that my nominalism saves me from all absurdity,”<sup>271</sup> the absurdity being, of course, something like a Platonic belief in separate existences. In the published version of this same article, however, the claim “since no cognition of ours is absolutely determinate, generals must have a real existence” is finally identified as scholastic realism!<sup>272</sup> These are now Peirce’s claims:

- (11) The real is that which information and reasoning finally results in.
- (12) The real is therefore independent of you and me.
- (13) No cognition is absolutely determinate, so generals are real.
- (14) This is scholastic realism.
- (15) The nominalist believes there is a thing-in-itself (figment).

Is Peirce’s nominalism so close to his realism that the labels can be interchanged almost imperceptibly? Before answering this question, let us look at what Peirce says in the “Berkeley Review” of 1871, Peirce’s better-known, and more explicit, declaration of realism:

The real is that which is not whatever we happen to think it, but is unaffected by what we may think of it . . . 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 the general is as real as in the concrete . . . This theory of reality is instantly fatal to the idea of a thing in itself—a thing existing independently of all relation to the mind's conception of it. (W2:467-8, 1871)

Here again we encounter a definition of reality and it is labeled realistic. Again, the reason given is what sounds like a nominalist claim: what is true is the result of a judgment, which in turn deals with general concepts, so generals (universals) are real. Peirce now insists this is not nominalistic! He is referring, I think, to that strain of (modern) nominalism which concludes there is an unknowable thing-in-itself,<sup>273</sup> and not to the (scholastic and acceptable) part which says that all concepts deal with generals. So it can be said that Peirce still maintains the scholastic nominalist doctrine but at the same time rejects what he sees as its ultimate result. This is what Peirce is claiming now:

- (16) The real is unaffected by what we may think of it.
- (17) General conceptions enter into all judgments, therefore into true opinions.
- (18) A thing in the general is as real as in the concrete.
- (19) This realist conception is more natural and obvious than the nominalistic one.

Was this shift the result of Peirce's reading of Scotus? Let us review some things about Scotus.

### Scotus's Hair

Everybody ought to be a nominalist at first, and to continue in that opinion until he is driven out of it by the force majeure of irreconcilable facts. (CP 1.1, 1898)

Recall that Scotus was a moderate realist, and as such believed that universals were real because they corresponded to something outside the mind. This does not mean, however, that he believed that there are universals existing as such outside cognition in external reality.<sup>274</sup>

Scotus held that in each individual there is a principle that accounts for its being the kind of thing it is and a formally distinct principle that accounts for its being the very thing it is. The former is its common nature or nature-in-itself (its *quidditas*, or "whatness," or U4) and the latter its individual differentia (its *haecceitas*, or "thisness"). Now this individual differs from all else (because of its haecceity) and agrees with others of its same kind (because of its nature). Thus the individuality of Socrates and the commonality between him and Plato is explained. The problem is in explaining how anything can have two distinct

principles in it that make it both really individual and really common.<sup>275</sup>

We saw that Scotus solves this problem by using a distinction called a “formal” distinction which serves as an intermediary between the other two scholastic distinctions—the real distinction and the logical distinction. The real distinction, which applies to real existent things (*in re*) is that between two objects that can exist independently of one another, e.g. between Socrates and Plato. A logical distinction is one made only by the mind, referring to our way of representing things. The formal distinction is one made by the mind but which has a basis in fact, e.g. the distinction between being a human being and having a sense of humor. Such too is the distinction between the common nature and the haecceity. Neither component ever exists separately, so it is the mind that does the separating, yet the distinction has a basis in the thing.

When a cognition takes place, Scotus holds that what is perceived is the nature. But the nature is not universal in itself (nor is it singular in itself); it is converted into a universal by the process of abstraction, that is, a spontaneous activity of the intellect. Now this process of abstraction does not consist in merely eliminating the individualizing determinations, for if it did, then the nature would be universal, and Scotus denies this. The reason is that if the nature itself were universal, it would be divided up among all its instances, so it would not be in each instance as a unit (recall Boethius). Rather, the production of universality involves the addition of something positive by the intellect to the “common” nature.<sup>276</sup> Hence universality is a product of cognition. Though it must be either “in” an individual or a universal, it cannot “exist” by itself, nevertheless, considered “in itself,” the nature is neither individual nor universal. In Socrates, for example, the common nature manifests itself (is contracted) into an individual, in our concept of Socrates the nature is abstracted into a universal.

By the time he wrote “Porter’s Human Intellect,” Peirce was well aware of Scotus’s doctrine, as the following passage shows:

The Thomistic view was that . . . the individual thing [consisted] of matter and form . . . the form is always universal, the matter is always singular. Their union is an individual, but it is a union in which the form is as such actually universal in itself. Scotus admitted that in the singular thing there is nothing actually universal; all generality results from a relation of reason. Nevertheless, when a general predicate is attached by the mind to a thing, the proposition so formed may be true, and since the same predicate may also be truly asserted of other things, it is true that there is something in the thing which, though actually contracted to the grade of singularity, is in its own nature not repugnant to being predicated of many. (W2:277,1869)

### *Michael’s View*

What Peirce called his scholastic realism took two fundamentally different forms. While the second is recognizably scholastic in inspiration, the first is very

close to nominalism; in fact nominalism was the source of this realism. (Michael, p.317)

Fred Michael agrees with Fisch, that Peirce was a nominalist at first, contra the standard view that he was a scholastic realist since early on. But he disagrees that Peirce progressed from nominalism to realism (sometime around 1868) and then gradually to an extreme realism in his later years. Rather, Michael contends, Peirce's realism was fundamentally of two kinds: his early realism maintained a nominalist ontology until Peirce was forced to modify it into a scholastic realism in 1883 as a result of abandoning the subject-predicate logic for the new logic of relatives which used quantifiers for the first time. Because of space constraints, I will not go into details regarding how this new logic affected Peirce's ontology according to Michael, nor is it necessary that I do so. My quibble with Michael is the following claim:

Peirce always insisted that there are universals within cognition. But when a nominalist denies the reality of universals, he is not denying that there are universals in thought and language; he is denying that there are universals outside of cognition in external reality. Peirce's early and late realism differ with respect to the reality of universals outside of cognition. Peirce's early realism did not commit him to such entities, and in that sense had a nominalist ontology. The realism Peirce develops after 1883, however, is committed to real universals outside the mind. (p.337)

I agree that Peirce held that cognition is of universals. I also agree that nominalists, like Ockham, made this claim and denied that there are universals "outside cognition in external reality," meaning by that, that universals do not exist. According to Michael, this makes Peirce's early realism nominalistic and not scholastic realist in character. But this betrays a misunderstanding of Scotus, who was a scholastic realist, and who, as we have seen, did not claim that universals as such exist either. It can also amount to a misconstrual of Peirce, depending on what is meant by "outside the mind." If I am correct, in my final analysis, according to Michael's own theory of two different realisms in Peirce, his early realism was realist (at least the scholastic, or Scotistic kind) while the later realism was not, for, as I will argue below, Peirce's extreme realism claims universals are not independent of thought in general. This amounts to a reversal of Michael's claim.

### *My View*

You must have a consistent plan of procedure, and the hypothesis you try is the one which comes next in turn to be tried according to that plan. This justifies giving nominalism a fair trial before you go on to realism; because it is a simple theory which if it doesn't work will have afforded indications of what kind of realism ought to be tried first. (CP 8.251, 1897)

Why did Peirce go from what seems like a staunch nominalism in 1865 to an apparently equally dogmatic realism in 1871? This is what I think happened. As we have seen, there is quite a bit of evidence that, during 1867 to 1868, Peirce acquired a number of books on medieval philosophy, including various works from Duns Scotus. Prior to this time, it is obvious that Peirce had an erroneous conception of what scholastic realism was. This is seen in his 1865 claim that in scholastic realism qualities are mistaken for external, or existing things. Perhaps we shouldn't judge Peirce's error too harshly, for apparently during his time this was a common misconception.<sup>277</sup>

Obviously, Peirce was one of the few at the time to "awake these works from their slumber," for the prevailing view (at least among "men of science," and Peirce was a member of this group as well as his friend Chauncey Wright, who, Peirce tells us, influenced his views), was that of nominalism. It would not be until much later that Peirce would agree with Francis Abbott's controversial thesis that science was realistic.<sup>278</sup> This would also explain why Peirce's "confession" written on an 1859 note card was labeled by Peirce himself as being "horrid." But after 1868, the works of Peirce are replete with comments on the schoolmen; we even see some of his works written in the question-and-answer form so common during scholastic times.<sup>279</sup>

As Peirce's philosophy matured, however, he apparently found Scotus's brand of realism not realistic enough. Hence, his comments:

Even Duns Scotus is too nominalistic when he says that universals are contracted to the mode of individuality in singulars, meaning, as he does, by singulars, ordinary existing things. (CP 8.208, 1905)

In the fourteenth century Nominalism was rendered a respectable opinion by the halting realism of Scotus and by the extravagant unpragmatism of his followers. (CP 6.175, 1902)

It is in the "Grand Logic," however, written about 1893, that there is mention of the phrase "extreme realism" to refer to Peirce's own kind of realism.<sup>280</sup> Why he thought Scotus was too nominalistic and why he therefore felt compelled to adopt a more realistic stance will be discussed below. However, there was definitely a third shift around this time.<sup>281</sup> This shift, one which Peirce acknowledged, is the one most commentators recognize. I think it would be helpful to see Peirce's three shifts from nominalism to realism in table form (Table 3-1).

So is Fisch correct in claiming that Peirce was a nominalist "at first," taking his first step toward realism in his 1868 "Cognition Series," his second in the "Berkeley Review," and gradually arriving at his extreme realism years later?<sup>282</sup> I think Fisch is partly right. Yes, Peirce was a nominalist at first (before 1868) but he was what I will call a scholastic nominalist, in order to differentiate him from the "modern" nominalists he spoke of so disdainfully. These latter were men like Locke who, according to Peirce,<sup>283</sup> took nominalism to its inevitable and errone-

	REAL	FICTION	NOMINALISM	REALISM
1865	external (things)	qualities	TRUE	FALSE
Early 1868	object of true proposition, universals, singulars, qualities	"singulars" (no immediate reality)	true (but not individualistic kind)	?
1868	what reasoning results in, what community reaffirms, independent of you and me, generals	what will ever after be denied	false (at least modern kind)	TRUE (at least Scotus' kind)
1871	unaffected by what we think, things in the general, thing in the concrete	Thing-in-itself	FALSE	TRUE
1880s	the final opinion	Thing-in-itself	FALSE	TRUE (at least extreme kind)

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Shift in understanding      Shift in labels      Shift in doctrine

**Table 3-1**

ous conclusion, the doctrine of an incognizable reality, by making the individual the center of all metaphysical claims.<sup>284</sup> Ockham, though, maintained that cognition is of the nature of signs, a claim that Peirce held throughout and which made him look upon Ockham a bit more favorably. But at the same time, before Peirce's discovery of scholastic realism, there were "realist" yearnings, as we can see from the 1859 confession of being a "Realist" and the comment that "our ideas are as real as our sensations." I think Peirce must have been delighted when he discovered that Scotus had articulated several hundred years before a doctrine similar to what he was struggling to say. This then allowed him to substitute the nominalist label for one with less unacceptable consequences.

I disagree with Fisch, however, in that Scotus's progression from nominalism to realism was a simple gradual process. There are, I think, three identifiable shifts in Peirce's change from nominalism to realism. There was a shift in his understanding of what scholastic realism meant (and didn't mean) and as a result, some months later, there was a second shift: the labels of nominalism and realism were swapped. Peirce realized that he could still maintain that universals were the product of cognition, but at the same time he could claim that they were, in some sense, real. Of course, this involved redefining the "real," and again Scotus provided a basis for this claim.<sup>285</sup> Fisch recognizes the first shift in the under-

standing, but he misses the second. Michael notices the swapping of labels, but claims it is not a real shift because Peirce's "conversion" was in name only and that he remained a nominalist until much later. But what Michael fails to notice, however, is that what he identifies not inaccurately as Peirce's nominalistic thesis, that is, that universals are within cognition, and therefore do not exist, is one that Scotus's realism incorporated as well. Michael focuses on the third shift, Peirce's development to an extreme realism, and erroneously claims that Peirce retained a nominalist ontology until then.

Can we then consider Peirce's remark that Scotus is "separated from nominalism only by the division of a hair" more of a compliment than a criticism? I think we can. Scotus's formal distinction was the "hair" that allowed universals to be classified as real even though, as the scholastic nominalists alleged, they are cognitive in nature. It allowed Scotus to be an Aristotelian and a realist, while steering clear of Platonism. And Peirce's own realism turned out to be only a hair's breadth away from his nominalism, thanks to Scotus, who provided him with a framework and a label for ideas he had considered all along.

### **The Real, the True, and Reality**

The difficulties and doubts of logicians begin with questions about reality. (MS 195, 1872)

The current explanations of the realist-nominalist controversy are equally false and unintelligible . . . We have only to stop and consider a moment what was meant by the word real, when the whole issue soon becomes apparent. (CP 8.12, 1871)

We have already seen that commentators have disagreed, for various motives, on the proper interpretation of Peirce's work. An important reason, as seen in the previous section, is unfamiliarity with scholastic, specifically, Scotistic, doctrine. It should be obvious, then, why I concur with Boler that two keys to understanding Peirce's thought, at least those aspects relevant here, are: first, understanding Scotus and second, understanding how Peirce's realism, idealism, and pragmatism are related. But there is one more thing that is crucial for understanding Peirce: his desire to incorporate into one system the diverse features of those philosophical systems he thought were worthwhile. I think he was convinced that (practically) all the great philosophers made important contributions to mankind's ultimate questions, and I believe part of the reason for the complexity of his own thought is due to his efforts at trying to make all these theories fit together:

Thus, in brief, my philosophy may be described as the attempt of a physicist to make such conjecture as to the constitution of the universe as the methods of science may permit, with the aid of all that has been done by previous philosophers. (CP 1.7, 1898)

Hence, Peirce has been variously categorized as a nominalist, a realist, an idealist, and a pragmatist, to name a few. Was he a nominalist? Or was he a realist? Or an idealist? A pragmatist? My answer to all these is: “yes, but no.” Peirce was all of these in the sense that he extracted and incorporated features of these doctrines into his own. But at the same time, he was none of these in the sense that he gave these theories his own special twist and therefore changed their original meanings. Peirce wanted “[t]o erect a philosophical edifice that shall outlast the vicissitudes of time,”<sup>286</sup> as Aristotle had done:

to outline a theory so comprehensive that, for a long time to come, the entire work of human reason, in philosophy of every school and kind, in mathematics, in psychology, in physical science, in history, in sociology, and in whatever other department there may be, shall appear as the filling up of its detail. (CP 8.12, 1898)

Now Peirce did not pretend to start from scratch, nor did he think it necessary; he had great admiration for some of his predecessors, so many of the building materials for this project were to be recycled from them. But in order to accommodate all these ideas in one structure he had to reinterpret and revise them many times, resulting in constructions which would have been almost beyond recognition not only to their own architects, but also to those acquainted with the originals. This is why many of Peirce’s comments are unexpected and puzzling, especially to the uninitiated. I will argue, however, that Peirce did manage to recast these systems in such a way that they could all come together, in at least a comprehensible whole. This means that most of my effort will be spent in trying to explain what Peirce meant. Towards the end I will discuss whether Peirce’s system really can be considered an extreme scholastic realism.

All the parts of Peirce’s grand construction interlock so snugly that it is difficult to separate them from each other in order to examine them. As a result, any discussion of Peirce’s realism has to be done in the context of his idealism, and that in the context of his pragmatism. (I suspect that as Peirce grew in his knowledge of the history of philosophy, he had to keep readjusting his overall scheme, in order to accommodate all that he wanted to assimilate.) Mine is no easy task, but I will attempt to extricate these different parts in order to discuss each in turn. With that in mind, I will begin by looking at Peirce’s realism, specifically his notion of the real, which will then lead us to a discussion of his idealism, the categories, pragmatism, synechism, and Peirce’s notion of the individual.

It is obvious Peirce was well aware of the issues at stake:

The great argument for nominalism is that there is no man unless there is some particular man. That, however, does not affect the realism of Scotus; for although there is no man of whom all further determination can be denied, yet there is a man, abstraction being made of all further determination. There is a real difference between man irrespective of what the other determinations may be, and



man with this or that particular series of determinations, although undoubtedly this difference is only relative to the mind and not *in re*. Such is the position of Scotus. Occam's great objection is, there can be no real distinction which is not *in re*, in the thing-in-itself; but this begs the question for it is itself based only on the notion that reality is something independent of representative relation. (CP 5.312, 1868)

Here, Peirce identifies the nominalist as claiming that only particular men exist (and therefore are real) and (specifically Ockham's, or Occam's, position) that there is no such thing as the formal distinction (described by Peirce as "relative to the mind" and not "*in re*" in the sense of the real distinction). Peirce describes Scotus's position as claiming that although existent men have "particular determinations," and "there is no man" that can exist without them, we can still claim that the universal "man" (irrespective of what the other determinations may be) is real, as a result of abstraction and the formal distinction.

But first let me review some points regarding moderate realism and nominalism. Since the controversy between realism and nominalism has been over the status of universals, it is sometimes overlooked that there really are two aspects to consider, like two sides of a coin: not just the ontological status of universals, but also the ontological status of singulars (or individuals or particulars).<sup>287</sup>

These two aspects apply not just to the question of realism versus nominalism, but also to the distinction between the different realisms, namely scholastic, i.e. moderate, and Platonic realism. Moderate (scholastic) realists claimed, like their nominalist counterparts, that (only) singulars exist and, of course, are real.<sup>288</sup> There was no disagreement there. Rather, their disagreement was due to the status of universals: as we have already seen, the realists claimed that universals, although lacking ordinary existence in themselves, were still real. The realists' claim was based, I have argued, on the "tie" the universal had to the singular existent thing: the supposit's nature is abstracted into the mind and becomes universal. Platonists, who could be considered extreme realists,<sup>289</sup> claimed that only universals, and not singulars, were truly "real." Indeed, the "moderateness" of the realists' position was precisely because they did not also ascribe a "separate existence" to universals, (in the sense of existing independently of the singular), unlike the Platonists who did attribute an independent (but not really material) "existence" to universals. We can see the "moderateness" of the realists in both the singular and the universal aspect, and in terms of nominalism and Platonic realism: as far as singulars went, the realists disagreed with the Platonists by claiming that singulars were truly real, concurring with the nominalists in this; in the case of universals, the realists thought that these did not exist as such, thereby agreeing with nominalists, but disagreeing with Platonists. However, realists were in agreement with Platonists that universals were real, opposing nominalist claims. It could be said, then, that the moderate realists' "moderateness" consisted in their agreeing with nominalists that only singulars exist and with the claim that

universals don't have existence in themselves. The "realist" part consists in the belief that universals were real. Here, in a sense, they agreed with Platonists. The following table helps to illustrate this:

	PLATO	ARISTOTLE	REALISTS	NOMINALIST
UNIVERSALS	Exist Real	Exist (?) Real (maybe)	Don't exist Real	Don't exist Not real
SINGULARS	Exist Not Real	Exist Real	Exist Real	Exist Real

**Table 3-2**

Nominalists and realists then agreed on the following points:

- Singulars are real, and
- Only singulars exist, therefore
- Universals are concepts, or thoughts, and therefore mind-dependent.

In determining whether Peirce really was an extreme scholastic realist, as he said he was, these two aspects, that is, the status of universals *and* the status of singulars, have to be considered. As will be apparent, this approach provides valuable insight into Peirce's position.

Like the scholastic or moderate realists, and unlike the nominalists, Peirce, I will show, believed that universals were real. However, as I will point out,<sup>290</sup> his notion of "real" was not quite the same as the scholastics'. In fact, as will be seen, it is not even the same as the common notion of "real." Actually, Peirce himself seems aware that he is using the word in an uncommon way: phrases such as "in what sense I always use the word," "according to my use of it," "as I employ that term," "that is what I mean by," all serve to indicate this awareness.<sup>291</sup>

Peirce claims that the clue to settling the issue between nominalists and realists revolves around the notion of the "real."<sup>292</sup> And it is precisely Peirce's definition of the "real," adapted from what he claims is originally Scotus's definition that gives Peirce's realism its distinctive flavor and which provides a base for Peirce to eventually add all the other ingredients of his own theory:

Are universals real? . . . Objects are divided into figments, dreams, etc., on the one hand, and realities on the other. The former are those which exist only inasmuch as you or I or some man imagines them; the latter are those which have an existence independent of your mind or mine or that of any number of persons. The real is that which is not whatever we happen to think it, but is unaffected by what we may think of it. (CP 8.12, 1871)

Peirce says the real is unaffected by, or independent of, what I (or any number

of persons) think about it. It is the opposite of the fictitious, of the figment, which *is* affected by or dependent on what others or I think about it. Examples of the latter would be a character in fiction, an optical illusion, a hallucination, etc. Peirce describes the difference between the real and a figment elsewhere:

The question whether Hamlet was insane is the question whether Shakespeare conceived him to be insane. Consequently, Hamlet is a figment and not a reality. But as to the inkstand being on my table, though I should succeed in persuading myself and all who have seen it that it is a mere optical illusion, yet there will be a limit to this . . . it will, at last . . . force its recognition upon the world . . . it has the characteristic which we call reality. (CP 8.153, 1900)

A character in a literary work is fictitious, or a figment, if its characteristics and circumstances are completely up to the author's decision. In other words, the character is merely the product of the author's imagination, and does not therefore actually exist as such. Now we know there is such a thing as "the real" because, as the individual learns early on in life, not everything is as she wants, or decides, it is; in other words, there is a constraint, or influence, on her thoughts which is beyond her control. Peirce continues:

Where is the real, the thing independent of how we think it, to be found? There must be such a thing, for we find our opinions constrained; there is something, therefore, which influences our thoughts, and is not created by them. (CP 8.12, 1871)

But where does this constraint come from? Peirce gives a familiar description of it:

We have, it is true, nothing immediately present to us but thoughts. These thoughts, however, have been caused by sensations, and those sensations have been constrained by something out of the mind. This thing out of the mind, which directly influences sensation, and through sensation thought, because it is out of the mind, is independent of how we think it, and is, in short, the real. (CP 8.12, 1871)

This is an empiricist-type explanation (ultimately traceable back to, at least, Descartes): what we have direct contact with is our mind, or our thoughts. But we have access to the world outside our mind through our senses, which filter the information the world provides us and in turn cause sensations in us, which are then translated into thoughts. That which is "out there" and is therefore external to my mind (my mind does not make it up) is the real, according to this account. The kind of permanency that which is "out there" has is not influenced by my thoughts about it.

So far, this sounds perfectly reasonable and uncontroversial. But then Peirce delivers a blow to the unsuspecting reader: he identifies the above view, the one that assumes sensations are caused by something "out there" independent of

thought, as nominalistic, and declares it to be wrong-headed. This maneuver is so unexpected, that some have actually misinterpreted it: Michael, for example, takes this to be Peirce's own position and cites the passage as evidence that Peirce is, at this time, a nominalist as Fisch claims.<sup>293</sup>

Peirce then offers an alternative explanation, a "realistic" one, which, he claims, is better:

[T]he other, or realist conception, if less familiar, is even more natural and obvious. All human thought and opinion contains an arbitrary, accidental element, dependent on the limitations in circumstances, power, and bent of the individual; an element of error, in short. But human opinion tends in the long run to a definite form, which is the truth. Let any human being have enough information and exert enough thought upon any question, and the result will be that he will arrive at a definite conclusion, which is the same that any other mind will reach under sufficiently favorable circumstances. This final opinion, then, is independent, not indeed of thought in general, but of all that is arbitrary and individual in thought; is quite independent of how you, or I, or any number of men think. (CP 8.12, 1871)

Notice what Peirce has done. He has amended what the "real" is. But he does this very carefully, in such a way that the revised notion, although very different from the familiar one, still complies with the accepted definition, that "the real is independent of what you or I think about it." Since the judgment of what is the "real" according to the first, familiar (and, according to Peirce, mistaken) view, is individually made by each person, and since there is always the possibility of error in any one person's particular thoughts or opinions on something (due to that person's specific circumstances), it is best, rather, to trust a consensus of opinions of what is real, Peirce argues. Now this final opinion (because of a natural human proclivity towards rationality),<sup>294</sup> given enough time, tends towards agreement, or "the truth about things." But the truth about things is none other than a description of what is real! What is real, then, is what would be thought in the final opinion:

The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in that opinion is the real. (CP 5.407, 1878)

This quotation includes two other important elements besides truth and the real which will be dealt with in a bit more detail below: the claim that we are "fated" to come to this convergence, and what "investigation" entails. But back to the real.

The "real," under this "realistic" view, still meets the qualifications of "independence" mentioned originally, in the sense that the real is not subject to or affected by what you, or I, or any particular group of people think. The final opinion is unaffected by what a particular person or group of people think because it would be the result of a consensus based on a prolonged investigation, and there-

fore gravitates toward “one opinion, fixed, and permanent.” But how can something which is down the line cause, or have an effect, on our present sensations? In other words, how can the as-yet-to-be final opinion (the real) cause our sensations now? Peirce claims that this way of looking at things is not as preposterous as it sounds. He gives an analogy by way of explanation, comparing thought to a current which flows from an origin to a destination:

A current is another image under which thought is often spoken of, and perhaps more suitably. We have particularly drawn attention to the point to which thought flows, and that it finally reaches; a certain level, as it were—a certain basin, where reality becomes unchanging. It has reached its destination, and that permanency, that fixed reality, which every thought strives to represent and image, we have placed in this objective point, towards which the current of thought flows. But the matter has often been regarded from an opposite point of view; attention being particularly drawn to the spring, and origin of thought. It is said that all other thoughts are ultimately derived from sensations; that all conclusions of reasoning are valid only so far as they are true to the sensations; that the real cause of sensations therefore, is the reality which thought presents. (CP 7.337, 1873)

The “destination,” of course, is the final opinion, while the “origin” is the sensations, which is, according to the “nominalists” the mainspring of thought.<sup>295</sup> Peirce claims that theories which offer sensations (commonly thought to be caused by the action of external objects on our senses) as the basis for thought (and consequently knowledge of the world) are approaching the problem from the wrong side. Peirce considers these nominalistic; even idealistic theories will claim that “something” causes sensations, even if the definition of what is external varies (hence, Peirce accuses some idealists of being nominalists a well). He proposes that the issue should rather be looked at from the “destination” point of view; in other words, that we see the final opinion as the proper grounding for thought, or knowledge of the world. He also uses the example of a chain in order to further illustrate this:

The reality must be connected with this chain of reasoning at one or other extremity. According as we place it at one end or the other, we have realism or nominalism . . . The reality must be so connected with our thought that it will determine the conclusion of true investigation. But the conclusion depends on the observations. Reality must then be connected with sensation as its cause (or to use another phrase, as its possibility) and this is the nominalistic theory of reality. But reality is independent of the individual accidental element of thought. Now on the observation end of the chain of reasoning all is accidental and individual. But at the conclusion end is one result to which alone investigation will ultimately lead . . . The reality, then, must be identified with what is thought in the ultimate true opinion. (CP 7.337, 1873)

Here Peirce speaks of an “observation” end and a “conclusion” end instead of an origin and a destination, but the reasoning is the same. We can see again why

Peirce wants to make the final opinion the basis for reality. If we consider reality to be based on sensations (and, following the chain backwards, external objects), then reality is ultimately based on what could be erroneous information, since individuals can make mistakes in their individual observations. The final opinion, however, since it is based on countless observations and investigations, and since we have an inborn tendency ultimately to get the right answer, would give a better guarantee against errors. And since reality by definition is “independent” of what you or I think, by it being based on the final opinion, a consensus and therefore not individual, it truly is “independent” of what you or I think.

But now let us consider the final thought, which is that thought which is the final upshot of the investigation—that to which we always strive to make our thoughts conform. The thought is thus no longer of any particular man, or of any number of men. The thoughts of a man or of many men may conform to it; but however closely they conform, it differs from them in this respect: that their thoughts are changed if they think otherwise; but it is not changed if they think otherwise. For the prejudice, incompetency or ignorance of any number of men, or of generations of men may postpone the agreement in the final opinion but can not make that final opinion to be other than it is to be. So it is quite independent of how any number of men think, and thereby is distinguished from other thoughts as completely as the external reality is. And indeed, in this fact that it is not even affected by any illusion to the thoughts of you or me or any number of men, it conforms entirely to the description which we have given of reality, that it should be what it is whatever we may think about it. (MS 200, 1872)

Here again we see how Peirce’s definition of reality, although reversing the normal description of sequence of events related to truth-formation, still conforms to the accepted definition of reality as independent of individual thought. We can also see the idealistic element in the definition, for as described, is of the nature of thought.

Peirce’s creative syntheses of traditional doctrines are confusing to many, and as one would expect, lead to misinterpretations as will be seen below. Farber, for example, admits

It’s surprisingly difficult to say just how Charles Peirce understands the concept of reality . . . It is clear that Peirce wants to . . . capture at least part of the standard intuitive meaning . . . however, things get murky.<sup>296</sup>

Now we can think of a number of related objections to Peirce’s proposal:

- how can something (the final opinion) which does not yet (and may never) exist (not till the end of all inquiry, if that is ever reached) produce something (my sensations, or thoughts of what is “out there”) now?
- do we really have a tendency to get the right answer?
- will the final opinion ever be reached, and what about those things that will

never be found out because they have been lost in the past or a somehow inaccessible to anyone (otherwise known as “buried secrets”)?

Let me begin with the first one, whose answer leads to the responses to the second and third objections. Peirce was aware of these problems, and suggests that we accept situations such as the first all the time:

At first sight it seems no doubt a paradoxical statement that, “The object of final belief which exists only in consequence of the belief, should itself produce the belief”; but there have been a great many instances in which we have adopted a conception of existence similar to this. The object of the belief exists it is true, only because the belief exists; but this is not the same as to say that it begins to exist first when the belief begins to exist. (W3:57, 1872)

So we say that the inkstand upon the table is heavy. And what do we mean by that? We only mean, that if its support be removed it will fall to the ground.<sup>[297]</sup> This may perhaps never happen to it at all—and yet we say that it is really heavy all the time; though there is no respect whatever, in which it is different from what it would be if it were not heavy, until that support is taken away from it . . . It exists only by virtue of a condition, that something will happen under certain circumstances; but we do not conceive it as first beginning to exist when these circumstances arise; on the contrary, it will exist though the circumstances should never happen to arise. (CP 7.342, 1873)

Even if something does not fall to the ground if its support is never taken away, and as a result its “heaviness” is not put to the test, nevertheless we consider it to have been “heavy” all the time. Peirce wants to apply this analogy to the future final opinion and its relation to the present thought. He wants to say that the final opinion has being now, in the sense that gravity has being now even when it is not put to the test. It may be objected, however, that gravity is an actual force in nature while the final opinion is only a theoretical possibility. But Peirce disagrees that the final opinion is only theoretical. He wants to claim that the drive towards a consensus is as much a force, or a law, or “power” as the gravitational one; it is a tendency that guides thought in one “fated” or determined direction, the truth, just as falling is a tendency that guides objects towards the center of the earth:

Now how is it that the springing up into the mind of thoughts so dissimilar should lead us inevitably though sometimes not until after a long time to one fixed conclusion? Disputes undoubtedly occur among those who pursue a proper method of investigation. But these disputes come to an end. At least that is the assumption upon which we go in entering into the discussion at all, for unless investigation is to lead to settled opinion it is of no service to us whatever. We do believe then in regard to every question which we try to investigate that the observations though they may be as varied and as unlike in themselves as possible, yet have some power of bringing about in our minds a predetermined state of belief. This reminds us of the species of necessity which is known as fate . . . Fate then is that

necessity by which a certain result will surely be brought to pass according to the natural course of events however we may vary the particular circumstances which precede the event. In the same manner we seem fated to come to the final conclusion. For whatever be the circumstances under which the observations are made and by which they are modified they will inevitably carry us at last to this belief. (CP 7.334, 1873)

Peirce is saying that the very fact that we engage in inquiry presupposes that we will be persuaded by the right kind of evidence to accept the correct answer. Considering the diversity of opinions, and possible explanations, the fact that there is agreement is quite surprising, and this fact shows that there is some “power” that naturally leads us, with individual exceptions that are ultimately factored out, to convergence. The name which Peirce will give to this “power” that ultimately guides us to the truth about things is synechism, which we will explore further below. We are destined, then, to be driven in the direction of truth, so it is a fact that we would arrive at it, given enough time:<sup>298</sup>

This activity of thought by which we are carried, not where we wish, but to a fore-ordained goal, is like the operation of destiny. No modification of the point of view taken, no selection of other facts for study, no natural bent of mind even, can enable a man to escape the predestinate opinion. This great hope is embodied in the conception of truth and reality. The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real. That is the way I would explain reality. (CP 5.408, 1878)

It is important to note that Peirce does not mean to claim that truth is the result of whatever is agreed upon. It is the other way around: truth is discovered, not invented, by those investigators who follow the scientific method, the best way to “fix belief.” Peirce identified four ways of acquiring beliefs: the method of tenacity (tenaciously holding on to a belief, regardless of evidence against it), the method of authority (a belief instilled by a social institution of some sort), the *a priori* method (adopting the belief that seems most reasonable in the context of other beliefs already held), and the scientific method (a belief resulting from the investigation of a community of inquirers with no other desire than to learn the truth about things). The communal aspect of the latter compensates for individual errors and therefore ensures, in combination with the inherent tendency to “get things right” that the final opinion is indeed equivalent to the “one True conclusion.”<sup>299</sup>

Peirce gives another example to show why his notion of the final opinion is not only not far-fetched, but is actually already one that is commonplace in science:

Thus we find the physicists, the exactest of thinkers, holding in regard to those things which they have studied most exactly, that their existence depends on their



manifestations or rather on their manifestability.<sup>300</sup> We have only to extend this concept to all real existence and to hold these two facts to be identical, namely that they exist and that sufficient investigation would lead to a settled belief in them. (MS 204, 1872)

Let us use the example of electrons. Physicists have not, as far as I know, ever actually seen an electron (the same can be said of quarks, and myriad other peculiar objects). However, they (and we) assume they exist because of their “manifestations,” that is, the negative charges left on devices, etc. The reason this seems to be sufficient evidence for their existence is the conviction, or “hope,” as Peirce also calls it, that eventually scientists will find a way to “see” them, or have better evidence regarding their existence. The belief is not only reasonable, but actually so natural that it is rarely questioned (outside of philosophical discussions, that is).

Perhaps the most common objection is the third one, about the final opinion never being reached. Farber claims that “if the truth is what we will believe at the end of inquiry, then there needs to *be* an end of inquiry for there to be a truth,”<sup>301</sup> and this is an untenable consequence of Peirce’s theory, he claims. But Peirce does not assert that there will be an exact point in time when inquiry will end. We can never be completely certain that we have achieved ultimate knowledge. We can have fixed beliefs which are always open, at least in theory, to further questions, and if indeed doubts are created, then further inquiry will put those doubts to rest eventually. At no time, however, can we be 100% assured that all inquiry has in fact come to an end. The fact that our knowledge at any moment in time can be put to the test (if sufficient doubt arises) leads to the conclusion that in theory all knowledge can be considered as fallible. This is Peirce’s well-known doctrine of fallibilism.

Our perversity and that of others may indefinitely postpone the settlement of opinion; it might even conceivably cause an arbitrary proposition to be universally accepted as long as the human race should last. Yet even that would not change the nature of the belief, which alone could be the result of investigation carried sufficiently far; and if, after the extinction of our race, another should arise with faculties and disposition for investigation, that true opinion must be the one which they would ultimately come to. (CP 5.408, 1878)

Peirce says that even if that moment of perfect agreement among humans, when all questions are answered, is never reached, the possibility still exists that it may be reached, and this is the important thing. The potentiality does not have to be actual at every single moment in order to have the desired effect, just as the inkstand does not have to fall in order for the law of gravity to be effective. Again, it could be argued, however, that gravity as a law regulating behavior is very different from a potential and theoretical end of inquiry. I will argue in a section below that for Peirce, though, they are in fact very similar.

Peirce also alludes to the related “buried secrets” objection, claiming that it is “hazardous” to say that the truth will never be found out, since there have been so many instances when history has proved the assertion false:

The second bar which philosophers often set up across the roadway of inquiry lies in maintaining that this, that, and the other never can be known. When Auguste Comte was pressed to specify any matter of positive fact to the knowledge of which no man could by any possibility attain, he instanced the knowledge of the chemical composition of the fixed stars . . . But the ink was scarcely dry upon the printed page before the spectroscope was discovered and that which he had deemed absolutely unknowable was well on the way of getting ascertained. (CP 1.137, c.1899)

True, there may be facts that will never get explained; but that any given fact is of the number, is what experience can never give us reason to think; far less can it show that any fact is of its own nature unintelligible . . . We must look forward to the explanation, not of all things, but of any given thing whatever. There is no contradiction here, any more than there is in our holding each one of our opinions, while we are ready to admit that it is probable that not all are true. (MS 204, 1872)

But why complicate matters like this? What is wrong with giving the familiar account, which Peirce disapprovingly calls nominalistic, that what’s real are the external objects that cause our sensations? Peirce does admit that his proposal is a bit “strange:”

But when, to avoid the strangeness of saying that the new elements of belief that spring up in the mind, no matter how we vary them by changing the circumstances of their emergence, will inevitably be such as shall lead us at last to a destined conclusion, we preferred to say that these origins of belief are produced in us by the action of realities upon sense and must therefore be relative to these realities. (MS 204, 1872)

But to speak of external objects as the cause of sensations and therefore of thought, as opposed to the final opinion being that cause, is not advisable, because it does not afford the proper point of view.<sup>302</sup> He does not recommend the nominalistic way of approaching the problem because it will ultimately lead to that dreaded of all nominalistic mistakes: the external object, the unknowable thing-in-itself. Talk of such a thing, that is, a thing independent of all thinking, has no meaning and therefore is absurd, according to Peirce, because anything we talk about has, by definition, a relation to thought:

A conception is said to be true if there exists such a thing independent of all thought. But a thing out of all thought can have no likeness to another, for likeness is the common element that two notions have. Seeing this, some metaphysicians say that a true conception is one that corresponds to a thing existing

independent of all thought. But nothing is gained by substituting one relation of reason for another; a thing corresponds to another only so far as the mind regards them as correlates . . . Everything considered therefore there is a complete vacuity of meaning in saying that independent of all thought there exist such things as we shall think in the final opinion. (MS 204, 1872)

Peirce is trying to express, in a more provocative way, the old scholastic idea that all our knowledge is of the general and that we cannot cognize the individuality of things. But Peirce takes this a step further, and suggests that instead of dwelling on the unknowable thing-in-itself we should focus our attention instead on ensuring that what we can know is as foolproof as possible by taking into consideration not just one account (mine), but infinitely many: the final opinion.<sup>303</sup> Now by denying that we can have conceptions of things independent of all thought (external objects, or things-in-themselves), Peirce is not saying that external objects do not exist. He admits that we do have a general notion of things that are independent of our particular thoughts (we learn this through trial and error early on). However, he wants to claim, that we cannot have a conception of something independent of all thought:

The experience of ignorance, or of error, which we have, and which we gain by means of correcting our errors, or enlarging our knowledge, does enable us to experience and conceive something which is independent of our own limited views; but as there can be no correction of the sum total of opinions, and no enlargement of the sum total of knowledge, we have no such means, and can have no such means of acquiring a conception of something independent of all opinion and thought. (CP 7.345, 1873)

In trying to say what the real is, Peirce was aware that all any human can do, because we are not omniscient and do not have immediate knowledge of the external world but rather have mediate knowledge of it through sensations which create thoughts and have to communicate these thoughts with each other through language, is to provide a *description* of what the real is. We cannot know external objects in their externality: we can experience them, but we cannot *know* them.<sup>304</sup> This, as may be recalled, is a scholastic point; specifically, Scotus's.<sup>305</sup> We can experience external objects, but we can only know them through concepts, which are logical, or propositional in nature.

What subtlety there is in all of this! Here Peirce demonstrates again how he truly is an intellectual descendant of Scotus. When Peirce tells us that reality is independent of what you or I think, one naturally thinks that he means "independence" in the sense that external, or outward things are independent of thought. But as we have seen, that is the "nominalistic" claim, and not the realistic one which Peirce endorses.<sup>306</sup>

Actually, Peirce's maneuver in revising the notion of the real is so subtle that few have understood it, even partially.<sup>307</sup> Boler, de Waal, and Friedman, for

example, agree that Peirce gives a special meaning to the word “real.”<sup>308</sup> Almeder recognizes the quasi-idealist element in the notion—

he was simply espousing the view that the real is knowable which is to say that the real is dependent for its being known (or knowable) upon the minds of the community . . . Hence Peirce’s definition of the real as the object of the ultimate opinion of the community in no way conflicts with his definition of the real as that which is independent of what we think about it. (Almeder, 1980)

Rosenthal, however, claims that Peirce commits “the fallacy of equivocation” in his account of reality:

In the last analysis, however, Peirce confounds the independence of reality with-in experience with our workable interpretations of it . . . Peirce’s equivocation here helps clarify the two distinct concepts of reality that pervade his writings in general. (Rosenthal, 1994)

I disagree with Rosenthal’s characterization here, for, as seen above, the two-sided aspect to Peirce’s notion of reality is fully intentional on his part.

Peirce contends that the words “real” and “reality” were invented in the thirteenth century, and he attributes their use primarily to Scotus:

For *realis* and *realitas* are not ancient words. They were invented in the thirteenth century, and the meaning they were intended to express is perfectly clear. That is real which has such and such characters, whether anybody thinks it to have those characters or not. (CP 5.430, 1905)

Scotus added a great deal to the language of logic. Of his invention is the word reality. (CP 4.28, 1893)

Peirce himself uses the two terms practically synonymously:

The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real. That is the way I would explain reality. (CP 5.408, 1878)

But even though he credits Scotus with the concept, Peirce was aware that he was putting his own spin on what the “real” is. And I think this is precisely what he does, using Scotus’s notion of *realitas*.

Recall Scotus uses *realitas* (“reality”) as another word for *formalitas* (“formality”), those “little” forms that are “in” things. They do not exist in the way external things exist (these latter can exist independently of each other); instead they are a kind of “mental” entity yet with a real basis in the existent thing. I think Peirce is referring to this use of “reality” when he says that Scotus “invented” the word. Now I think it is accurate to say that the word (and the concept) “real” (*realis*) in its common meaning of “existent thing” predates Scotus, for we have seen that the real distinction was a scholastic notion which Scotus refers to. We have

also seen that at least as far back as Porphyry (at least as commonly translated) there is talk about whether genera and species are “real” and whether they are separable “in reality.” So I do not think that Scotus makes up these words. However, we are told by Wolter that Scotus creates the neologism “formality” in order to refer to those things that are formally distinct.<sup>309</sup> So it is very possible, I think, that Scotus was original in this particular use of “reality” to refer to formalities. I think this is what’s going on when Peirce makes his rather astounding claim.

Recall that formalities are not really (only formally) distinct from the things in which they inhere, for formalities cannot exist separately. However, in our minds we can separate the formality from the thing (the I-U4 is an example), and since the formality is a component of a real existent thing, it remains “real” even though it is in our thoughts. So even though it is of the nature of thought, the formality, or “reality,” is more than a mere logical (mental) entity, for it has a tie to the existent thing.<sup>310</sup> However, in abstracting these realities, the mind does make a contribution; it allows the reality to act as universal: it becomes indeterminate in such a way that we can apply it to many instances.

I believe Peirce is referring to Scotus’s use of *realitas* as entities synonymous with formalities. Furthermore, I believe Peirce utilizes the idea that a *realitas* has a mental component in the Scotistic sense of the word, to give his own twist to the notion of reality, defining it as the object of the final opinion:

reality is only the object of the final opinion to which sufficient investigation would lead. (CP 2.693, 1878)

Now it must not be assumed that by “object” here Peirce means what we normally call an external object. I believe the object here is the “immediate object of thought,” which is a thought itself. It is important to note that Peirce uses the meaning of “objective” in the scholastic sense, which is actually opposed to the modern sense. Most people use “objective” to mean nonsubjective. That is not how scholastics used the term. For them, the “object” referred to is the immediate object of thought, which is what is being thought of, not the object outside the mind.<sup>311</sup>

As to the Object, that may mean the Object as cognized in the Sign and therefore an Idea, or it may be the Object as it is regardless of any particular aspect of it. (CP 8.183, 1903)

we have supposed the very reality would be an object of belief—a thought. The race, the community is perpetually tending towards such a state. (MS 204, 1872)

This “mental” component of the *realitas* which I claim Peirce borrows from Scotus is what has been identified as the idealist character of Peirce’s notion of reality. I will deal with Peirce’s idealism in the next section.

Interestingly enough, Peirce developed his ingenious amendment to what’s

real quite early on. It is at least as far back as 1868, in his “Consequences of Four Incapacities,” (before the 1871 “Berkeley Review” quoted previously) that we already find this new twist on the meaning of the word “real:”

And what do we mean by the real? . . . The real, then, is that which, sooner or later, information and reasoning would finally result in, and is therefore independent of the vagaries of me and you. Thus, the very origin of the conception of reality shows that this conception essentially involves the notion of a COMMUNITY, without definite limits, and capable of an indefinite increase of knowledge. And so those two series of cognitions—the real and the unreal—consists of those which, at a time sufficiently future, the community will always continue to reaffirm; and of those which, under the same conditions, will ever after be denied . . . Consequently, that which is thought in these cognitions, is the real, as it really is. (CP 5.311, 1868)

Here we see, as in the later “Review,” the idea that the real is independent of individual idiosyncracies, and that what it is is what would result in a community consensus. I cannot help but think that Peirce got this notion of the importance of “community” from the scholastics as well; he praises their concern with authority, and compares this trait with the modern scientist’s concern with verification:

The logical upshot of the doctrine of Scotus is that real problems cannot be solved by metaphysics, but must be decided according to the evidence. As he was a theologian, that evidence was, for him, the dicta of the church. But the same system in the hands of a scientific man will lead to his insisting upon submitting everything to the test of observation. (CP 4.28, 1893)

But above all things it is the searching thoroughness of the schoolmen which affiliates them with men of science and separates them, world-wide, from modern so-called philosophers. The thoroughness I allude to consists in this, that in adopting any theory, they go about everywhere, they devote their whole energies and lives in putting it to tests bona fide—not such as shall merely add a new spangle to the glitter of their proofs but such as shall really go toward satisfying their restless insatiable impulse to put their opinions to the test. Having a theory, they must apply it to every subject and to every branch of every subject to see whether it produces a result in accordance with the only criteria they were able to apply—the truth of the Catholic faith and the teaching of the Prince of Philosophers. (CP 1.33, 1909)

Actually, as I argued in a previous section, Peirce in a sense was a realist early on and keeps this same notion of “real” throughout his long career, as we can see by the dates on the following:

The real, then, is that which, sooner or later, information and reasoning would finally result in, and is therefore independent of the vagaries of me and you. (CP 5.264, 1868)

Now what is the difference between reality and fiction? A fiction is something whose character depends upon what we think about it; a reality is what it is whatever we may think about it. (MS 200, 1872)

In admitting this we do not annul the distinction between reality and fiction. If an object is of whatever character I or any man or men will have it to be or imagine it, it is a fiction; but if its characters are independent of what you or I or any number of men think about it, it is a reality. (MS 200, 1872)

Thus, for example, the real becomes that which is such as it is regardless of what you or I or any of our folks may think it to be. (CP 8.191, 1904)

the Real is such that whatever is true of it is not true because some individual person's thought or some individual group of persons' thought attributes its predicate to its subject, but is true, no matter what any person or group of persons may think about it. (Weiner, p.418)

Notice how careful Peirce always is in the wording of his definition of the real so that it meets the requirements of the more familiar, or accepted, definition, while at the same time cleverly interjecting his own meaning.

Peirce himself acknowledges, late in his career, the fact that he did not change his mind on this particular topic:

In a long notice of Fraser's Berkeley, in the North American Review for October, 1871, I declared for realism. I have since very carefully and thoroughly revised my philosophical opinions more than half a dozen times, and have modified them more or less on most topics; but I have never been able to think differently on that question of nominalism and realism. (CP 1.20, 1909)

We have seen, then, that the "real," as defined by Peirce, has a certain kind of independence from thought in the sense that it is independent from any *particular* thought, or mind. At the same time, the "real" is nothing more than what would be the result of the consensus of all thought, the "catholic consent," or as he also calls it, the "final opinion." But if the real is of the nature of an opinion, and since an opinion is of the nature of a conception, or "cognition," as he calls it above, the "real" also has a certain kind of dependence on thought! Peirce is not contradicting himself, as some have claimed. Again, a careful reading reveals the subtlety in what he says. Peirce uses "thought" in two senses, as he explains elsewhere. It can mean a particular thought in one person's mind (as he does when he speaks of the real's independence from that), but it can also mean "thought in general:"

The objective final opinion is independent of the thoughts of any particular men, but is not independent of thought in general. That is to say, if there were no thought, there would be no opinion, and therefore, no final opinion. (MS 194, 1872)

But now let us consider the final thought, which is that thought which is the final

upshot of the investigation—that to which we always strive to make our thoughts conform. The thought is thus no longer of any particular man, or of any number of men. The thoughts of a man or of many men may conform to it; but however closely they conform, it differs from them in this respect: that their thoughts are changed if they think otherwise; but it [the final opinion] is not changed if they think otherwise. (MS 200, 1872)<sup>312</sup>

We can understand, then, what, at first sight, seems self-contradictory like the following:

reality means a certain kind of non-dependence upon thought, and so is a cognitive character, while existence means reaction with the environment, and so is a dynamic character; and accordingly the two meanings . . . are clearly not the same. (CP 5.503, 1905)

How can something be non-dependent upon thought and at the same time be of a “cognitive” character? Again, it is non-dependent on the particular thought of an individual, but since the real is that final conclusion of what there is in the world, the real is ultimately of the nature of a cognition.

Peirce also anticipates this objection: the claim that if the real is dependent on the final opinion, its “independence” is compromised. But as already seen, Peirce’s answer is that while reality is, in a sense, dependent on thought, it is independent of any particular thought about it:

But it may be said that this view is directly opposed to the abstract definition which we have given of reality, inasmuch as it makes the characters of the real depend on what is ultimately thought about them. But the answer to this is that, on the one hand, reality is independent, not necessarily of thought in general, but only of what you or I or any finite number of men may think about it; and that, on the other hand, though the object of the final opinion depends on what that opinion is, yet what that opinion is does not depend on what you or I or any man thinks. (CP 5.408, 1878)

We can also see here Peirce’s early tendency towards idealism, and how he incorporates that into his scholastic realism. His idealism is obvious in the claim that the “real” is of the nature of a cognition.<sup>313</sup>

Not all commentators, however, interpret what Peirce says of reality in the same way as I have. Rosenthal, for example, seems to recognize what I refer to as the idealistic component in this definition of reality when she claims that Peirce

can hold at once that the real world is the perceived world, that the real world has an independence from mind, and yet that the perceived world is partially dependent upon the noetic act and is thus relative in its nature to the mind. (Rosenthal, 1994)

But her interpretation is different: she sees Peirce as anticipating a Kuhnian-like position of “pragmatic pluralism” where “even the ideal convergence to a



final ultimate opinion, to perfect knowledge, is always convergence within an accepted framework or perspective.” As a result, she disagrees with Haack and Rescher (with whom I would agree) who claim that Peirce, as a realist, holds a cumulative notion of scientific knowledge and progress which increasingly approximates (with hits and misses along the way) an ideal limit. Rosenthal’s position, although she would eschew the label, makes Peirce’s notion of reality relativistic in the sense of being context-bound; she claims that according to Peirce, there could be equally “true,” though conflicting, accounts.<sup>314</sup> This is especially evident when, in paraphrasing Peirce, she says, several times, that “reality, according to Peirce, is a continuum that ‘swims in indeterminacy,’” when it is actually knowledge, and not reality, that Peirce is referring to in this passage.<sup>315</sup>

### The Ideal

The one intelligible theory of the universe is that of objective idealism, that matter is effete mind, inveterate habits becoming physical laws. (CP 6.25, 1877)

To those who know Peirce as a pragmatist, it is a rather shocking bit of news to hear that he is also an idealist<sup>316</sup> (as well as a scholastic realist!). But as I have argued throughout this work, once analyzed, and especially keeping in mind Peirce’s desire to incorporate several doctrines into one, and his propensity to revise these so that they all fit, Peirce’s system is not as incoherent as some have thought.

Since now it seems as if Peirce is an idealist as well as a scholastic realist (and a pragmatist, as will be seen below), I think it only proper that I say something about idealism (and later about pragmatism) as well. However, this will not by any means be as detailed an account as I have given of scholastic realism for the obvious reason that only the latter is the major focus of this paper. But since Peirce’s idealism is interwoven with the rest, some preliminary remarks about idealism are due.

One reason why Peirce’s avowed idealism is seen as inconsistent with his realism is because, as Haack has pointed out, there are several kinds of “realisms,” and as a result, several kinds of non-realisms. And these are not infrequently confused. One kind of realism deals specifically with the reality of universals, and here the opposition is with nominalism. Another kind of realism, (perhaps better known as dualism) focuses on the claim that there are both physical and mental objects (and events, processes, states). Here, the opposition is with idealism, which holds that everything is mental, period. Haack offers a concise description of the different varieties of idealism:

An idealist holds that everything there is, is mental: that the world is a construction out of our, or, in the case of the solipsist, his own, ideas—subjective idealism; or is constituted by God’s ideas—theological idealism; or that the world is itself of a mental or spiritual character—objective idealism, as in Hegel. (Haack, 2002)

Of these, Peirce would be classified as an objective idealist. Indeed, he seems to endorse this view when he says, as seen above, that objective idealism is “[t]he one intelligible theory of the universe.” But what is it about idealism that Peirce thinks is right? I believe it is the idea that reality has a mental component, since all we understand is by definition thought-related,<sup>317</sup> and therefore all description of reality has a mental component:

The key to the solution of this question is that what we think of cannot possibly be of a different nature from thought itself. For the thought thinking and the immediate thought-object are the very same thing regarded from different points of view. (CP 7.339, 1873)

Actually, I suspect it is Berkeley’s (and Schelling’s and Hegel’s), combined with Scotus’s ideas that sparked Peirce’s imagination and led him to his creative definition of reality:

Here [in Berkeley’s conception] we seem to have a third new conception of reality, different from either of those which we have insisted are characteristic of the nominalist and realist respectively, or if this is to be identified with either of those, it is with the realist view. (CP 8.30, 1871)

Boler seems to have missed Peirce’s “third new conception of reality,” what I have described as being dependent on thought in general while independent of particular thoughts about it, for he describes only two ways of being “relative to the mind:”

However, “relative to the mind” can mean (1) that something is dependent either upon the way we think or the way we think about it—in which case it is either mental or not real . . . or (2) that it is “knowable,” that is, capable of being related to a human mind. It is the latter sort of “relatedness” that Peirce is concerned with in 8.14 . . .<sup>318</sup> If generals as thoughtlike are relative to the mind in just the way that anything known is relative to the mind, how can Peirce be so sure that the controversy has nothing to do with Platonic archetypes (8.17)?<sup>319</sup> By making everything thoughtlike (in his panpsychism), Peirce has, it seems to me, changed only the terminology of the problem and not the substance. (Boler, 1969)

Peirce’s point is precisely that there is a third way: by defining reality as tied to the final opinion, it can be “thoughtlike” and still real (independent of particular thoughts) without having to resort to Platonic entities or divine archetypes to explain what makes it real.

But Peirce, as we would expect by now, is not a “straight” idealist either. It is not because he misinterprets the idealists, for he demonstrates, as usual, a thorough acquaintance with his subject. Peirce sees Berkeley’s declaration “to be is to be perceived” as the logical outcome of a philosophical tradition going back at least to Descartes. This was basically the assertion that all we can ever claim to know is the content of our minds. Berkeley, Peirce thought, just took that to its

logical conclusion: if that is all we can ever know, then we cannot claim to know what is outside our minds. This leads to some rather undesirable results:

That the conception of external realities is a very embarrassing one for the philosophical questions to which it gives rise is very well known to metaphysicians. While it seems to bring the process of unity of mental action into an analogy with that of other facts, it at once creates the necessity of supposing an extraordinary exception to the laws of mechanics. We find that we have by this means created two worlds—a mental world of representations and images, which the laws of reflection must show can not be of the same nature with these external objects even if we adopt the belief that the mind is simply a function of the brain. And we find this world of ideas influenced by the external objects in a manner in which the laws of mechanics can not possibly explain, and in its turn influencing external objects in a manner which seems absolutely contradictory to the general principles of mechanics. (MS 200, 1872)

Here Peirce identifies the dilemma that results from a representative theory of perception: if what we have direct access to are representations and images only of the real world which in turn is made up of external objects, then how can we explain how a material thing can affect a mental thing, and vice versa? The laws of mechanics tell us that that is not possible.

Peirce basically agrees with Berkeley's assessment of what is essentially an epistemological problem:

There is no difference between a real perception and a hallucination, taken in themselves; or if there be, it is altogether inconsiderable . . . For the purposes of physiological psychology it may be proper and needful to put them into different classes. That is a branch of science with which I am not concerned. But for logical purposes, that is, in regard to their relations to knowledge and belief, which is the concern of this whole paper, they should be regarded as one and the same phenomenon, in themselves. (CP 7.644, 1903)

But again, as we have seen before, Peirce disagrees with the attempt at a solution by his fellow philosopher, and finds himself revising and adapting the theory before he incorporates it into his own scheme. Just as Peirce agreed with the nominalistic claim that universals are of the nature of words, or signs,<sup>320</sup> and with Scotus's claim that universals were real, he agreed with the idealistic claim that the object known must be like the knowledge of it. But Berkeley's mistake was not what many interpret it to be:

But though Berkeley thinks we know nothing out of the mind, he by no means holds that all our experience is of a merely phantasmagoric character. It is not all a dream; for there are two things which distinguish experience from imagination: one is the superior vividness of experience; the other and most important is its connected character . . . "These two things it is," says Berkeley, in effect, "which constitute reality. I do not, therefore, deny the reality of common experience,

although I deny its externality.” Is not this something quite unexpected from so extreme a nominalist? (CP 8.30, 1871)

Therefore, Berkeley was, so far, entirely in the right; although he blundered when from that manifest truth he inferred his idealism. (CP 8.339, 1873)

Even the idealists, if their doctrines are rightly understood have not usually denied the existence of real external things. But though the conception involves no error and is convenient for certain purposes, it does not follow that it affords the point of view from which it is proper to look at the matter in order to understand its true philosophy. (CP 8.335, 1873)

Berkeley said that there are only minds and their contents, and therefore many people interpret Berkeley as having claimed that there were no (what we call) “external things,” meaning by this, independently existing material things. But this is not what Berkeley claimed. Rather, he admitted to independently existent (but not necessarily material) things in the sense that their existence was independent of particular minds, but not of God’s. The reason why a table is still there even if no one thinks of it is because it is an idea in God’s mind, and this is what provides “the common experience.” We can see the similarity between Berkeley’s claim and Peirce’s notion of reality as independent of particular thoughts but not of thought in general.

Again, as is common with Peirce, what he characterizes as the fatal flaw in many philosophers’ doctrines is a “kind” of nominalism. Berkeley’s “nominalism” consists in the reason why true experience (as opposed to a hallucination) is more vivid, and why experiences are interconnected: these are ideas in God’s mind. This is what reality consists of, for Berkeley. But Peirce does not accept Berkeley’s conception of reality:

But it is clear that when Berkeley says that reality consists in the connection of experience, he is simply using the word reality in a sense of his own.<sup>[321]</sup> That an object’s independence of our thought about it is constituted by its connection with experience in general, he has never conceived. On the contrary, that, according to him, is effected by its being in the mind of God. In the usual sense of the word reality, therefore, Berkeley’s doctrine is that the reality of sensible things resides only in their archetypes in the divine mind. This is Platonistic, but it is not realistic . . . Historically there have been prominent examples of an alliance between nominalism and Platonism. The reason of this odd conjunction of doctrines may perhaps be guessed at. The nominalist, by isolating his reality so entirely from mental influence as he has done, has made it something which the mind cannot conceive; he has created the so often talked of “improportion between the mind and the thing in itself.” (CP 8.30, 1871)

One reason for Peirce’s disapproval is this: Berkeley, like the nominalists, makes reality to be the cause of sensation. The difference between the two, though, is that the other nominalists identify this cause as material, or what we normally

call external things. Berkeley identifies this cause as God's ideas. But it is still, according to Peirce, a wrong-headed attempt. It is Platonistic in the sense that reality depends on rather inaccessible objects "something which the mind cannot conceive" (in this case, God's ideas, instead of the Forms).<sup>322</sup> Berkeley's doctrine is nominalistic in the most important (and worst) way—it leads to "individualism" in an epistemological sense (the individual, as the perceiver, is the ultimate guarantor of knowledge, and not the community), and in a metaphysical sense, it leads to the notion of an unknowable thing-in-itself:

The nominalist, by isolating his reality so entirely from mental influence as he has done, has made it something which the mind cannot conceive; he has created the so often talked of "improportion between the mind and the thing in itself." And it is to overcome the various difficulties to which this gives rise, that he supposes this noumenon, which, being totally unknown, the imagination can play about as it pleases, to be the emanation of archetypal ideas. The reality thus receives an intelligible nature again, and the peculiar inconveniences of nominalism are to some degree avoided. (CP 8.32, 1871)

A problem for the nominalist, as we have seen, is to be able to explain how we can have knowledge of the world if knowledge is of the universal (signs, as Ockham would say) and only suppositis are real. Ockham did not provide a satisfactory way to bridge this gulf between the mind and the world of suppositis while both Plato and Berkeley tried to solve the problem by locating reality in the realm of the Forms and in the mind of God, respectively; hence, reality acquires an "intelligible nature" again. And then other problems arise: for one, both pose rather controversial grounds for their theories.

But, as demonstrated before, Peirce, although critical of the doctrine, still sees possibilities for recycling its initial claims:

That an object's independence of our thought about it is constituted by its connection with experience in general, he [Berkeley] never conceived. (CP 8.30, 1871)

But Peirce did! He saw that an object could be considered independent of particular thought by being "tied" to the general opinion. And as a result, we have his complex system:

Consequently, that which is thought in these cognitions, is the real, as it really is. There is nothing, then, to prevent our knowing outward things as they really are. (W2:239, 1868)

Notice how carefully Peirce tries to navigate between the perils of a full-blown idealism and the dangers of solipsism: even though the real is of the nature of a conception, we can still have reasonable assurance of having knowledge of "outward" or external things because we are not just relying on our conceptions, but, rather, comparing them to everyone else's. But again, we must not be fooled

into thinking that “outward things” and “things as they really are” means what we think they mean. In fact, there are those who have interpreted Peirce as declaring that there are no external, or existing things.<sup>323</sup> Actually, Peirce does not claim to know that there are no external realities. But I am getting ahead of myself.

### The External

The internal is that whose real existence depends on what I (or you or somebody) think of something. The external is that which so far as it is real is independent not only of what I think about it but also of what I think about anything. (MS 203, 1872)

We have seen that for Peirce the “real” is connected to thought in general. And, as we have seen, “outward things” or the external world, are not the same as what he means by “real,” although the latter are included in his definition. But is there such a thing as the “external?” In order to determine that, Peirce must first determine what the meaning of the term is. He contrasts it with “internal.” The internal is dependent on “what I think *of something*.” In contrast, the external, since it is real it is therefore independent of what I think *about it*,<sup>324</sup> but also of what I think *about anything*. Elsewhere, (in a letter to Lady Welby) Peirce explains the internal in the context of dreams.<sup>325</sup> A dream, meaning what is dreamed, is not real because, for example, if it be true that the dream was about hen’s eggs, it is because the action of the dreamer’s mind made it to be true. But the fact that a given person did dream of hen’s eggs, if it be true, is true whether he remembers dreaming it, or thinks he dreamed it or not. The fact that he dreamed depends on the action of his mind, but does not depend upon any attribution by his mind to the fact that he dreamed. The dream is internal since it is a mental process. The content of the dream is a figment because it is dependent on its having been dreamed. So it is true that there was a dream of hen’s eggs, even though this fact depends on someone having dreamed (an internal phenomenon):

That of which whatever is true depends for its truth on the action of a mind is internal or as schoolmen said objective (Germans might say subjective). That of which the truth of whatever is true of it depends not merely on the action of a person’s or group of persons’ thought but also upon their thought about the substance of the proposition that is true, is unreal. That which is such that something true about it is either true independently of the thought of any definite mind or minds or is at least true independently of what any person or any definite individual group of persons think about that truth, is real. (Weiner, p.419)

For the scholastics, thought is objective in the sense that it is of an object (hence the name “objective”). As seen in a previous section, this “object” in the mind is called the immediate object of thought, which is supposed to be a representation or image of what is commonly called the direct, or external object. Notice that the terms “objective” and “subjective” have, in modern times, switched

meaning, to the confusion of many who read Peirce.<sup>326</sup>

But the fact that the dream took place, however, though dependent on the mental process of my having dreamed the dream (and therefore dependent on an internal process), is nevertheless real because the fact that I had the dream is independent of what I think *about* it. The point Peirce wants to make is that the internal can be real, since, although mind-dependent (or internal), the fact that the dream took place is a real fact (independent of what I think about it).

The fact that a dream took place (if indeed it did) even though it is a mental product is a reality even though the content of the dream is a product of one mind. It is only when the truth of whatever is true of it depends not merely on the action of a person's (or group of persons') mind (or thought) but also upon their thought *about* it, like Shakespeare's thought about Hamlet's sanity, that the object spoken of is not real. Here we are reminded of the scholastic realist's subtlety in making distinctions; just as they wanted to claim that universals were mind-dependent yet real because their reality had an outside source, Peirce is saying that the dream is real in the same sense that its occurrence is not dependent on the mind's attribution, but its content is dependent on the action of the mind.

Thus an emotion of the mind is real, in the sense that it exists in the mind whether we are distinctly conscious of it or not. But it is not external because although it does not depend upon what we think about it, it does depend upon the state of our thoughts about something. (CP 7.339, 1873)

If the result of the action of a mind, which is internal, may be real, what about the result of an indefinite number of minds? This, by definition, is the real, provided it would be the result after investigation in consensus. It would also be "external" in the sense that "it is not dependent on what I think about anything." But is an external reality completely independent of all thought? The answer that Peirce gives is (a qualified) "no." He begins, again, by trying to determine what the meaning of the question is:

I would in turn ask, what is meant by such an expression [external realities, or that which is absolutely independent of thought] and what can be meant by it. What idea can be attached to that of which there is no idea? For if there be an idea of such a reality, it is the object of that idea of which we are speaking, and which is not independent of thought. (MS 194, 1872)

Here we see Peirce again referring to the notion of objectivity. I believe he is saying that an idea of reality has as its object the immediate object of thought (that idea) and therefore is not independent of thought. We assume that the immediate object is a representation of the external object, but this assumption may not be warranted:

it is supposed [sensations] are caused by something external. In using the word "supposed," I do not wish to imply that there is any room for doubt in the mat-

ter; but only that the external realities are not themselves the immediate object of thought but are only what it is necessary to suppose exist, to account for the phenomena of sensation. (MS 194, 1872)

We have seen that what is internal can be a reality, though not all internal things are realities (some are figments). And what is external, in the sense that it is not the result of one particular mind, is real. “External,” though, has a special meaning for Peirce which is not the common everyday one:

Accordingly, the external is necessarily real, while the real may or may not be external; nor is anything absolutely external nor absolutely devoid of externality. (CP 8.191, 1904)

The following table illustrates this:

	Real	Figment
Internal (objective in scholastic sense)	yes	yes
External	yes	no <sup>327</sup>

**Table 3-3**

But why is it then that we suppose that there are such things as (absolute) external realities if there isn’t even meaning in the expression for us? Peirce proposes that they have provided what on the surface seems like a coherent picture of the world, but which, when examined, is highly problematic.

It is clear that it is quite beyond the power of the mind to have an idea of something entirely independent of thought—it would have to extract itself from itself for that purpose; and since there is no such idea there is no meaning in the expression. (MS 194, 1872)

We have no warrant, then, to speak of external realities as independent of all thought; it is not only philosophically unsophisticated, but it promotes a corrosive way of thinking. To speak like this is, of course, the way of “the nominalist.” And what is so wrong with the nominalistic view? Is it just that it is a metaphysical embarrassment, unnecessarily assuming too much? I believe that for Peirce the nominalistic view commits a much more serious mistake: it hinders the advancement of knowledge. Herein lies his eventual criticism of Scotus, from an epistemological angle.

As we have seen, to speak of something that is absolutely independent of all thought is meaningless. Another way to say this is that what is independent of all thought is incognizable. If external reality is the cause of sensation and thought is caused by sensation, then thought is caused by something incognizable,



or unknowable. This would mean that we could never have true knowledge of the world. Recall that Scotus's main concern (as well as Aristotle's and other scholastics') in maintaining the reality of universals was to preserve our claim to knowledge of the world. But the world is made up of singulars. That is why Scotus had to find a way of relating these two, the universals and the singulars. As a modern scientist, Peirce too was concerned with this. He believed that by speaking of an unknowable thing-in-itself, that is, a thing independent of all thought, a notion we could not understand (an incognizable), "a roadblock to inquiry" was erected. By defining the meaning of concepts like the "real" or the "external" in terms of something cognizable Peirce clears the roadblock and makes way for knowledge, and therefore makes room for science.<sup>328</sup>

De Waal would seem to disagree with at least part of this account, for he claims that Peirce suggests at one point that there is no reality:

In one of his manuscripts Peirce seems content with his version of realism while at the same time admitting that "it may be, and it would seem very bold to hope for anything better, that the hypothesis of reality though it answers pretty well does not correspond to what is," even suggesting that perhaps there is no reality (MS 439.28, 1898). (De Waal, p.233)

I do not believe that Peirce would want to say that there is no reality; certainly not in the way he endeavored to define it, for that would be self-defeating. But if by "reality" De Waal means "what is," as is commonly meant, we have seen that Peirce does not deny that either, nor does Peirce imply it in the passage quoted by De Waal above, for Peirce admits in the same passage that the hypothesis may not have a complete correspondence with "what is." Here we have fallibilism at work: this is Peirce's way of not creating a "roadblock to inquiry" by humbly acknowledging that his own theory of reality too is subject to the self-corrective method of science which he advocates:

For fallibilism is the doctrine that our knowledge is never absolute but always swims, as it were, in a continuum of uncertainty and indeterminacy. (CP 1.172, c.1897)

### **The Categories**

My view is that there are three modes of being. I hold that we can directly observe them in elements of whatever is at any time before the mind in any way. They are the being of positive qualitative possibility, the being of actual fact, and the being of law that will govern facts in the future. (CP 1.23, 1903)

No account of Peirce's brand of realism can be complete without mention of his categories, for these describe what Peirce variously refers to as "three categories of being," "three universes of experience," and "three modes of reality."<sup>329</sup> Peirce developed these ideas early on, and throughout his career reworded them,

although the basic concepts of each stayed the same. The origin of this whole enterprise, of course, is Aristotelian (and Kantian) in nature, for Peirce, like Aristotle and Kant, is trying to describe the different ways things have being. Recall that Aristotle thought that his ten ways that something could be were exclusive and exhaustive. Kant, concerned with an analysis of judgments, came up with a total of twelve categories, that is four groups of three (universal, particular, singular, affirmative, negative, infinite, categorical, hypothetical, disjunctive, possibility, actuality, and necessity). Peirce reduced these to the more fundamental three categories, which he described in different ways depending on the context (whether logical, mathematical, metaphysical, psychological, phenomenological, etc.), but preferred to refer to them as Firstness, Secondness, and Thirdness. These were meant to apply to anything we can think or speak of. The fact that he used different language and explained them in different ways is not an indication that he changed his mind, but rather, that he was trying to communicate their fundamental status as permeating all of experience.<sup>330</sup> Indeed, it is because they are meant as an attempt at a description of such elemental features of experience that they are difficult to grasp (and also probably why Peirce tried to explain them in such different ways).

It is important to note that in describing these categories, “it is not the usage of language which we seek to learn” but rather, “what must be the description of fact” so that the categories “may not only be true, but also have the utmost possible value, being governed by those same characteristics which really dominate the phenomenal world.”<sup>331</sup> Let us look briefly at each category in turn.

The first comprises the qualities of phenomena, such as red, bitter, tedious, hard, heartrending, noble . . . The qualities merge into one another. They have no perfect identities, but only likenesses, or partial identities . . . Still, each one is what it is in itself without help from the others. They are single but partial determinations. (CP 1.418, c.1897)

Firstness is the mode of being which consists in its subject’s being positively such as it is regardless of aught else. That can only be a possibility. For as long as things do not act upon one another there is no sense or meaning in saying that they have any being, unless it be that they are such in themselves that they may perhaps come into relation with others. The mode of being a redness, before anything in the universe was yet red, was nevertheless a positive qualitative possibility. And redness in itself, even if it be embodied, is something positive and *sui generis*. (CP 1.25, 1903)

Peirce usually gives as an example of the first category, the quality of a color, because it conveys, better than any explanation, the directness or immediacy of the category. Indeed, it is our senses that best capture the essence of the category. This is the result of “the evolutionary process which has made us what we are,” which makes us dependent on certain senses and which renders certain sensations (which we perceive as qualities) as “bright” and “clear,” and why “wherever there

is a phenomenon there is a quality; so that it might almost seem that there is nothing else in phenomena.”<sup>332</sup>

Firstness is the most basic of the three—we can speak of an “element of Firstness” in both Secondness and Thirdness (just as it can be said of Secondness as being an essential element of Thirdness), but “there is no Secondness of pure Firstness and no Thirdness of pure Firstness or Secondness.” This cryptic remark is a bit easier to understand when we take into consideration the fact that although the categories are in themselves (in their “firstness”) independent of each other, we cannot cognize each category in its “pure” form; an attempt at a description of Firstness or Secondness, for example, by definition involves Thirdness, which is the category of thought, as will be seen below.

Firstness is also described as the category of possibility, since there can be nothing unless there is first the possibility of something. Peirce, however, qualifies the use of the notion to describe it, because, again, by doing so, we are adding another element to the notion as such:

The word possibility fits it, except that possibility implies a relation to what exists, while universal Firstness is the mode of being of itself. That is why a new word was required for it. (CP 1.530, 1903)

Hence, Firstness is kind of half-way between nothingness and existence. It is more than nothing because it can become actual, but it is not existent because as such Firstness has a monadic, or one-dimensional character: it is just itself. Just in itself, Firstness is a “pure may-be,” not an actuality; the actual occurrence of seeing a red object and recognizing it as red is not a pure case of Firstness, because, again, it involves the other categories: as an actual occurrence it involves Secondness (it is recognized as something other than the perceiver) and it is compared to the already established concept of red (so Thirdness is involved). In itself, however, “[i]ts only being consists in the fact that there might be such a peculiar, positive, suchness” as red.<sup>333</sup>

But to ask why a quality is as it is, why red is red and not green, would be lunacy. If red were green it would not be red; that is all. And any semblance of sanity the question may have is due to its being not exactly a question about quality, but about the relation between two qualities, though even this is absurd. (CP 1.420, c.1897)

Again, if two qualities are compared, the question involves a relation, so it would involve Thirdness, and not be a case of Firstness as such.

Because of its “might be” mode of being, a quality is “eternal, independent of time and of any realization.”<sup>334</sup> For something to exist, however, something else (besides the possibility) is needed for a reaction. Secondness, or actuality, is the mode of existence: the “brute force” which impinges itself on the other; hence it is dyadic, or two-dimensional in character.

The second category of elements of phenomena comprises the actual facts. The qualities, in so far as they are general, are somewhat vague and potential. But an occurrence is perfectly individual. It happens here and now . . . Qualities are concerned in facts but they do not make up facts. Facts also concern subjects which are material substances. We do not see them as we see qualities, that is, they are not in the very potentiality and essence of sense. But we feel facts resist our will. That is why facts are proverbially called brutal. Now mere qualities do not resist. It is the matter that resists. (CP 1.25, 1903)

Just as qualities are sensed, existence (of material substances and of occurrences and of “facts”) is felt as a resistance to the ego. Peirce variously refers to it as “brute” and “blind,” a force without law or reason,” “the contingent, that is, the accidentally actual . . . an unconditional necessity.”<sup>335</sup> It is unconditionally necessary because in its Secondness itself it is there, and its existence cannot be denied or taken back; it is accidentally actual because in itself it possesses no law-like-quality, or characteristic in common:

But actuality and existence are words expressing the same idea in different applications. Secondness, strictly speaking, is just when and where it takes place, and has no other being; and therefore different Secondnesses, strictly speaking, have in themselves no quality in common. (CP 1.535, 1903)

Individuality as such is a case of Secondness.<sup>336</sup> Peirce often refers to it as having the characteristics of “here and now,” an expression he claims is Scotus’s.

Hic et nunc is the phrase perpetually in the mouth of Duns Scotus, who first elucidated individual existence. It is a forcible phrase if understood as Duns did understand it, not as describing individual existence, but as suggesting it by an example of the attributes found in this world to accompany it. (CP 1.458, c.1896)

Recall that the attributes of space and time do not, for Scotus, determine individual existence. Hence, even if two drops of water could be superimposed one on top of another, each would retain “its identity and opposition to the other no matter in what or in how many respects they are alike.” The reason Peirce gives for this is that “they would nevertheless react, though perhaps not at that moment, and by virtue of that reaction would retain their identities.”<sup>337</sup> This example is reminiscent of Scotus’s own explanation of how the sun’s rays, though overlapping, are still individual (although we cannot perceive the individual rays).

Peirce speaks of two ways of describing individuals: one focuses on this element of reaction, this “brutal insistence” on “being here irrespective of any reason.”<sup>338</sup> Another is to consider the individual as “completely determinate” in regard to every possibility, or quality, either as possessing it or as not possessing it:

The individual fact insists on being here irrespective of any reason . . . But besides that character, individuality implies another, which is that the individual is

determinate in regard to every possibility, or quality, either as possessing it or as not possessing it. This is the principle of excluded middle, which does not hold for anything general, because the general is partially indeterminate. (CP 1.434, 1896)

In short, an individual is either heavy or light, round or square, musical or not, etc.; that is, for every possible characteristic, the individual either has it or it does not. The law of excluded middle (i.e. it either has or has not a certain characteristic) applies to an individual in every aspect. I will return to this notion of individuality in a section below.

The third category of elements of phenomena, or experience, or being, is Thirdness, variously described as the mode of Thirdness in terms of laws, habits, thought, cognition, rationality, signs, meaning, predication, relations, continuity, infinity. It is what mediates, what brings two things into association, so it involves three elements: the two relata and the relation itself, hence it is triadic, or three-dimensional. Peirce also uses the term “general” to describe this modality:

[Thirdness] consists of what we call laws when we contemplate them from the outside only, but which when we see both sides of the shield we call thoughts. Thoughts are neither qualities nor facts. They are not qualities because they can be produced and grow, while a quality is eternal, independent of time and of any realization . . . No more is it a fact. For a thought is general. I had it. I imparted it to you. It is general on that side. It is also general in referring to all possible things, and not merely to those which happen to exist. No collection of facts can constitute a law; for the law goes beyond any accomplished facts and determines how facts that may be, but all of which never can have happened, shall be characterized. (CP 1.420, c.1897)

A thought as an example of a general can be indeterminate (i.e. not an individual) in two ways: it can be passed on to others (not here and now), and it refers to all possible things, not just existent things.<sup>339</sup> A law as an example of a general can be indeterminate because it is not merely a collection of facts; facts are “contingent, that is, accidentally actual” but a law, for it to be considered a law, encompasses future facts, and applies ad infinitum.<sup>340</sup> Firsts can be considered to have generality too—“that which is not general is singular,”<sup>341</sup> but in a “negative” way, because firsts are also indeterminate (not individual):

It is first requisite to point out something which must be excluded from the category of fact. This is the general, and with it the permanent or eternal (for permanence is a species of generality), and the conditional (which equally involves generality). Generality is either of that negative sort which belongs to the merely potential, as such, and this is peculiar to the category of quality; or it is of that positive kind which belongs to conditional necessity, and this is peculiar to the category of law. These exclusions leave for the category of fact, first, that which the logicians call the contingent, that is, the accidentally actual, and sec-

ond, whatever involves an unconditional necessity, that is, force without law or reason, brute force. (CP 1.428, 1896)

Positive generality, which is Thirdness, is described as conditional necessity because a law, if it is a law, controls the behavior of its subjects as long as certain conditions are present, whereas Secondness, or the “brute force” of existence, imposes itself unconditionally. Firstness, on the other hand, is not necessary, but rather only a possibility or potentiality. Peirce also refers to specific qualities, such as colors, having a “definite” potentiality, in contrast to the “indefinite” potentiality of Firstness as such:

Imagine a magenta color . . . Such a definite potentiality can emerge from the indefinite potentiality only by its own vital Firstness and spontaneity. Here is this magenta color. What originally made such a quality of feeling possible? Evidently nothing but itself. It is a First. (CP 6.198, 1898)

Let us now turn to some implications of Firstness and Thirdness in the next section, and of Secondness in the following one.

### Unpacking the General

Very wretched is the notion of [the categories] that can be conveyed in one lecture. They must grow up in the mind, under the hot sunshine of hard thought, daily, bright, well-focussed, and well-aimed thought; and you must have patience, for long time is required to ripen the fruit. They are no inventions of mine. Were they so, that would be sufficient to condemn them. Confused notions of these elements appear in the first infancy of philosophy, and they have never entirely been forgotten. Their fundamental importance is noticed in the beginning of Aristotle’s *De Caelo*, where it is said that the Pythagoreans knew of them. In Kant they come out with an approach to lucidity. (CP 1.521, 1903)

Even though the inspiration to create a categorical system came from Aristotle and Kant, Peirce’s categories are significantly influenced by Scotus’s ontology. We have seen that by the late 1860s Peirce had read Scotus and had a thorough acquaintance with Scotus’s philosophy.<sup>342</sup> Not only did Peirce come to realize that it was a mistake to hold that scholastic realists like Scotus believed that universals (substantial forms) were “entities” in the sense of existent things (having “the power dynamical to react upon things,”<sup>343</sup>) but he was also quite aware of Scotus’s other contributions, such as the special meaning of “real,” and of his use of the formal distinction:<sup>344</sup>

Scotus admitted that in the singular thing there is nothing actually universal; all generality results from a relation of reason. Nevertheless, when a general predicate is attached by the mind to a thing, the proposition so formed may be true, and since the same predicate may also be truly asserted of other things, it is true that there is something in the thing which, though actually contracted to

the grade of singularity, is in its own nature not repugnant to being predicated of many . . . Thus there is a really, but only potentially, general form in the singular thing which yet in that thing in itself does not differ from the singular thing. This is the famous doctrine of formal distinctions, which is the central idea of the whole Scotistic philosophy. (W2:277, 1869)

Peirce was also thoroughly acquainted with Scotus's analysis of the different meanings of universals:

Scotus sees several questions confounded together under the usual *utrum universale est aliquid in rebus* . . . there is the celebrated dispute among Aristotelians as to whether the universal is really in things or only derives its existence from the mind. (CP 8.18, 1871)

Peirce then goes on to describe what I have termed the U3, or universality, which "is a relation of a predicate to the subjects of which it is predicated," and which "can exist only in the mind, wherein alone the coupling of subject and predicate takes place." But, Peirce continues, the word "universal" is also used to denote "what are named by such terms as a man or a horse; these are called universals, because a man is not necessarily this man, nor a horse this horse." Peirce claims that in such a sense (the U2) it "is plain universals are real; there really is a man and there really is a horse." But it is with the notion of the common nature in itself, what I have termed the U4, and what Peirce calls the "actually indeterminate universal," that which "not only is not necessarily this, but which, being one single object of thought, is predicable of many things," where the "whole difficulty" lies, and for which Peirce gives Scotus's solution of an individuated common nature (I-U4) in the singular which is what is "in the mind" as universal (U2):

Accordingly any such nature is to be regarded as something which is of itself neither universal nor singular, but is universal in the mind, singular in things out of the mind. If there were nothing in the different men or horses which was not of itself singular, there would be no real unity except the numerical unity of the singulars; which would involve such absurd consequences as that the only real difference would be a numerical difference, and that there would be no real likenesses among things. If, therefore, it is asked whether the universal is in things, the answer is, that the nature which in the mind is universal, and is not in itself singular, exists in things. It is the very same nature which in the mind is universal and in re is singular; for if it were not, in knowing anything of a universal we should be knowing nothing of things, but only of our own thoughts, and our opinion would not be converted from true to false by a change in things. This nature is actually indeterminate only so far as it is in the mind. But to say that an object is in the mind is only a metaphorical way of saying that it stands to the intellect in the relation of known to knower. The truth is, therefore, that that real nature which exists in re, apart from all action of the intellect, though in itself, apart from its relations, it be singular, yet is actually universal as it exists in relation to the mind. But this universal only differs from the singular in the

manner of its being conceived (formaliter), but not in the manner of its existence (realiter). (CP 8.18, 1871)

Many Peirce commentators, such as Goudge, Goodwin, Moore, to name a few, acknowledge the Scotistic influence in Peirce's categories.<sup>345</sup> Boler, for example, recognizes Scotus's marked influence on Peirce's categories, at least on the third one—"Peirce's category of Thirdness corresponds to Scotus's metaphysical mode" (the mode of being of "real intelligibilities," or real non-existent things).<sup>346</sup> But not all commentators agree that there is such correspondence: Almeder claims it is "illegitimate" to claim that "Peirce is a Scotistic realist" on the basis of his analysis of Peirce's categories:

Not only do the scotistic notions of Common Nature, Haecceitas, and Logical Universal not correspond in nature and function with Firstness, Secondness, and Thirdness, but also there is nothing in Scotus's thought that can stand as a counterpart for Firstness and Thirdness. The most that can be said is that what Peirce meant by Thirdness corresponds with what Scotus meant by the Common Nature as contracted. (Almeder, p.176)

Rosenthal, who mentions that W. P. Haas, Peter Turley, and Bernard Helm all identify Peirce's Firstness with some type of Platonic Forms, concludes that Peirce's characterization of, for example, Firstness is

a metaphysical category of Firstness that is neither a remnant of traditional conceptions of determinate repeatable qualities nor a remnant of eternal Platonic possibilities. (Rosenthal, p.108)

Although I will grant the point that Peirce's categories do not correspond perfectly with Scotus's notions, I will argue that there is nevertheless a lot more correlation than Almeder, Rosenthal, or even Boler allow.

I submit that Firstness encompasses the mode of being of the nature-in-itself, or remote subject, or U4 (not just the "common nature" as Almeder refers to it).<sup>347</sup> Recall the characteristics of the U4: it does not exist as such; it either exists as a particular or as a universal in a mind. In itself, however, it is more than nothing but less than "something." Although the nature-in-itself or U4 cannot exist on its own, it still has being (real less-than-numerical being). It is "less than numerical" because only existent things have numerical unity. It can also be referred to as an "uninstantiated" universal. In the same way, Peirce recognizes the reality of Firstness, without granting it existence, or Secondness: "there is no Secondness of pure Firstness." For Scotus, the nature-in-itself is "in potency" as either a singular or universal; Scotus has to acknowledge some such potentiality if he is to allow that the U4 persists in different instantiations when other individuated U4s cease to exist.<sup>348</sup> Peirce describes Firstness as possibility, or pure potentiality. Recall my argument about the nature of the extinct Dodo bird. I argued that the nature would still have to have being (although not existence, since that would make it Platonic,



something Scotus would deny) even though it had no instantiations. I think Peirce would agree with this assessment, and if I am right that he takes his cue from Scotus, he may have interpreted him in this way too (or at least he thought that this is what Scotus should have said).

Scotus describes the U4 as not only having less-than-numerical unity, but also as being “indifferent” to singularity (and universality as well):

there is some real unity in things, apart from all operations of the intellect, which is less than numerical unity or the unity proper to a singular, and this unity belongs to the nature in virtue of itself. In virtue of this unity that is peculiar to the nature as it is a nature, the nature is indifferent to the unity of singularity; therefore, it is not of itself one by that unity, i.e. by the unity of singularity. (*Ord.* II, d.3 p.1.q.1)

Notice how Peirce uses scholastic language to describe his categories. He says outright that Firstness in its widest sense is the mode of being “of itself:”

The word possibility fits it, except that possibility implies a relation to what exists, while universal Firstness is the mode of being of itself. That is why a new word was required for it. Otherwise, “possibility” would have answered the purpose. (CP 1.531, 1903)

He also uses Scotus’s same language of “indifference” and numerical unity in his descriptions of these:

Unity is thus used, not to express pure oneness, nor yet positive oneness, but to express the negation of multitude in the object to which it is attributed. Thus it involves a distinct reference to the possibility, not of duality merely, as positive unity does, but of plurality (in the sense of more than two) The first unity might be named simplicity or firstness; the second is very appropriately termed individuality; the third, which is nearly what Kant terms synthetical unity, ought to have some better designation than totality or universality . . . Numerical unity implies repugnance to multiplication; formal unity, indifference to multiplication; universal unity, non-repugnance to multiplication. (CP 6.376, 1902)

Numerical unity applies to an individual (and Secondness) because an individual is one in the sense of being non-repeatable, hence its being “repugnant” to being multiplied. Formal unity, the unity of a nature-in-itself is described by Peirce as “the possibility of plurality,” and as “indifferent to multiplication,” because it can be instantiated in singulars ad infinitum (that is why he also says it is eternal), but it doesn’t have to be instantiated at all. Elsewhere, he says that “Firstness is essentially indifferent to continuity,” for it “lends itself readily to generalization,”<sup>349</sup> that is, it can be made universal by the mind, which is the other characteristic of a U4 (hence the name, “common” nature). Universal unity is the kind that applies to a universal which by nature is one term that is predicated of many, so it is accepting of (not repugnant to) multiplication.

The category of Secondness is the mode of being of “brute” existence, which involves the mode of being of individuals. It seems reasonable, then, to say that it corresponds to haecceity. But it must be remembered that haecceity, for Scotus, was a principle of individuation. It is what makes an individual a “this” and not anything else. Although haecceity goes hand-in-hand with existence (since only individuals exist) nevertheless it is not the same, for if existence was the individuating principle, all existing things would have the same identity. Peirce recognizes this two-fold aspect of haecceity, that of an “inward force of identity” which makes something what it is throughout, and the notion of “otherness” which differentiates the individual from everything else. This “otherness” means that it has no other characteristics in common with anything else; in other words, it is non-repeatable.

By a hecceity, I mean, some element of existence which, not merely by the likeness between its different apparitions, but by an inward force of identity, manifesting itself in the continuity of its apparition throughout time and in space, is distinct from everything else, and is thus fit (as it can in no other way be) to receive a proper name or to be indicated as this or that. (CP 3.460, 1897)

Otherness belongs to hecceities. It is the inseparable spouse of identity: wherever there is identity there is necessarily otherness; and in whatever field there is true otherness there is necessarily identity. Since identity belongs exclusively to that which is *hic et nunc*, so likewise must otherness. (CP 1.566, 1899)

Secondness, strictly speaking, is just when and where it takes place, and has no other being; and therefore different Secondnesses, strictly speaking, have in themselves no quality in common. (CP 1.532, 1903)

A more accurate way of stating the relation between haecceity and Secondness, then, is that a haecceity has the mode of being of a Secondness (and not that they correspond perfectly to one another). Almeder, however, bases his claim that there is no correspondence between haecceity and Secondness for a different reason: on the claim that Peirce “explicitly denied the existence of individuals.” I will return to this point in the following section.

One reason it is difficult to state the exact correspondence between Peirce’s categories and Scotus’s theory is that the former are meant to be an attempt to describe all aspects and all degrees of experience, and hence the descriptions change depending on the context of the discussion. Since by definition any attempt to explain the categories is an intellectual one, there is an element of Thirdness in any such endeavor. This is what he means when he says that our experience of them is not in their pure form, since consciousness itself involves relations between feelings, cognition, the past and present self, etc., and this involves Thirdness.

Another reason for this difficulty is that Peirce also subdivides the three categories into genuine and “degenerate” cases, depending on whether what is being discussed displays a characteristic that is either essential or accidental to the

category. Firstness does not have any degenerate cases while Secondness has one, which “really amounts to nothing but this, that a subject, in its being a Second” (being a Second is genuine Secondness) “has a Firstness, or quality;” Peirce identifies this degenerate case as the dyadic relation of identity, since the “quality” that the Second has is identity with itself (which is similar, but not the same as resemblance).<sup>350</sup> Peirce suggests a degenerate Second be termed “internal,” in contrast to “external Seconds, which are constituted by external fact, and are true actions of one thing upon another.” Unlike genuine Secondness, then, the degenerate sort “does not exist as such, but is only so conceived.”<sup>351</sup>

In Thirdness there are two degrees of degeneracy. The first degree of degeneracy, or “accidental Thirds” is when the third element can be annihilated and the other two components remain. Peirce offers the example of a pin fastening two things together by sticking through one and through the other: if the pin is undone and no longer sticks through one, it will stick through the other. Intermediate Thirds or Thirds of comparison are Thirds degenerate to the second degree. Peirce gives the example of the scholastics’ “relation of reason,” which serves to compare “forms whose similarity might otherwise escape attention.”<sup>352</sup> Here Peirce is referring to the logical distinction (*distinctio rationis*) which is one that the mind makes, but which is not real; we can distinguish between Shakespeare and the author of Hamlet, but really they are one and the same. Elsewhere, Peirce describes resemblance (like contrasts and comparisons) as a “relation of reason” because it “arise[s] from the mind setting one part of a notion into relation to another,” for “any two objects in nature resemble each other . . . it is only with reference to our senses and needs that one resemblance counts for more than another.”<sup>353</sup>

Genuine Thirdness is exemplified by a law of nature.<sup>354</sup>

Nature herself often supplies the place of the intention of a rational agent in making a Thirdness genuine and not merely accidental . . . But how does nature do this? By virtue of an intelligible law according to which she acts . . . Thus, intelligibility, or reason objectified, is what makes Thirdness genuine. (CP 1.366, 1890)

What could we say is the candidate in Scotus’s ontology for Thirdness? I have already claimed that the U4 corresponds to the mode of being of Firstness, haecceity to Secondness, so some possible contenders would be the U3 (universality), the U2 (the logical universal, or universal “in the mind”), and the I-U4 (the nature as manifested in the particular).<sup>355</sup> Now we have already seen that Peirce recognizes universality as “a relation of a predicate to the subjects of which it is predicated,” and which “can exist only in the mind, wherein alone the coupling of subject and predicate takes place.” We have also seen how Peirce categorizes “relations of reason” as degenerate Thirds. So I think we can safely say that universality (U3) is a degenerate Third. What about the U2? Recall that Almeder considers whether the logical universal corresponds to Thirdness and rejects this suggestion:

Is it the case, then, that Peirce's category of Thirdness corresponds with the Logical Universal of Scotus? Here again the answer is no. The Logical Universal for Scotus exists formally in the mind as a concept predicable of many . . . [It] is a second intention. It is an *ens mentis* which is not arbitrarily mental since it has a foundation in fact. For Peirce, however, Thirdness is not simply an *ens mentis* with a foundation in fact; it is real operative law, mediation or habit in the universe. Thirdness is the universal in *re*; whereas for Scotus the Logical Universal does not exist in *re*—it is an abstraction of the universal in *re* which is the common nature individuated. Hence the Logical Universal is not the universal in *re*, whereas Thirdness is the universal in *re*. (Almeder, p.176)

Now if what Almeder means by “Thirdness” is the genuine kind, then I do agree that the U2 is not what corresponds. However, just as I have argued that the U3 is a degenerate Third, for the same reason (the universal as universal exists in the mind), the U2 can be classified as a degenerate Third as well. Hence I also agree that for Scotus the universal (as U2) is not *in re*. But although Almeder is correct in the claim that the U2 does not correspond to (genuine) Thirdness and that the U2 as such, is not *in re* for Scotus, he is correct for the wrong reason: it is not because for Peirce, “Thirdness is the universal *in re*.” If that were the case, then it could be said that the I-U4, or individuated common nature, would correspond to Thirdness, and Almeder would then be wrong that in Scotus there is no counterpart to Thirdness. But let me first take the claim that “Thirdness is the universal *in re*.” Almeder overlooks the fact that although for Peirce genuine Thirdness is real operative law, this does not mean that the law is “in” the thing. It seems Peirce is saying something like this, when he says “a law necessarily governs, or “is embodied in” individuals.”<sup>356</sup> However, Peirce's use of quotation marks indicates that his meaning will not be quite literal. Indeed, a closer look reveals that Peirce wants to say that a law controls its subject, but it is not contained by its subject. This is a crucial point for Peirce, as will be seen below, and one he repeats in different contexts:

A quality is something capable of being completely embodied. A law never can be embodied in its character as a law except by determining a habit. (CP 1.536, 1903)

What is this Reason? In the first place, it is something that never can have been completely embodied. The most insignificant of general ideas always involves conditional predictions or requires for its fulfillment that events should come to pass, and all that ever can have come to pass must fall short of completely fulfilling its requirements. (CP 1.615, 1903)

Only one must not take a nominalistic view of Thought as if it were something that a man had in his consciousness. Consciousness may mean any one of the three categories. But if it is to mean Thought it is more without us than within. It is we that are in it, rather than it in any of us. (CP 8.256, 1900)

A real law cannot be completely embodied because its being does not consist in the sum total of its actual manifestations. A law, in order to be a law, must not just hold sway over how things have been and how they are presently, but also how they will be—“A law is how an endless future must continue to be.”<sup>357</sup> To say that a stone is hard is to consider that it has been hard in the past, is hard now, and will be hard in the future. If we call other things “stone” besides this one, then all those are expected to exhibit this same “habitual” behavior. Peirce does emphasize however that a law must have “the prospect of its sometime having occasion to be embodied in a fact” in order to have any being.<sup>358</sup>

This mode of being which consists, mind my word if you please, the mode of being which consists in the fact that future facts of Secondness will take on a determinate general character, I call a Thirdness. (CP 1.26, 1903)

To call the stone hard is to predict that no matter how often you try the experiment, it will fail every time. That innumerable series of conditional predictions is involved in the meaning of this lowly adjective. Whatever may have been done will not begin to exhaust its meaning. At the same time, the very being of the General, of Reason, is of such a mode that this being consists in the Reason’s actually governing events. (CP 1.615, 1903)

the third category . . . (which in that cosmology appears as the element of habit) can have no concrete being without action, as a separate object on which to work its government, just as action cannot exist without the immediate being of feeling on which to act. (CP 5.436, 1904)

For force is compulsion; and compulsion is *hic et nunc* . . . Law, without force to carry it out, would be a court without a sheriff; and all its dicta would be vaporings. (CP 1.212, 1902)

Note that Peirce emphasizes that the mode of being of Thirdness “consists in the fact that future facts” will take on a certain character. Unlike Firstness, which can be “completely embodied,” (as a red object can capture redness, for example), but which does not need to in order to still be a first (“a quality is how something may or might have been”),<sup>359</sup> a law requires subjects (Seconds) over which to reign. Also described as a habit, this mode of being is subject at any time, however, to “an element of pure chance” (Firstness) which survives and which allows for “fortuitous variation,” and “the formation of new habits.”<sup>360</sup> Thus, Peirce rejects a strict necessitarianism (“the common belief that every single fact in the universe is precisely determined by law”) about laws.<sup>361</sup> Peirce’s characterization of law as future-directed is related, I will claim, to the point that the contracted nature cannot be the counterpart to genuine Thirdness either. I will argue in the next section that this is one reason why Peirce objects to Scotus’s notion of contraction.

Is Almeder correct then that there is no correspondence between Peirce’s Thirdness and Scotus’s thought? Again, I disagree with him. Boler suggests

Thirdness is the mode of being of “real intelligibilities.” I agree; but to state it even more appropriately, considering the comparison with Scotus, I believe that Scotus’s notion of “realities” is the inspiration for Peirce’s category, although as was his custom, he “improved” on it.

Recall that for Scotus realities and formalities were synonymous. A formality is a feature of the thing that is the result of “the operation of the intellect,” through abstraction and cognition, yet is real because it is actually present in the thing. It is based on the Aristotelian idea of “form” as the principle of intelligibility and actuality, since for Aristotle the form is what makes something actual, and is what is abstracted. We can see that Peirce uses the Scotistic notion that the mind makes an important contribution, as well as using the same term of “intelligibility” to describe Thirdness:

it is the genius of the mind, that takes up all these hints of sense, adds immensely to them, makes them precise, and shows them in intelligible form . . . by the realistic hypostatization of relations; that is the one sole method of valuable thought. Very shallow is the prevalent notion that this is something to be avoided . . . and so well in accord with the spirit of nominalism. The true precept is not to abstain from hypostatization, but to do it intelligently. (CP 1.383, c.1890)

The third element of the phenomenon is that we perceive it to be intelligible, that is, to be subject to law, or capable of being represented by a general sign or Symbol . . . There is not anything truly general that does not actually make irrational existences conform to itself. That is the very heart of the idea. (CP 8.268, 1903)

Not only will meaning always, more or less, in the long run, mould reactions to itself, but it is only in doing so that its own being consists. For this reason I call this element of the phenomenon or object of thought the element of Thirdness. It is that which is what it is by virtue of imparting a quality to reactions in the future. (CP 1.343, 1903)

Just as objects are subject to, for example, the law of gravity, it can be said that objects are, in a sense, subject to intelligibility, or capable of being represented. That is what rationality, or reason is: compelling “irrational existences” (brute Seconds) to conform to an idea that makes sense. This process involves hypostatization, for Peirce, the creation of a universal or mental sign that stands for Seconds. This “imparting of a quality” to “reactions” (Seconds) holds for all future subjects that meet the same characteristics. The name “rose,” for example, applies to all such plants in the infinite future that meet these characteristics. Nominalists disregard the importance of this hypostatistic function, whereas realists recognize that it is at the very heart of all explanations. However, this must be done “intelligently,” through a scientific method which promotes physical inquiry and peer corroboration to discover whether indeed the concepts we have correspond to existing things as we have defined them, and are not just empty concepts, the result of useless disputations. This is related to Peirce’s notion of pragmati-

cism, as will be seen in a section below. Indeed, Peirce criticizes the scholastic realists for their sometimes “extravagant unpragmatism.”<sup>362</sup>

But the Scotists were guilty of two faults. The first . . . was that they were utterly uncritical in accepting classes as natural, and seemed to think that ordinary language was a sufficient guarantee in the matter. Their other and principal fault . . . was that they set up their idle logical distinctions as precluding all physical inquiry. (CP 6.361, 1904)

According to Peirce, the Scotists’s system of endless distinctions and discussions, while admirable in its untiring search for answers, was misguided in some of its conclusions because of its lack of an experimental method.

So can we say that we have knowledge of what real classes are, if meanings or concepts are the product of our intellect and are in a sense imposed on reacting things? Scotus’s answer, of course, was that the abstracted universal is tied to the real existing thing. Peirce’s answer is even more subtle than the Subtle Doctor’s:

What is the essential difference between a sign that is communicated to a mind, and one that is not so communicated? If the question were simply what we do mean by a sign, it might soon be resolved. But that is not the point. We are in the situation of a zoölogist who wants to know what ought to be the meaning of “fish” in order to make fishes one of the great classes of vertebrates. It appears to me that the essential function of a sign is to render inefficient relations efficient—not to set them into action, but to establish a habit or general rule whereby they will act on occasion. (CP 8.332, 1904)

I believe what Peirce means is this: because we are thinking creatures, we deal with signs—that is what thinking is. Now if we want to be efficient in our relation with the external world (to have knowledge of it) there must be correspondence between the signs which we create and their objects (which can also be referred to as signs). But it is a two-way relationship: the sign is a product of our thought (we create the name “fish”) but whether the different objects can be classified under the concept will depend on the meaning we give to the word, and whether the different objects meet the stipulated characteristics of the class. If whales are to be included in the class of fish, for example, an adjustment to the meaning of “fish” might be needed. This is how meaning “moulds reactions,” how the mind “adds immensely” to the senses; in other words, this is an explanation of intelligibility, the mode of being of Thirdness:

That is what we call an abstraction or idea. The nominalists say it is a mere name. Strike out the “mere,” and this opinion is approximately true. The realists say it is real. Substitute for “is,” may be, that is, is provided experience and reason shall, as their final upshot, uphold the truth of the particular predicate, and the natural existence of the law it expresses, and this is likewise true. It is certainly a great mistake to look upon an idea, merely because it has not the mode of existence of a hecceity, as a lifeless thing. (CP 3.460)

The scholastic realists, although they recognized the reality (and hence importance) of ideas, or universals, nevertheless erred because they did not recognize the importance of the experimental method. In the next section, I will discuss Secondness in more detail.

### Charlie's Angels

We cannot easily understand how Thomas Aquinas can speculate so much on the nature of angels, and whether ten thousand of them could dance on a needle's point. But it was simply because he held them for real. If they are real, why are they not more interesting than the bewildering varieties of insects which naturalists study? (CP 8.11, 1871)

Even Duns Scotus is too nominalistic when he says that universals are contracted to the mode of individuality in singulars, meaning, as he does, by singulars, ordinary existing things. The pragmatist cannot admit that. (CP 8.208, 1905)

We saw above how Scotus begins his investigation of individuality, or particularity, with talk of angels. I would like to discuss now Peirce's notion of the individual and how it ties in with Secondness.

As I have mentioned already, some commentators have claimed that Peirce believed that individuals do not exist. Almeder gives that as the reason why haecceity cannot correspond to Secondness. Although he admits that "it cannot be denied" that Scotus "had an inspirational effect on Peirce," providing him with "a partial justification of his own realistic thesis," Almeder claims that

Peirce rejected Scotus's nominalism and turned Pragmatism into extreme scholastic realism by simply denying the existence of individuals and identifying the undetermined common nature with real operative law governing the behavior of objects. (Almeder, p.179)

Jeffrey Di Leo, in "Peirce's Haecceitism," makes a similar claim:

It must be mentioned that prior to the mid-1880s, viz., before recognizing a need for quantifiers and other indices, Peirce denied the existence of individuals. (Di Leo, p.94)

But Peirce did not doubt that there are such things as individuals nor did he doubt that they exist. We saw above that Secondness is the category that encompasses the mode of being of existence. As the category of the here and now, it is the category of our everyday world:

The practical exigencies of life render Secondness the most prominent of the three. This is not a conception, nor is it a peculiar quality. It is an experience. It comes out most fully in the shock of reaction between ego and non-ego. It is there the double consciousness of effort and resistance. That is something which



cannot properly be conceived. For to conceive it is to generalize it; and to generalize it is to miss altogether the hereness and nowness which is its essence. (CP 8.266, 1903)

What Peirce claims is that we cannot know individuals as individuals because of the nature of intelligibility, but we can certainly experience them, and they exist. This is simply the same scholastic (nominalist and realist alike) and Aristotelian doctrine that all thought is of universals. Peirce himself contributes to the confusion with this enigmatic fragment from “Notation for Logic of Relatives:”

those who have used the word individual have not been aware that absolute individuality is merely ideal . . . the absolute individual can not only not be realized in sense or thought, but cannot exist, properly speaking . . . All, therefore, that we perceive or think, or that exists, is general. (CP 3.93, 1870)

It is passages like these that have prompted comments of Peirce’s denial of individuals’ existence, but what Peirce is doing here, I want to claim, is simply attempting the difficult task of explaining this notion that thought is of the general, something he tries to do from different perspectives (just like he does with the categories).

Peirce tackles it in this case from a logical point of view—he speaks of the term “individual” as supposedly having two characteristics: one being a “logical atom” which, as the ancient Greek word signifies, is not capable of “logical division” (is indivisible) and the other that “every predicate may be universally affirmed or denied” of it (is determinate). But that is not the case upon logical analysis:

For, let A be such a term. Then, if it is neither true that all A is X nor that no A is X, it must be true that some A is X and some A is not X; and therefore A may be divided into A that is X and A that is not X, which is contrary to its nature as a logical atom. (CP 3.93, 1870)

Such a term, Peirce says, “can be realized neither in thought nor in sense.” Not in sense, because an individual is indeterminate in some respect to the senses—for instance, the eye does not detect sweetness, so by looking at a flower I do not see whether it is sweet or not, so then what I see “is capable of logical division into the sweet and not sweet,” in terms of sight. In thought, “an absolutely determinate term cannot be realized” either, for since all the determination is not given by sense, the concept would have to be formed “by synthesis, and there would be no end to the synthesis because there is no limit to the number of possible predicates.” No matter how determinate a term is, it can always be made more determinate still, but never absolutely determinate, for there is an infinite number of applicable predicates. For example, a supposedly determinate and indivisible term such as “the second Philip of Macedon” is for example “still capable of logical division—into Philip drunk and Philip sober,” and so on for an infinite

number of predicates. However, we still call it individual because “that which is denoted by it” namely, Philip, “is in only one place at one time.” It is only when “we neglect differences in time and the differences which accompany them,” as we habitually do, that we can regard such terms as indivisible though they are not “*absolutely* indivisible.”

Since absolute indivisibility and absolute determinacy cannot be realized in sense or thought, then neither can absolute individuality. And then, Peirce delivers a shocking blow:

The absolute individual . . . cannot exist, properly speaking. For whatever lasts for any time, however short, is capable of logical division, because in that time it will undergo some change in its relations. But what does not exist for any time, however short, does not exist at all. All, therefore, that we perceive or think, or that exists, is general. So far there is truth in the doctrine of scholastic realism. But all that exists is infinitely determinate, and the infinitely determinate is the absolutely individual. (CP 3.93, 1870)

I believe that Peirce is trying to illustrate, by this *reductio ad absurdum*, “the truth in the doctrine of scholastic realism,” which, in Peirce’s terms, is that Seconds (in their Secondness), are a different category and hence untranslatable to the category of reason, “properly speaking,” and in Scotistic terms, that we cannot know an individual’s haecceity. Peirce wants to claim that if we use logical analysis (the epitome of rationality) we come to the conclusion that the “absolute” individual (as defined in terms of divisibility and determination) does not exist at all. But obviously, there are individuals and they exist, so it must be admitted that they are “infinitely determinate” and therefore “absolutely individual:”

This seems paradoxical, but the contradiction is easily resolved. That which exists is the object of a true conception. This conception may be made more determinate than any assignable conception; and therefore it is never so determinate that it is capable of no further determination. (CP 3.93, 1870)

Again, Peirce’s point is that our attempt at getting at what exists will always be a conception, or a Third. If it is a true conception (a genuine third, a real law), that will be the closest we will come to it. Elsewhere, Peirce expresses the same idea in a similar way:

But it follows that since no cognition of ours is absolutely determinate, generals must have a real existence . . . for although there is no man of whom all further determination can be denied, yet there is a man, abstraction being made of all further determination. (CP 5.312, 1868)

And again, he identifies it with scholastic realism:

Now this scholastic realism is usually set down as a belief in metaphysical fictions. But, in fact, a realist is simply one who knows no more recondite reality

than that which is represented in a true representation. Since, therefore, the word “man” is true of something, that which “man” means is real. (CP 5.312, 1868)

Peirce tried to express the notion, in a different context, that what we truly deal with, what reality is for us, is the general. A recipe for apple pie is an example—it is an example of a general rule. If followed to the letter, an apple pie will be produced, and that is what is desired. What is wanted is not any particular apple pie, but just *an* apple pie, that is, a delicious, warm, crusty, one. But the desire is of a general thing, for “we seldom, probably never, desire a single individual thing.” What we want is something which shall produce a certain pleasure of a certain kind, and although we may experience single pleasures, “the pleasure itself is a quality.” Experiences are single; but “qualities, however specialized, cannot be enumerated:”

She is directed to take apples. Many times she has seen things which were called apples, and has noticed their common quality . . . What she desires is something of a given quality; what she has to take is this or that particular apple. From the nature of things, she cannot take the quality but must take the particular thing . . . However, what is desired is not a mere unattached quality; what is desired is that the dream of eating an apple pie should be realized in Me; and this Me is an object of experience. So with the cook’s desire. She has no particular apple pie she particularly prefers to serve; but she does desire and intend to serve an apple pie to a particular person. When she goes into the cellar for the apples, she takes whatever bowl or basket comes handy, without caring what one, so long as it has a certain size, is clean, and has other qualities . . . Throughout her whole proceedings she pursues an idea or dream without any particular thisness or thatness—or, as we say, hecceity—to it, but this dream she wishes to realize in connection with an object of experience, which as such, does possess hecceity; and since she has to act, and action only relates to this and that, she has to be perpetually making random selections, that is, taking whatever comes handiest. (CP 1.341, 1895)

Peirce credits the Greeks and scholastics with an awareness of the difficulty in trying to grasp the notion of individuality. He sees the different terms (and their different meanings) of individual, particular, and singular as evidence of this:

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 (to atomon) and singular (to kath’ hekaston). (CP 3.93, 1870)

And because he recognizes that it sounds counterintuitive to say not only that absolute individuality does not exist (even though, “properly speaking” from a purely logical point of view, it is correct), but also that “all that exists is general” (which sounds like a rejection of the scholastic claim that what exists is individual) he elsewhere suggests a different definition for individual, as that which reacts:

Another definition which avoids the above difficulties is that an individual is something which reacts. That is to say, it does react against some things, and is of such a nature that it might react, or have reacted, against my will . . . It may be objected that it is unintelligible; but in the sense in which this is true, it is a merit, since an individual is unintelligible in that sense . . . That is to say, a reaction may be experienced, but it cannot be conceived in its character of a reaction; for that element evaporates from every general idea. According to this definition, that which alone immediately presents itself as an individual is a reaction against the will. But everything whose identity consists in a continuity of reactions will be a single logical individual . . . With this definition there is no difficulty about the truth that whatever exists is individual, since existence (not reality) and individuality are essentially the same thing; and whatever fulfills the present definition equally fulfills the former definition by virtue of the principles of contradiction and excluded middle. (CP 3.613, 1911)

In spite of Peirce's agreement with what the scholastic realists said about thought and universality, by 1905 he considers himself "a scholastic realist of a somewhat extreme stripe" and chides their most famous spokesman, John Duns Scotus:

Even Duns Scotus is too nominalistic when he says that universals are contracted to the mode of individuality in singulars, meaning, as he does, by singulars, ordinary existing things. (CP 8.208, 1905)

I think it would be a mistake to conclude, as some have, that Peirce's extreme realism was due to his belief that individuals do not exist, for I do not think he held this, as I have discussed above. But what is it, then, that Peirce objects to in the quote above? What is missing in Scotus's "halting" realism that persuades Peirce to adopt a more extreme kind?

The answer clearly revolves around the role individuality plays in the scheme of things, how it is related to universals and singulars, and the connection with contraction.

Boler claims that the divergence occurs because Peirce is "strenuously opposed to Scotus on the importance of the individual," resulting in Peirce's "emptying the physical mode of its content." This leads to ambiguity and confusion in Peirce's treatment of the individual, Boler claims, for while denying contraction, Peirce replaces it with "an equally mysterious notion of concretion;" that is, "the notion that the real general becomes concrete in a world of actuality," or that "thirdness must be realized in the actuality of thirdness."

Let me begin with the role of the individual (or singular). Boler is correct in his observation that the individual is of primal importance for Scotus. As seen in previous sections, the individual is what grounds the reality of the universal—it is the tie to the real world, since it is the common nature present in the individual (as a formality or reality) that gets abstracted and transformed by the intellect into the universal. Also present in the individual is the haecceity, what makes it an indi-

vidual, which is also a formality, but really the same as the common nature. Since the haecceity individualizes the common nature, it is the *ultima realitas entis* (the final, or ultimate reality of the thing). Although I agree with Boler that for Scotus the supposit integrates in a unique way “the richness and fullness” of the common nature, I want to claim that nevertheless in Peirce’s account, the individual, or Second, still has an important, albeit different, role and the account provided by Peirce is a coherent one. The individual is important for Peirce, as two criticisms of Hegel demonstrate:

He has usually overlooked external Secondness, altogether. In other words, he has committed the trifling oversight of forgetting that there is a real world with real actions and reactions. Rather a serious oversight that. (CP 1.368, 1890)<sup>363</sup>

Let the Universe be an evolution of Pure Reason if you will. Yet if, while you are walking in the street reflecting upon how everything is the pure distillate of Reason, a man carrying a heavy pole suddenly pokes you in the small of the back, you may think there is something in the Universe that Pure Reason fails to account for; and when you look at the color red and ask yourself how Pure Reason could make red to have that utterly inexpressible and irrational positive quality it has, you will be perhaps disposed to think that Quality and Reaction have their independent standing in the Universe. (CP 5.92, 1903)

It is the grounding of reality in the individual that Peirce rejects, on both metaphysical and epistemological grounds; he expresses this disagreement in different contexts.

Sandra Rosenthal correctly points to Peirce’s evolutionary cosmology as “holding the key” to understanding the ontological relationship between Thirdness and Secondness.<sup>364</sup> Peirce offers his “Cosmogonic Philosophy,” or evolutionary cosmology, accounting for the origin of the main features of the universe as we know it—“the characters of time, space, matter, force, gravitation, electricity, etc.,” which is a combination of the Darwinian evolutionary theory with a dose of the categories:

in the beginning—ininitely remote—there was a chaos of unpersonalized feeling, which being without connection or regularity would properly be without existence. This feeling, sporting here and there in pure arbitrariness, would have started the germ of a generalizing tendency. Its other sportings would be evanescent, but this would have a growing virtue. Thus, the tendency to habit would be started; and from this, with the other principles of evolution, all the regularities of the universe would be evolved. At any time, however, an element of pure chance survives and will remain until the world becomes an absolutely perfect, rational, and symmetrical system, in which mind is at last crystallized in the infinitely distant future. (CP 6.36, 1892)

The whole process begins with “what require[s] no explanation . . . non-existent spontaneity . . . absolute chance.” Then, the “evolution of forms” begins

which is a stage of “vague potentiality” (Firstness) which, through chance, develops into a “continuum of forms having a multitude of dimensions too great for the individual dimensions to be distinct.” These, through reaction with one another acquire eventually “determination” as arbitrary Seconds and as a result take on habits which eventually become regular, and hence, laws (Thirdness). The element of chance, what Peirce calls “tychism” remains throughout, although in an increasingly diminished state, as the universe becomes more law-like.

Note how Peirce uses Scotus’s term of “contraction” to describe the progression from vague potentiality into the “continuum of forms:”

It must be by a contraction of the vagueness of that potentiality of everything in general, but of nothing in particular, that the world of forms comes about. We can hardly but suppose that those sense-qualities that we now experience, colors, odors, sounds, feelings of every description, loves, griefs, surprise, are but the relics of an ancient ruined continuum of qualities . . . [which] had in an antecedent stage of development a vaguer being, before the relations of its dimensions became definite and contracted. (CP 6.196, 1898)

Contraction makes something indefinite or indeterminate into something more definite or determinate. For Scotus, this is what happens to the common nature (U4) in the supposit. Recall my earlier argument that Scotus’s common nature in itself corresponds to Firstness. Peirce seems to agree with the process of contraction, as it applies to making firsts more definite (and we can assume, although he does not explicitly say so here, eventually making firsts into Seconds) so the point of disagreement with Scotus must lie elsewhere. It lies, I think, in this: for Peirce, true universality or generality is a genuine (not a degenerate) Third. In the context of evolutionary cosmology, to claim that a Third is contracted to a Second is to confuse a Third with a First, which would result in a reversal of the description of the evolutionary process.

In the context of the categories, it does not make sense either to say that a general is contracted to the mode of being of Seconds since “Secondness does not contain Thirdness.” Brute existence has no relations, so there is no intelligibility in it. Expressed differently, an individual cannot “contain” a genuine Third. If contraction involves determination (the indeterminate nature-in-itself acquires determinate characteristics of an individual through haecceity), Peirce must object, for a Second cannot make a Third more definite or determinate, since, as we saw earlier, the mode of being of Thirdness consists in the very fact that future facts will take on a certain character, and the future of course is indeterminate.<sup>365</sup>

But indeterminacy belongs only to ideas; the existent is determinate in every respect . . . our idea of the past is precisely the idea of that which is absolutely determinate, fixed, fait accompli, and dead, as against the future which is living, plastic, and determinable . . . great errors of metaphysics are due to looking at the future as something that will have been past. I cannot admit that the idea of the future can be so translated into the Secunda ideas of the past. (CP 8.330, 1904)

If we speak of Thirds in terms of laws, then by contraction the law is confined to a finite number of instances.<sup>366</sup> This would be a case of recognizing mere uniformity (all stones experienced up to now have been hard), but not recognizing the power of law, for uniformity might be due to pure chance. It is the notion of habit (as law) governing an infinite number of instances, that truly captures the genuine Thirdness of law. Genuine Thirdness is not merely a description of what *will* happen. The latter is still too restrictive; law needs to encompass what *would* or *could* happen as well.<sup>367</sup> Peirce illustrates this notion of law as habit in the famous “Harvard Experiment” in front of a class: the prediction that the stone will fall once he lets go of it is fulfilled, and he calls this an example of “the doctrine of scholastic realism.”<sup>368</sup> Only by covering an infinite number of instances extending into an infinite future can it truly be a law as opposed to a repetition:

let a law of nature—say the law of gravitation—remain a mere uniformity—a mere formula establishing a relation between terms—and what in the world should induce a stone, which is not a term nor a concept but just a plain thing, to act in conformity to that uniformity? All other stones may have done so, and this stone too on former occasions, and it would break the uniformity for it not to do so now. But what of that? There is no use talking reason to a stone. It is deaf and it has no reason. (CP 5.48, 1903)

Now Scotus’s error in the notion of contraction is not simply a “category mistake.” Peirce sees serious metaphysical and epistemological implications regarding the connection with reality:

[A quality] is not anything which is dependent, in its being, upon mind, whether in the form of sense or in that of thought. Nor is it dependent, in its being, upon the fact that some material thing possesses it . . . That it is dependent upon the subject in which it is realized is the great error of all the nominalistic schools . . . Let us not put the cart before the horse, nor the evolved actuality before the possibility as if the latter involved what it only evolves. A similar answer may be made to the other nominalists. It is impossible to hold consistently that a quality only exists when it actually inheres in a body. If that were so, nothing but individual facts would be true. (CP 1.422, 1896)

A law is in itself nothing but a general formula or symbol. An existing thing is simply a blind reacting thing, to which not merely all generality, but even all representation, is utterly foreign. Here we have that great problem of the principle of individuation which the scholastic doctors after a century of the closest possible analysis were obliged to confess was quite incomprehensible to them. (CP 5.107, 1903)

Recall that for Scotus the universal is real because it is the abstracted form of the common nature actually in the supposit (as I-U4). Since the nature-in-itself can only “exist” in the mind as universal or in the supposit as individual, this

means that it is “dependent upon the subject in which it is realized,” whether it be (1) the supposit (and hence dependent on the haecceity for its realization) or (2) the individual mind doing the abstracting. If dependent on the haecceity, then reality is based on the unknowable and therefore an unacceptable (nominalist) ontological conclusion:

For I had long before declared that absolute individuals were entia rationis, and not realities. A concept determinate in all respects is as fictitious as a concept definite in all respects. I do not think we can ever have a logical right to infer, even as probable, the existence of anything entirely contrary in its nature to all that we can experience or imagine. But a nominalist must do this. For he must say that all future events are the total of all that will have happened and therefore that the future is not endless. (CP 8.208, 1905)

The nominalist must admit that man is truly applicable to something; but he believes that there is beneath this a thing in itself, an incognizable reality. His is the metaphysical figment. (CP 5.312, 1868)

Peirce attributes the scholastics’ mistake in grounding reality in the individual in part to theological commitments regarding the existence of souls as forms prior to embodiment, and the necessity of there being individual souls that are rewarded and punished. As a result, the theory is an unsuccessful amalgamation of Platonism and Aristotelianism:

[The scholastics’] notions of form were rather allied to those of Plato . . . admit[ing] that the soul was a form . . . [but] awe of Aristotle caused them to modify the proposition . . . A question, for example, which exercised them greatly was, how the form was restricted to individual existence? For Aristotle there could not be any such question, because he did not conceive of a form taking on individuality, but of an undifferentiated matter taking on, or rather developing, form, and individuality, perhaps, with it. (CP 6.357, 1902)

Peirce’s description of Aristotelianism is reminiscent, as we can readily see, of his own account of the evolutionary development of the categories (and of the universe). This is part of what he means when he says

I should call myself an Aristotelian of the scholastic wing, approaching Scotism, but going much further in the direction of scholastic realism. (CP 5.79, 1903)

Epistemologically, contraction of the universal in the individual is unacceptable as well, for contraction renders reality ultimately unknowable. Scotus, as we have seen, refers to the haecceity as the *ultima realitas entis* (the final, or ultimate reality of the thing, which is what “individualizes” the nature, or, in other words, is the singularity of the thing. If this is what the ultimate reality of the thing is, we have a problem: the reality is a mind-dependent feature, while the haecceity, because of its singularity, is unknowable for us because we only know through



general concepts. The ultimate reality, then, is intrinsically unknowable for us! But exactly in what sense “unknowable”?

The term “unknowable” has at least two meanings, depending on whether the focus is on the knower or on the object known. In the former case, to say that something is unknowable would mean that there is a deficiency on the part of the knower, but under other more favorable circumstances, it is possible to gather the information. In the example of not knowing whether something is sweet by looking at it, the unknowability refers to the lack of this capacity in the sense of vision. However, an answer can be gotten by tasting the substance. It is different, however, to say that an object in itself is unknowable because it is totally inaccessible by nature. Although in theory the haecceity is knowable in itself according to Scotus (by angels and by the blessed) and hence seems an example of the first kind, for us, while in this life, the haecceity is unknowable because we do not possess the intuitive faculty in its fullest form. Peirce, however, would say that brute existence is a feature of reality that cannot be known in itself because as such there is nothing to be known or cognized (it has no Thirdness), and hence would be an example of the second kind of unknowability. I will come back to this point.

To claim something unknowable, then, would be unacceptable for Peirce since it would defeat the whole scientific enterprise, for every attempt to understand anything, just as every experiment and research supposes, “or at least hopes,” that the very objects of study themselves “are subject to a logic more or less identical with that which we employ.”<sup>369</sup> The ironic thing is that one of Scotus’s main concern was epistemological—to be able to claim that we have knowledge of the world:

The great object of the metaphysics of Duns Scotus is so to state the results of ordinary experience, that it shall not close any positive experimental inquiry, or pronounce anything possibly observable to be a priori impossible. (CP 7.395, 1893)

Scotus’s realism in the end is nominalistic and “halting” because it creates, albeit inadvertently, a “roadblock to inquiry.” Like the nominalists, according to Peirce, Scotus ultimately cannot protect our claim to knowledge:

The sole immediate purpose of thinking is to render things intelligible; and to think and yet in that very act to think a thing unintelligible is a self-stultification. It is as though a man furnished with a pistol to defend himself against an enemy were, on finding that enemy very redoubtable, to use his pistol to blow his own brains out to escape being killed by his enemy. (CP 1.405, 1890)

The nominalist, by isolating his reality so entirely from mental influence as he has done, has made it something which the mind cannot conceive; he has created the so often talked of “improportion between the mind and the thing in itself.” (CP 8.30, 1871)

Every unidealistic philosophy supposes some absolutely inexplicable, unanalyzable ultimate; in short, something resulting from mediation itself not susceptible of mediation. Now that anything is thus inexplicable can only be known by reasoning from signs. But the only justification of an inference from signs is that the conclusion explains the fact. To suppose the fact absolutely inexplicable, is not to explain it, and hence this supposition is never allowable. (CP 5.4, 1902)

An account that claims that it is the individual mind that abstracts the formality (reality) from the supposit and forms the universal is also problematic, for (in addition to the fact that the individual mind is prone to error), it is based, Peirce says, on a flawed conception of cognition: since every cognition is based on a previous cognition, there must be an “ideal first” cognition not determined by a previous cognition. Let me explain.

At any moment in time we are in possession of all kinds of cognitions, which are determined by previous ones, and these by cognitions earlier still. Now it seems there must at some point be a first in this series, for if that were not the case, a present cognition would be completely determined by the actual state immediately before, and that does not seem to be the case (we seem to detect a chain of cognitions going backwards in time). But what kind of thing would this “first” cognition be? This “first” would have to be an intuitive cognition, the result of an intuition, where “the term intuition will be taken as signifying a cognition not determined by a previous cognition of the same object, and therefore so determined by something out of the consciousness.”<sup>370</sup>

Peirce is referring here, I believe, to Scotus’s account of immediate intuitions. Recall that for Scotus there are two kinds of knowledge, or intellection: abstractive, and intuitive. Intuitive intellection (*visio*) is a form of existential awareness in which an object is grasped as present “here and now:” it gives us information of something as “precisely of a present object as present and of an existing object as existing.”<sup>371</sup> This is “direct” or immediate knowledge, unlike the derivative and therefore “diminished” (but still real) likeness of the the thing itself (the intelligible species) which results in abstractive knowledge. Although only immaterial beings such as the angels have complete use of this faculty, humans have a limited capacity for it while embodied: the awareness of self, and certain simple impressions, like that of color, are examples of intuitive intellection. The reason we cannot know a thing-in-itself (and why all our thought is of universals) is because of our limited intuitive capacity and reliance on abstraction.

I believe that Peirce is thinking of Scotus in this discussion of cognition, for he argues why the impression of color (Scotus’s example) cannot be an intuitive cognition:

If it be objected that the peculiar character of red is not determined by any previous cognition, I reply that that character is not a character of red as a cognition; for if there be a man to whom red things look as blue ones do to me and vice

versa, that man's eyes teach him the same facts that they would if he were like me. (CP 5.261, 1868)

Since intuition is an awareness of the "here and now" of a thing, i.e. an awareness that it is an existent thing, it is an awareness (but not a knowledge) of a haecceity. We can anticipate Peirce's objection to this notion of an "ideal first" cognition not determined by a previous cognition:

At any moment we are in possession of certain information, that is, of cognitions which have been logically derived by induction and hypothesis from previous cognitions . . . and so on back to the ideal first ([b]y an ideal, I mean the limit which the possible cannot attain), which is quite singular, and quite out of consciousness. This ideal first is the particular thing-in-itself. It does not exist as such. That is, 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. (CP 5.311, 1868)

The theory of immediate intuition leads us, again, to the incognizable thing-in-itself, and to the self-contradictory epistemological stance of the nominalist:

to suppose that a cognition is determined solely by something absolutely external, is to suppose its determinations incapable of explanation. Now, this is a hypothesis which is warranted under no circumstances, inasmuch as the only possible justification for a hypothesis is that it explains the facts, and to say that they are explained and at the same time to suppose them inexplicable is self-contradictory. (CP 5.260, 1868)

Peirce concludes, then, "that it is not true that there must be a first." No cognition not determined by a previous cognition, then, can be known. Peirce claims "it does not exist," first, because it is absolutely incognizable, and second, "because a cognition only exists so far as it is known."<sup>372</sup> But what does Peirce offer as an alternative?

He offers an analogy, which is similar to the paradox of Achilles and the tortoise: suppose an inverted triangle to be dipped gradually into the water. At every instant as the the triangle is submerged, the surface of the water creates a horizontal line on the surface of the triangle. If the lines each represent a cognition previously determined by the other, there are an infinite number of lines created at finite distances below it, so there is never a "first."<sup>373</sup> This is an illustration of Peirce's notion of "continuity," which he eventually dubs "synechism," and which, I will argue, plays a central role in his extreme scholastic realism.

### The Schism in Synechism

as soon as a man is fully impressed with the fact that absolute exactitude never can be known, he naturally asks whether there are any facts to show that hard

discrete exactitude really exists. That suggestion lifts the edge of that curtain and he begins to see the clear daylight shining in from behind it. (CP 1.172, 1897)

The recurrent theme throughout this work has been the profound influence Scotus had on Peirce. I have argued, however, that Peirce eventually created a rift between his realism and Scotus's when he concluded that Scotus's use of the individual as the basis for an account of our access to reality turned out to be counterproductive on several levels. As we have seen, Peirce's account tries to avoid the pitfalls of Scotus's reliance on the individual by viewing reality as "the object of the final opinion." But what alternative does Peirce offer to Scotus's "tie" between the individual and the reality of the universal? Furthermore, if the final opinion (albeit the result of investigation) is what defines reality, what keeps Peirce's theory from slipping into a sort of relativism (or even nihilism)? This latter seems all the more inevitable if we combine the notion of the final opinion with Peirce's fallibilism—

On the whole, then, we cannot in any way reach perfect certitude nor exactitude. We never can be absolutely sure of anything, nor can we with any probability ascertain the exact value of any measure or general ratio. (CP 1.147, 1897)

Indeed, subsequent versions of pragmatism (a few in Peirce's lifetime, and some in more recent times) have manifested relativistic features in some measure or other.<sup>374</sup> Peirce vehemently disagrees with relativistic accounts, as his comments show:

Mr. Schiller's second definition . . . that "the 'truth' of an assertion depends on its application," . . . seems to me the result of a weak analysis. His third definition is that pragmatism is the doctrine that "the meaning of a rule lies in its application," which would make the "meaning" consist in the energetic interpretant and would ignore the logical interpretant; another feeble analysis. (CP 5.494, 1906)

It is the doctrine of synechism, I will argue, that allows Peirce to maintain a non-relativistic stance regarding reality and truth. Actually, Peirce claims that synechism and fallibilism are allied—synechism "is the idea of fallibilism objectified." Let us look at how this is so.

Synechism is "the idea of continuity, or unbrokenness," and the idea of continuity, says, Peirce, "involves the notion of infinity."<sup>375</sup> Peirce uses an example similar to the one used to illustrate that there is no first cognition. This time, he tries to show how consciousness cannot be explained without some such notion of infinity (and therefore continuity):<sup>376</sup>

We are immediately aware only of our present feelings—not of the future, nor of the past. The past is known to us by present memory, the future by present suggestion. But before we can interpret the memory or the suggestion, they are past; before we can interpret the present feeling which means memory, or the present

feeling that means suggestion, since that interpretation takes time, that feeling has ceased to be present and is now past. So we can reach no conclusion from the present but only from the past. (CP 1.167, 1897)

But how can I know that the past ever existed? For that matter, how do I know that I myself exist except for this one single instant, or that anyone else ever existed or that everything is not all an illusion? The answer, of course, is that I don't know for certain, but that I labor under the hypothesis that it is real, and this seems to work pretty well. Now if this is real, then it can be said that the past is really known to the present. But how can it be known? Not by inference, because as we have just seen "we can make no inference from the present, since it will be past before the inference gets drawn."<sup>377</sup> But then I must have an immediate consciousness of the past. But this takes me to an infinite number of past states: if I have an immediate consciousness of a state of consciousness past one instant and if that past state involved an immediate consciousness of a state then past by another instant, I now have an immediate consciousness of a state past by two instants, and as this is equally true of all states, I have an immediate consciousness of a state past by four, eight, etc., instants; in short I must have an immediate consciousness of every state of mind that is past by any finite number of units of time. But how can I say then that I have an immediate consciousness of my state of mind a year ago? This only makes sense if the series (and time) are continuous.

Peirce claims that continuity thus provides a plausible hypothesis about knowledge, of the world unlike the nominalist's account:

How does one mind act upon another mind? How can one particle of matter act upon another at a distance from it? The nominalists tell us this is an ultimate fact—it cannot be explained . . . what is meant is that we come up, bump against actions absolutely unintelligible and inexplicable, where human inquiries have to stop. Now that is a mere theory, and nothing can justify a theory except its explaining observed facts. It is a poor kind of theory which in place of performing this, the sole legitimate function of a theory, merely supposes the facts to be inexplicable. It is one of the peculiarities of nominalism that it is continually supposing things to be absolutely inexplicable. That blocks the road of inquiry. But if we adopt the theory of continuity we escape this illogical situation. We may then say that one portion of mind acts upon another, because it is in a measure immediately present to that other; just as we suppose that the infinitesimally past is in a measure present. And in like manner we may suppose that one portion of matter acts upon another because it is in a measure in the same place. (CP 1.170, 1905)

Thus, Peirce argues for the principle of continuity. But how does continuity solve the problem of relativism about reality? Let us go back to the idea of fallibilism:

The principle of continuity is the idea of fallibilism objectified. For fallibilism is the doctrine that our knowledge is never absolute but always swims, as it were, in

a continuum of uncertainty and of indeterminacy. Now the doctrine of continuity is that all things so swim in continua. (CP 1.171, 1905)

Note that Peirce goes from the epistemological claim that knowledge is in a continuum of indeterminacy (fallibilism), to the metaphysical claim that things also are in a continuum of indeterminacy (synechism).<sup>378</sup> This latter is reminiscent of the assertion that there is no such thing as an absolute individual (for there is no absolute determinacy), that the general is indeterminate, that Thirdness is generality, and that reality is a Third, all important metaphysical claims for Peirce:

True generality is, in fact, nothing but a rudimentary form of true continuity. Continuity is nothing but perfect generality of a law of relationship. (CP 6.172, 1902)

Just as the evolution of the cosmos is explained in terms of the categories, Peirce uses the notion of synechism in this context as well:

If all things are continuous, the universe must be undergoing a continuous growth from non-existence to existence. There is no difficulty in conceiving existence as a matter of degree. The reality of things consists in their persistent forcing themselves upon our recognition. If a thing has no such persistence, it is a mere dream. Reality, then, is persistence, is regularity. In the original chaos, where there was no regularity, there was no existence. It was all a confused dream. This we may suppose was in the infinitely distant past. But as things are getting more regular, more persistent, they are getting less dreamy and more real. (CP 1.175, 1897)

Now if something is continuous, we would expect that this means that there is at least a part that remains basically the same and perseveres throughout. This is exactly what Peirce asserts—he rejects the doctrine of dualism, and proposes a kind of monism,<sup>379</sup> which he calls “objective idealism:”

Synechism . . . can never abide dualism, properly so called . . . dualism in its broadest legitimate meaning as the philosophy which performs its analyses with an axe, leaving as the ultimate elements, unrelated chunks of being, this is most hostile to synechism. In particular, the synechist will not admit that physical and psychical phenomena are entirely distinct—whether as belonging to different categories of substance, or as entirely separate sides of one shield—but will insist that all phenomena are of one character, though some are more mental and spontaneous, others more material and regular. Still, all alike present that mixture of freedom and constraint, which allows them to be, nay, makes them to be teleological, or purposive. (CP 7.570, 1892)

to bridge the gap synechism is required. Supposing matter to be but mind under the slavery of inveterate habit, the law of mind still applies to it. (CP 6.613, 1893)

The one intelligible theory of the universe is that of objective idealism, that matter is effete mind, inveterate habits becoming physical laws. (CP 6.25, 1891)

But what is the connection of all this with reality? Recall that for Peirce “[t]here is, then, to every question a true answer, a final conclusion, to which the opinion of every man is constantly gravitating.” Although the individual may not live to reach the truth, there is “a definite opinion to which the mind of man is, on the whole and in the long run, tending, which is the truth.”<sup>380</sup> Any human being with enough information and with sufficient effort and sincerity will reach the same conclusion as others under the same favorable circumstances.

Peirce was convinced that experience could aid us in discovering to a high degree the way things are (not just the way they appear to us). The reason why humans are able to divine something of the principles of nature is because we have evolved as a part of nature: the way of the cosmos is not utterly foreign to the propensities of our minds. We have inherited (through evolution) a certain disposition, or instinct—

Our faculty of guessing corresponds to a bird’s musical and aeronautic powers . . . it is to us, as those are to them, the loftiest of our merely instinctive powers.”  
(CP 7.48, 1907)

Because of this actual human proclivity towards rationality, given enough time, there is a tendency towards agreement whenever there is a painstaking, persistent, and systematic inquiry.

Disputes undoubtedly occur among those who pursue a proper method of investigation. But these disputes come to an end. At least that is the assumption upon which we go in entering into the discussion at all, for unless investigation is to lead to settled opinion it is of no service to us whatever. We do believe then in regard to every question which we try to investigate that the observations though they may be as varied and as unlike in themselves as possible, yet have some power of bringing about in our minds a predetermined state of belief . . . we seem fated to come to the final conclusion. (CP 7.334, 1873)

Peirce wants to claim that the drive towards a consensus about things is as much an actual force, or a law, or “power” as the gravitational one; it is a tendency that guides thought in one “fated” or determined direction—the truth; just as falling is a tendency that guides objects towards the center of the earth. The very fact that we engage in inquiry presupposes that we will be persuaded by the right kind of evidence to accept the correct answer. Considering the multitude of opinions, and possible explanations, the fact that there is agreement is quite surprising, and this fact, according to Peirce, is indicative that there is some predisposition, some “occult power” that naturally leads us, with individual exceptions that are ultimately factored out, to consensus. We are destined, then, to be driven in the direction of truth, so given enough time, we would very likely arrive at it. It is a real fact that there would be a final opinion were investigation to continue long enough.

This activity of thought by which we are carried, not where we wish, but to a fore-ordained goal, is like the operation of destiny. No modification of the point of view taken, no selection of other facts for study, no natural bent of mind even, can enable a man to escape the predestinate opinion. This great hope is embodied in the conception of truth and reality. The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real. That is the way I would explain reality. (CP 5.408, 1878)

But even if we grant Peirce the fact that there would be such a thing as a final opinion fated to be ultimately agreed by all, would this avoid a relativistic view of reality and truth? Not necessarily: why couldn't it be the case that the reason we are "fated" to consensus is that we have evolved (with individual deviations, of course) a predisposition to agree (or at least to strive to agree) because it promotes survival, a sense of peace, or what you will? Peirce considers this, and denies it:

For the sole purpose of reasoning is, not to gratify a sense of rationality analogous to taste or conscience, but to ascertain the Truth, in the sense of that which is SO, no matter what be thought about it. (CP 2.153, 1902)

This is where Peirce's monism combined with the theory of continuity comes in: the same drive towards regularity and order which the force of habit imposes on matter, is the same drive or "occult power" that impels minds towards agreement. Just as the universe tends towards organization, or law, the mind tends toward rationality (if we can call that progress in answering questions). It is all the same continuous process, synechism, a process that intertwines reality and our knowledge of it. Synechism is the "daylight shining in from behind" the curtain.

In so far as evolution follows a law, the law of habit, instead of being a movement from homogeneity to heterogeneity, is growth from difformity to uniformity. But the chance divergences from law are perpetually acting to increase the variety of the world, and are checked by a sort of natural selection and otherwise (for the writer does not think the selective principle sufficient), so that the general result may be described as "organized heterogeneity," or, better, rationalized variety. In view of the principle of continuity, the supreme guide in framing philosophical hypotheses, we must, under this theory, regard matter as mind whose habits have become fixed so as to lose the powers of forming them and losing them, while mind is to be regarded as a chemical genus of extreme complexity and instability. (CP 6.101, 1902)

Again, this must not be interpreted as a classic case of idealism with the denial of existent things having the mode of being of Secondness—"to be sure, the synechist cannot deny that there is an element of the inexplicable and ultimate, because it is directly forced upon him."<sup>381</sup> Peirce acknowledges that there are different kinds of things, but the difference is due to degree more than basic kind:



the synechist will not admit that physical and psychical phenomena are entirely distinct—whether as belonging to different categories of substance, or as entirely separate sides of one shield—but will insist that all phenomena are of one character, though some are more mental and spontaneous, others more material and regular. (CP 7.570, 1892)

Synechism, as a real force, is what propels us towards the final opinion, the object of which is the real, and this is what comprises reality. What grounds reality for Peirce, then, is synechism, which has the mode of being of a law, or Third. What grounds reality, then, is a Third. Compare that to Scotus, who grounds reality in the individual, with the mode of being of a Second. Peirce's is an extreme scholastic realism indeed!

### **Diamonds are a Pragmatist's Best Friend**<sup>382</sup>

A kiss on the hand may be quite continental but diamonds are girl's best friend. A kiss may be grand but it won't pay the rental on your humble flat, or help you at the automat . . . Time rolls on and youth is gone and you can't straighten up when you bend . . . But square-cut or pear-shaped [diamonds] don't lose their shape. ("Diamonds Are A Girl's Best Friend" words by Leo Robin and music by Jule Styne Copyright © 1949 [renewed] by Music Sales Corporation [ASCAP] International Copyright Secured. All Rights Reserved. Used by permission)

We say that a diamond is hard. And in what does the hardness consist? It consists merely in the fact that nothing will scratch it; therefore its hardness is entirely constituted by the fact of something rubbing against it with force without scratching it. (CP 7.340, 1878)

People don't care for methods! They want results. Give them all the diamonds you make, and you may have the method of making them for your own. (CP 7.570, 1892)

If you ask the proverbial woman in the street to define what a pragmatist is, most likely she will say that it is someone who is practical—sees things as they are and acts accordingly; in other words, a pragmatist is a realist. If you ask a philosopher that same question, however, you will most likely not get that same answer for she is probably aware that there are different kinds of philosophical realisms, some of which, at least on the surface, would seem to be incompatible with the philosophical doctrine of pragmatism. Many philosophers, for instance, associate scholastic realism with such "impractical" concerns as how many angels can dance on the head of a needle, while pragmatism, as commonly understood, wastes no time with metaphysical "mumbo jumbo."

Peirce's description of pragmatism as concerned with defining a concept in terms of its practical consequences seems in accord with this common view:

the theory that a conception, that is, the rational purport of a word or other ex-

pression, lies exclusively in its conceivable bearing upon the conduct of life; so that . . . if one can define accurately all the conceivable experimental phenomena which the affirmation or denial of a concept could imply, one will have therein a complete definition of the concept, and there is absolutely nothing more in it. (CP 5.412, 1905)

It is therefore quite a shock for many to discover that Peirce identifies, as the basis for his pragmatism, the doctrine of scholastic realism:

Another doctrine which is involved in Pragmaticism as an essential consequence of it, but which the writer defended . . . before he had formulated, even in his own mind, the principle of pragmaticism, is the scholastic doctrine of realism. (CP 5.453, 1905)

[an] experiment will prove that the diamond is hard, as a positive fact. That is, it is a real fact that it would resist pressure, which amounts to extreme scholastic realism. (CP 8.208, 1905)

What strange bedfellows: scientific experiments and scholastic realism! And yet Peirce combines these two into what turns out to be his brand of realism, what he calls “extreme scholastic realism.” Just as Peirce’s categories, as I have argued, are the modern metaphysical version of Scotus’s ontology, pragmatism, or “pragmaticism” as Peirce later called it, is the modern equivalent of Scotus’s epistemological claim that we can (and do) have knowledge of the world. Let me explain.

Even though Scotus’s formal distinction and the real less-than-numerical distinction were meant to safeguard our knowledge of the world, Peirce felt that they were not only useless, but more importantly, they were actually counterproductive: they reduced the nature, (a general), to an “ultimate reality” that was incognizable (the haecceity). As we saw, Peirce saw this as defeating the whole purpose of the endeavor, the equivalent of erecting a “roadblock to inquiry.” Pragmaticism is how Peirce’s realism manifests itself. It wastes no time trying to understand what, by definition, is incomprehensible since it would be impossible to try to cognize the incognizable. Hence Peirce’s claim that there are no absolute individuals or completely determinate beings because what is intelligible is general (universal) or indeterminate. But this maneuver, meant to avoid the embarrassing admission that the basis for knowledge of the world (universality) is ultimately unknowable (haecceity), is not merely semantical. Pragmaticism means actually to give a more accurate account of the meaning of a concept. It is not in itself a metaphysical theory, in terms of describing, for instance, what kinds of things exist, as some have made pragmaticism out to be:

pragmatism is, in itself, no doctrine of metaphysics, no attempt to determine any truth of things. It is merely a method of ascertaining the meanings of hard words and of abstract concepts . . . As to the ulterior and indirect effects of practising the pragmatic method, that is quite another affair. (CP 5.464, 1905)

All pragmatists will further agree that their method of ascertaining the meanings of words and concepts is no other than that experimental method by which all the successful sciences (in which number nobody in his senses would include metaphysics) have reached the degrees of certainty that are severally proper to them today; this experimental method being itself nothing but a particular application of an older logical rule, "By their fruits ye shall know them." (CP 5.465, 1905)

In order to ascertain the meaning of a concept successfully, the method to undertake is not to define it through another inscrutable concept, but rather through a process analogous to the experimental method, used successfully in the sciences, which is focused on hypothesis, observation, testing, and conclusions. Hence, the meaning of the ascription of the universal "hardness" to a diamond is better explained in terms of what would happen to the diamond if rubbed by another substance, than by saying that it possesses a certain nature or form that is common to all such substances and that is abstracted by the mind. What is meant by saying that a diamond is hard, then, is that were we to subject it to such trials, it would be the case that it would not be scratched.

the question of Pragmatism is the question of Abduction, let us consider it under that form. What is good abduction? What should an explanatory hypothesis be to be worthy to rank as a hypothesis? Of course, it must explain the facts. But what other conditions ought it to fulfill to be good? The question of the goodness of anything is whether that thing fulfills its end. What, then, is the end of an explanatory hypothesis? Its end is, through subjection to the test of experiment, to lead to the avoidance of all surprise and to the establishment of a habit of positive expectation that shall not be disappointed. Any hypothesis, therefore, may be admissible, in the absence of any special reasons to the contrary, provided it be capable of experimental verification, and only insofar as it is capable of such verification. This is approximately the doctrine of pragmatism. (CP 5.196, 1903)

Peirce objects to the scholastics' method of explaining metaphysical concepts, but what is it in scholastic realism then that Peirce finds agreeable to his pragmatism?

before we treat of the evidences of pragmaticism, it will be needful to weigh the pros and cons of scholastic realism. For pragmaticism could hardly have entered a head that was not already convinced that there are real generals. (CP 5.503, 1905)

But what do real generals have to do with ascertaining the meanings of concepts? The answer is that it was the scholastic realists who maintained that universals are real, in an attempt (which Peirce endeavors to improve) to be able to claim that we can have knowledge of how things are.

Peirce's definition of reality as the object of the final opinion is the pragmatistic definition of this abstract concept. We can see how the definition reflects

Peirce's standards of scientific inquiry, for the final opinion is meant to be that "to which sufficient investigation would lead."<sup>383</sup> Peirce acknowledges, however, that the definition is rather unconventional, "inasmuch as it makes the characters of the real depend on what is ultimately thought about them."<sup>384</sup> Peirce tries to get around this objection, as seen earlier, by distinguishing between being independent of "what you or I or any finite number of men may think about it" (which reality is) and being independent of all thought (which reality is not). This last assertion, that reality is not independent of all thought, shows, I have argued, the Scotistic as well as idealistic roots in Peirce's thought. It also shows the correlation of pragmatism with synechism,<sup>385</sup> which Peirce admits: "[pragmatism] would essentially involve the establishment of the truth of synechism."<sup>386</sup>

We can begin to see the connection with synechism in Peirce's confession:

I myself went too far in the direction of nominalism when I said that it was a mere question of the convenience of speech whether we say that a diamond is hard when it is not pressed upon, or whether we say that it is soft until it is pressed upon. I now say that experiment will prove that the diamond is hard, as a positive fact. That is, it is a real fact that it would resist pressure, which amounts to extreme scholastic realism. (CP 8.28, 1871)

The emphasis on the word "would" is the clue. It recalls the notion that a law must be infinitely indeterminate in order to fully capture all instances under its "rule." In the same way, a (true) concept needs to be expressed in a future-oriented (subjunctive) proposition if it is to apply to all the objects under it. A definition of a concept in terms of what *will* happen if something is the case is an inaccurate or confused account because it disregards all the possibilities (including those subject to tychism, which is still active in the universe):

Pragmatism is the principle that every theoretical judgment expressible in a sentence in the indicative mood is a confused form of thought whose only meaning, if it has any, lies in its tendency to enforce a corresponding practical maxim expressible as a conditional sentence having its apodosis in the imperative mood. (CP 5.18, 1903)

A true continuum is something whose possibilities of determination no multitude of individuals can exhaust. (CP 6.170, 1902)

Just as no multitude of instances can exhaust a law or concept, no multitude of individuals can exhaust all the possible answers about everything; questions put to rest may crop up again until settled once more in a different way. This is what fallibilism, closely allied with synechism, implies. And this is why the most accurate description of reality has to take into account this indeterminacy. But Peirce was no relativist about truth:

There is, then, to every question a true answer, a final conclusion, to which the opinion of every man is constantly gravitating. (CP 8.12, 1871)

Scotus also thought that every question had a true answer and that we could come to have knowledge of the external world. But for him the reality of that which is real depends on the individual. But for Peirce, the reality of that which is real depends on synechism: a real force, hence a real fact that compels us toward rationality:

the reality of that which is real does depend on the real fact that investigation is destined to lead, at last, if continued long enough, to a belief in it. (CP 5.408, 1893)

In a parallel way, the universe itself is gradually becoming more regular and lawlike, and at the same time less tychistic.

### Peirce's Scholastic Realicism

[H]e who introduces a new conception into philosophy is under an obligation to invent acceptable terms to so express it . . . For example, it might be agreed, perhaps, that the name of a doctrine would naturally end in -ism, while -icism might mark a more strictly defined acception of that doctrine. (CP 5.411, 1905).

I am myself a scholastic realist of a somewhat extreme stripe. (CP 5.470, c.1906)

Charles Sanders Peirce claimed to be a scholastic realist. We have seen he was particularly sympathetic to the realism of John Duns Scotus. However, I want to argue that by the time he developed his mature philosophy, Peirce, by his own rules, should no longer have called himself a realist, but rather a "realicist," for his version of the doctrine, although firmly based on Scotus's principles, was nevertheless sufficiently original enough to merit the modified name. This is particularly evident in his notion of the real which, as I have shown, encompasses nominalist and idealist, as well as realist, aspects, resulting in much confusion for his commentators. Just as Peirce was compelled to distinguish his brand of pragmatism by calling it "pragmaticism," a term "ugly enough to be safe from kidnappers,"<sup>387</sup> In the same way, a distinction can be made between moderate or scholastic realism and Peirce's "extreme" version of it. I therefore propose that Peirce be dubbed a "scholastic realicist" because he not only combined nominalism, idealism, and scholastic realism into one package, he also gave each his own special twist, thereby changing their original meanings. This neologism would also serve clearly to differentiate his position from Plato's, which is commonly described as an extreme realism, and which Peirce rejected. Although Peirce identifies Scotus as a key influential figure, and we have seen the many parallels of his notions with Scotus's own, as he develops his own brand of realism, and as a result his pragmatism, Peirce eventually distances himself from Scotus, as we have seen, towards the end of his career.

In a recent paper, Boler states that when he wrote his 1963 book he did not

think to distinguish Peirce's scholastic realism from "his more general and developing realism."<sup>388</sup> Although Boler claims that scholastic realism "may play a relatively minor role" in Peirce's "fully developed realism," he disagrees with those others who believe that Peirce eventually gives up on scholastic realism. I take Boler's side against that view—it is more accurate to say that Peirce incorporated important features of scholastic realism, adapting the doctrine to his own realism. But even though Boler says that this influence may be "relatively minor" in Peirce's fully developed realism,<sup>389</sup> he still believes that Peirce "can rightly claim the label [of scholastic realist] for himself throughout his writings."<sup>390</sup> My proposal is rather that a better label is that of scholastic realicist, since it marks Peirce's own reworking of that doctrine, as well as his debt to it.

Let me summarize. Peirce incorporates elements of nominalism, idealism, and scholastic realism in his notion of the real. He accepts the nominalist notion that generals, or universals, are of the nature of thought, but rejects that doctrine's claim that only individuals are real. He accepts the idealist notion that reality is relative to the mind, but rejects Berkeley's description of reality. He accepts the scholastic realist notion of the reality of universals and adapts Scotus's *realitas* to reflect his own version of reality, but rejects Scotus's notion of contraction. Peirce then takes all these elements, adds some of his own such as synechism, and combines them into his own theory, which I have suggested should be called his scholastic realicism. We can now complete the table:

	PLATO	ARISTOTLE	REALISTS	NOMINALIST	PEIRCE
UNIVERSALS	Exist Real	Exist (?) Real (maybe)	Don't exist Real	Don't exist Not real	Don't Exist Real
SINGULARS	Exist Not Real	Exist Real	Exist Real	Exist Real	Exist No Reality

**Table 3-4**

But why did Peirce not create the neologism of "realicism" himself, as he did in the case of "pragmatism?" I would say it is probably because during Peirce's time, not that many were interested in "kidnapping" his realist doctrine, as was apparently the case for pragmatism, so it was "safe" to refer to his realism simply as "extreme." However, since there seems to be a renewed interest in realism lately, it might be advisable to heed Peirce's own advice and apply it, in turn, to him.

A case can be made, however, for the claim that individuals (absolute individuals) do not have "reality" in Peirce's sense. The principle of continuity, which guides all things, provides a better account of the way things are, Peirce argues, for it takes into account the true nature of law which is indeterminate. Peirce does

not deny individuals exist, however, nor does he deny that we experience them.

It is Scotus's notion of a *realitas*, or "reality" ("formality" or *formalitas*) that Peirce adopts and adapts. This, as discussed above, is a feature, or characteristic of a thing, which, although it has a basis in a real existent thing, is nevertheless mind-dependent. Peirce's "reality," is "not independent of thought," just like Scotus's *realitas* is an *ens rationis*, or mental entity, in the sense that we make the distinction in our mind (but it still has a basis in the existent thing). Reality for Scotus has a basis in the existent thing, a Second. Peirce takes Scotus's notion of reality, frees it from the "idle" and complicated distinctions which burden it (like non-adequate identities and such), and recycles it, after adding the notions of the scientific method and synechism, defining it as the object of the final opinion. As a result, the basis for the notion of reality for Peirce is a Third.





## Conclusion

The aim in this endeavor has been to clarify the relationship between Scotus's and Peirce's brand of realism. Peirce has been taken to be inconsistent, even incoherent at times, in his claims, but I have shown that once his relation to Scotus and Scotus's relation to his predecessors are understood, it becomes apparent that Peirce's theory comes together in a coherent whole.

Peirce's cryptic remark that Scotus, the quintessential realist, was too much of a nominalist was the place to start. To decipher this, I had to explore what realism was trying to answer in the first place: the problem of universals. I traced the problem, originating with Plato, through Aristotle's ambiguous analysis which created what I called "the muddle" and which subsequent generations tried to resolve, culminating in Scotus's masterpiece of subtlety and ingenuity. Scotus managed, for the most part, to keep a difficult balance between Plato's extreme position of existing universals and the other extreme nominalist position of existing particulars only, by claiming that universals were real, though nonexistent as such. What makes the universal real, though, is the "tie" with the existent thing, the particular. It is this tie, and the nod to the nominalist that only particulars exist, that makes his position a moderate, or scholastic, realism, and which allows Scotus to achieve his goal: to claim that we have knowledge of the world.

So was Peirce a scholastic realist? As I have done throughout this work, I will have to qualify my answer: no, but in a certain sense, yes. Let me begin with the "yes" part. As I show, he incorporates many realist notions: the claim that all thought, and therefore all knowledge, is of the universal (nominalists acknowledged this too) and not of individuality as such, the conviction that universals are real, the idea that the mind makes a contribution to what reality is, and the importance of preserving our claim to knowledge of the world. I also point to the parallels between Peirce's and the realist's respective enterprises: just as scholasticism is the result of reconciling Aristotle with Christianity, we can say that pragmatism is the result of reconciling scholasticism with science,<sup>391</sup> just as Scotus

“tests” his claims against the authority of the Church, we can say that Peirce’s test is achieved through the final opinion. I clear up Peirce’s seemingly-inaccurate pronouncement that the words “real” and “reality” were invented in the thirteenth century, and then demonstrate how Scotus’s *realitas* is cleverly transformed, with idealist overtones, into Peirce’s “real.” I also show how Peirce’s categories turn out to be a modern version of Scotus’s ontology.

But I still want to say, in the end, that Peirce was not a true scholastic realist. The reason is that he severs the scholastic tie to the particular which ensures the reality of the universal, and hence of our knowledge of the world. Peirce believes this tie, especially as described by Scotus, is too restrictive for an accurate conception of law. He also believes it to overly emphasize the importance of individuality or singularity and therefore of the unknowable. He chooses to ground the claim to knowledge on something he claims is more solid: the final opinion, to which sufficient investigation would lead. What makes this a reality is the “real fact” that investigation is destined to lead, if continued long enough, to a belief in it. This compulsion towards rationality is the result of synechism, the principle of continuity and generality. The basis, then, for reality is a Third. This makes for a new kind of extreme realism. Peirce himself concurs that he was not a regular scholastic realist: that is why he insisted, in order to set himself apart, that he was of an extreme kind.

Therefore, I have proposed that Peirce be called a scholastic realicist instead. His skillful synthesis of nominalism, realism, and idealism into a synechistic pragmatism result in a complex, but coherent, and thoroughly original, doctrine which merits the new name. I think Peirce himself, were he to reflect on my suggestion, might agree.

## Notes

1. See, for example, Eco’s *The Sign of Three: Dupin, Holmes, Peirce*, Eisele’s *Studies in the Scientific and Mathematical Philosophy of Charles S. Peirce*, Frontodona’s *Pragmatism and Management Inquiry*, Gandelsonas’s *X-Urbanism: Architecture and the American City*, Milovanovic’s *Postm odern Criminology*. Also the website [www.jfsowa.com](http://www.jfsowa.com); <http://members.door.net/arisebe/menu/library/aboutcs/prmain.htm> has many articles, including Ransdell’s “The Relevance of Peircean Semiotic to Computational Intelligence Augmentation,” Van Breemen’s “Dieiagrammatic Signs, Electronic Media and Semiotics,” and Brier’s “Cybersemiotics . . . Why information is not enough! A Trans-Disciplinary Approach to Information, Cognition, and Communication Studies, through an Integration of Niklas Luhmann’s Communication theory with Charles Peirce’s Semiotics,” to name just a few.

2. CP 6.4, 1898.

3. CP 6.4, 1898.

4. One would expect that this criticism was aimed in part at the scholastics, who

were theologians; however, that is not the case (see CP 1.659). Rather, Peirce had in mind later “seminarians” who confused metaphysics with religion. I treat this in more detail in “Peirce y la Metafísica,” forthcoming in *Anthropos*.

5. The rise of humanism is probably one; Peirce gives his own (perhaps not entirely unbiased) account in CP 8.11, 1871.

6. There were other realists and nominalists at the time, of course, but these are the names usually associated with the two positions.

7. Even Scotus seems aware of the difficulty involved in understanding his ideas (e.g. the formal distinction): “Who, then, can grasp this let him grasp it, because my intellect does not doubt that this is the case.” (Tweedale, 1999, p.86)

8. I will go into them in more detail in the Peirce chapter.

9. The task of organizing these into a sensible order is a continuing one; more on this in the Peirce chapter.

10. I suppose that would make him, and possibly me, “dunces,” but only in the original sense, of course.

11. There is a reason for the odd spelling; more on this in the Peirce chapter.

12. Because of time and space constraints, I will not include his semiotic, nor his logic; I leave that for a later time.

13. I will use standard citation norms for ancient authors (e.g. Stephanus numbers for Plato and Bekker numbers for Aristotle).

14. Scotus’s early death prevented the final editing of his most important work, the monumental commentary on the *Sentences* known as the *Ordinatio*. Begun at Oxford and continued in France as an outgrowth of earlier lectures, this final version was dictated to scribes, with instructions to implement it with materials from his Paris and Cambridge lectures (the *Lectura* is considered to be his original set of notes of his Oxford lectures around 1300, the *Reportata Parisiensis* is just that, reports, or student’s notes, of his lectures at Paris from the period 1302-1305). A modern critical edition of the *Ordinatio*, as part of the *Opera Omnia* begun by the Typis Polyglottis Vaticanis (Vatican Press) in 1950, P.C. Balic, ed., is still in progress. Traditionally, the name “*Ordinatio*” is used when referring to the text from the Vatican edition, while *Commentaria Oxoniensia* or more simply *Opus Oxoniense* is used to refer to the earlier Wadding-Vives edition originally edited by Luke Wadding, Lyons, in 1639, and republished, with only slight alterations, by L. Vives, Paris, in 1891-95. (See Wolter for a more detailed account). Scotus is standardly cited with book, distinction, part, and question.

15. Peirce published many articles and reviews in his lifetime, but most of his papers were in their original handwritten state when he died. Peirce published what would amount to twelve thousand printed pages. The known manuscripts that he left unpublished (and which are housed at the Houghton Library at Harvard) make up about eighty thousand handwritten pages. If two of these make on the average one book page, and calculating five hundred pages to the volume, it would take one hundred four volumes to encompass all his works. (W2 p.xiii) In 1931 the first of what would eventually be eight volumes of *The Collected Papers*, under the editorship of Charles Hartshorne and Paul Weiss, and later, Arthur Burks, was published by Harvard University Press. The Peirce Edition Project is working on the *Writings of Charles S. Peirce*, a chronological version including papers not in the original collection. There is also a microfilm edition of his manuscripts “The Microfilm Edition of the Charles S. Peirce Papers in the Houghton Library at Harvard University,” comprising of a total of thirty-eight rolls. Peirce is standardly cited by volume and para-

graph in the *Collected Papers* (otherwise referred to as “CP”), and by volume and page in the *Writings* (W). Unpublished manuscripts are referred to by manuscript number (MS). It is also customary to include the date.

16. Of course, there are several other reasons: the writing style, the fact that Latin was the language of choice, the preoccupation with theological dogma, etc.

17. I am thinking in particular of words such as general (genera), specific (species), real, etc.

18. “From Kant, I was led to an admiring study of Locke, Berkeley, and Hume, and to that of Aristotle’s . . . and somewhat later . . . the works of medieval thinkers . . . most especially from John of Duns . . . and from William of Ockham.” (CP 1.560, 1905)

19. I will address this in more detail in the “Hair” section.

20. I’m afraid my accounts will be a bit sketchy because there is a lot of ground to cover, and I will not be able to deal with all details of some still controversial issues.

21. Some may recognize this poem from the last page of *The Name of the Rose*, the novel about medieval monks by Umberto Eco, a semiotician and admirer of Peirce.

22. I thank Joe Pitt and Roger Ariew, who helped me with this particular translation.

23. Of course, it is also an expression of the transient nature of things.

24. I have adapted an example used by Thomas Nagel (p.196).

25. A word is not just a sound, of course, not even just a sound (or inscription) type, because different instances of the same sound (or inscription) type can be instances of different word types. I thank Risto Hilpinen and Kiriake Xerohehmona for helping point that out.

26. This is a version, in layman’s terms, of what came to be called Plato’s “Third Man” problem.

27. I will be using the terms “individual,” “particular,” “singular” interchangeably, as is common, although, as will be seen in the next chapter, originally they did not mean the same thing.

28. Peirce, as we will see, prefers the use of “general.”

29. I’m thinking of Wittgenstein in particular, though there are many others.

30. Here, I have adapted an example used by Bolter (p.27).

31. There are several other uses of “realism” in philosophy, which I will not go into, for example, scientific realism, internal realism, transcendent, immanent, etc. See Haack, (1987) (2002), Armstrong, (1978). Others, in referring to Peirce’s realism, have coined terms such as “obstrusive” and “projective” realism (Farber, 2005).

32. Although Aristotle speaks of universals as “predicates,” there is evidence that his concern was metaphysical and not purely logical (that is, concerned with language).

33. The better-known examples are Plato and Aristotle, Scotus and Aquinas, respectively.

34. It was pretty much assumed during the Middle Ages that particulars do exist; in this, as in many other ways, we see Aristotle’s influence (skepticism about the existence of the material world was a much later development). What needed explaining was the kind of “existence” universals supposedly had.

35. Aristotle defined the universal in logical terms. His followers tried out several metaphysical definitions, with limited success, as we will see below.

36. Aristotle was reintroduced to Western Europe in the eleventh century by Arab scholars as the result of the Moorish invasion of Spain.

37. Peirce considered conceptualism as a disguised nominalism: “Many philosophers

call their variety of nominalism, 'conceptualism'; but it is essentially the same thing; and their not seeing that it is so is but another example of that loose and slapdash style of thinking that has made it possible for them to remain nominalists. Their calling their 'conceptualism' a middle term between realism and nominalism is itself an example in the very matter to which nominalism relates. For while the question between nominalism and realism is, in its nature, susceptible of but two answers: yes and no, they make an idle and irrelevant point which had been thoroughly considered by all the great realists; and instead of drawing a valid distinction, as they suppose, only repeat the very same confusion of thought which made them nominalists." (CP 1.27, 1909)

38. Because of time and space constraints, I will not treat Ockham's position; for an excellent analysis see Marilyn McCord's *William of Ockham*.

39. As mentioned already, my purpose in these sections is merely to provide a general summary of these views as background to the problem of universals. For more on the ancient Greeks, please consult the works of Gail Fine, Terence Irwin, Gregory Vlastos, to name a few.

40. Translation by B. Jowett.

41. Socrates speaks as if the problem of "the one and the many" is an old one: "the ancients . . . handed down the tradition." (Philebus, 15b 12) Perhaps the problem can be traced back to Thales. Of course, we are all aware that since Socrates left no written work, we are dependent on Plato's interpretations of what he said. It is difficult to determine, as a result, where Socrates ends and Plato begins. I will designate Plato, however, as the originator of the problem.

42. See Cresswell, pp.238-47.

43. It is commonly believed, of course, that this was Plato's philosophy, though Socrates was the speaker.

44. I follow what seems to be a certain norm in the literature, that is, using all three of these terms synonymously. I am not sure (and my lack of knowledge of classical Greek is no help) if that is completely accurate. I will have more to say about the term "universal" as used by the medievals.

45. Translation by David Bostock.

46. See, for example, Cresswell, p.241.

47. See, for example, Tweedale (1993), p.78.

48. Because of natural disasters, wars, environmental conditions, lack of resources, etc., very few Greek manuscripts survived in Western Europe. For some reason, more of Plato's works were known than Aristotle's, until the Moorish invasion of Spain, when Aristotle was "rediscovered" as a result.

49. Translation by W. D. Ross.

50. I use "individuals" in the medieval sense of "individual things," not in its more modern sense meaning "people."

51. It's not clear how many are needed: Aristotle seems to say that several "memories" constitute one experience; but wouldn't one encounter, and therefore one memory of it, be sufficient?

52. Translations by Ross.

53. Bosley and Tweedale, p.660.

54. I need to emphasize again the controversial nature of all this: it's due not just to what Aristotle says, but also to what he doesn't say. See for example, Tweedale (1987) pp.412-14.

55. Aristotle, the "Father of Biology," originated, as we know, this system of classification.

56. I hope the reader is as fascinated, as I am, to see how so many of these words used in our everyday speech had a very technical philosophic origin.

57. Tweedale (1987) p.421.

58. I think the same can be said of universals and genera and species as what was said of individuals and concrete things: all genera and species are universal, but not all universals are genera and species. This will become clearer later.

59. As with all ancient texts, it is difficult to determine whether any particular ordering of sections was the author's own. In many cases, we are aware of compilations done by subsequent followers. Indeed, it is difficult enough to determine the authenticity of many texts.

60. Tweedale (1986) p.503.

61. Tweedale (1993) p.78.

62. See Armstrong, p.77-92.

63. Of course, it could be said that species and genera are one kind of universal, just as I said that there may be more than one kind of individual, but that does not solve all the incongruities.

64. Translation by M. Tweedale. This sentence is attributed to Alexander by David the Armenian. See Tweedale (1984) p.290.

65. Alexander is not considered a scholastic, but as a commentator of Aristotle, he was probably known (Tweedale tells us) to Avicenna, who was very influential to the schoolmen.

66. Of course, it could be argued that I too am guilty of this.

67. I don't pretend to be an authority on the Aphrodisian, but what I have encountered seems to show that he was original in this.

68. An accident, in Aristotelian terms, is a feature or characteristic of a thing, not essential, or necessary to the thing's existence (nor directly entailed by the thing's definition). (Bosley and Tweedale, p.660) More specifically, in logical terms, it is a predicate that is attributed to a subject incidentally, not necessarily (not part of the definition). In metaphysical terms, it is a category of being whose nature it is not to exist in itself but rather in another subject (there are exceptions, however, in transubstantiation; see 209 below).

69. This refers to the Aristotelian notion that, when apprehended (or perceived) the object becomes a part of the organ doing the perceiving, or apprehension.

70. There is some question as to the authenticity of this passage; supposedly it appeared in a now-lost commentary. However, enough sources have attributed it to him so as to make it extremely likely that he held the view. (Tweedale (1984) p.284)

71. Bosley and Tweedale, p.667.

72. Bosley and Tweedale, p. 667.

73. Another possibility is one that is open to all interpreters, especially those of ancient texts: the possibility of inauthenticity. Tweedale dismisses this claim, citing several sources for its authenticity.

74. Tweedale tells us (p.285-86) that Simplicius and David the Armenian attribute to Alexander the view that universals were by nature posterior to particulars, and Dexippus claimed that for Alexander universals get their reality from the particulars under them.

75. Tweedale (1984) p.289.

76. I have a feeling this has something to do with Aristotle's account of abstraction

and our needing several encounters (perhaps with several different instances?) in order to form an experience which will then be remembered.

77. We must remember, of course, that it was not known at this time that the sun was one of many stars.

78. As with Plato's Forms, obviously it is not the same kind of existence as that of particulars.

79. Tweedale (p. 296) for the most part disagrees, claiming that in Greek there is no significant difference in meaning between "the universal" and "the common item," but later he admits that perhaps, "in a sense" Alexander did make a distinction.

80. I use square quotes, because, as will be seen below, I think Alexander uses this term in different senses.

81. Note that Alexander speaks of "concrete existence" when referring to particulars' mode of existence.

82. Here we see Alexander having the same concern over "the problem of the one and the many."

83. Tweedale (1984) p.296.

84. At the risk of sounding redundant, I will use both my notation and its description together for the reader's convenience.

85. This will become clearer when we look at Scotus, for he distinguishes these uses as well.

86. Part of the problem, I think, is that sometimes the word is used as an adjective (to describe the feature) and other times as a noun (to describe what's in the mind).

87. Tweedale, p.300.

88. For a discussion on the different ways a universal depends on particulars and vice versa, see Amie Thomasson, in *Fiction and Metaphysics*. She distinguishes singular (dependence on a particular object), generic (dependence on objects of a certain kind or type), constant (A can exist at t only if B exists at t), and historical (A's existence at t depends on B's existence at t or prior to t) dependence. It sounds as if Alexander would say that the dependence of U1 on particulars is generic, and not constant, not historical. I thank Hilpinen for calling my attention to this.

89. (Tweedale, p.298) This is a point that Peirce will make later, and in which there is much at stake (namely, his "extreme" realism).

90. Boler, p.44.

91. Gracia (1994) p.14.

92. Translation by Spade.

93. "Subsistence" was usually distinguished from the kind of existence substances have: an individual thing is a substance because it underlies, or "substands" accidents (Maurer, p.31). The term seems to have been used in two ways: to refer to a non-substantial thing which, unlike an accident, does not need a subject in which to exist, like genera and species which do not require a subject in which to inhere (they are not substances, because they do not underlie accidents), but also the kind of dependent "existence" which a quality seems to have. Boethius seems to be using these two senses.

94. Translated by Spade.

95. Could we say that things such as scientific laws fall under this category? We will discuss this further when we look at Peirce's Third category.

96. See Spade, p.xi.

97. This is further evidence for considering Alexander a realist.

98. It could be argued (and Tweedale inclines towards this theory) that Boethius was a Platonist at heart, for Boethius adds the disclaimer: “I have not deemed it fitting to judge between [Plato’s and Aristotle’s] views, for that belongs to deeper philosophy.” (Bosley and Tweedale, p.365) However, it is not clear here where his preferences lie, although apparently in his other works (e.g. *The Consolation of Philosophy*) a Platonist bent is more obvious.

99. Bosley and Tweedale, p.365.

100. Tweedale finds the choice of this term, as opposed to “form” to be indicative of Boethius’s Platonic inclinations, since the latter sometimes uses this term to describe the relationship between particulars and Forms. I don’t see a strong argument for this; I think Boethius was trying to describe the connection between particulars. His use of the terms “form” and “nature” in the same passage indicates to me that he was not so constrained.

101. There was a later tradition of referring to the abstracted form in the mind as the “intelligible species” so as to differentiate it from the regular species. It is not clear if this is what Boethius is referring to.

102. As I have mentioned above, Boethius speaks mainly of genera and species, but I have argued that he is referring to universals.

103. Perhaps this may have been a precursor to the formal distinction, which we will look at below.

104. Translation by Bosley and Tweedale.

105. Only individual things have numerical unity; it is the mode of being, or way of existing, of individuals.

106. Again, I find it fascinating to see the origin of our use of this word: an accident is something that “happened” to something.

107. Owens, p.188.

108. I will go into more detail in the Scotus chapter.

109. “Difference,” like many terms we commonly use today, had a technical meaning in philosophy. Things differed if they had a common feature among all the other differing ones. Things were diverse if they had no common feature.

110. Individuals are numerically different.

111. Here, “intention” is used as “concept.” The scholastics made a distinction between first and second intention, as we will see in the next chapter.

112. In this passage, Avicenna alludes to the idea that we cannot cognize an individual’s individuality; we can only think in general terms. Scotus will elaborate on this.

113. We can see the Aristotelian tendency of framing universality in logical (language-related) terms: predications, definitions.

114. Owens, p.190.

115. See Allan Wolter’s *The Transcendentals and their Function in the Metaphysics of Duns Scotus* for a thorough account.

116. This was not the only possibility for reconciling Avicenna’s theory with the theory of transcendent properties of being. As we will see, Aquinas took the alternative of accepting the denial of unity and then trying to argue against the nature as having a proper being.

117. Gracia (1994) p.ix-xii.

118. Garcia (1994) p.ix-xii.

119. The source of most of the following general historical information is Hyman and Walsh’s *Philosophy in the Middle Ages*.



120. Below, I will go into more detail of the process.
121. Although the proper Latin term is “suppositum” (singular) and “supposita” (plural), the word “supposit” (singular, “suppositis” plural) is used in its Anglicized form to mean “individual thing;” it is medieval in origin.
122. There was also a concern not to contradict what other revered forebears had said, e.g. the more Platonistic Augustine; we see Scotus struggling to reconcile all these.
123. When I speak of “the nominalists” I usually refer specifically to Ockham, who exemplifies their doctrine, just as, unless otherwise indicated, Scotus exemplifies the realists.
124. In this very limited sense, nominalists could be considered realists of sorts. Tweedale (1999) p. 396.
125. Nominalists then had to answer what kind of basis this similarity had; they were unable to do so without making some kind of realist claim.
126. I will elaborate more on the “real” below.
127. There were several problems with how we got to know these ideas: divine illumination, Augustine’s answer, seemed too undemocratic.
128. Tweedale, (1999) p.396.
129. This will be qualified for Scotus below.
130. See especially Abelard’s *The Glosses on Porphyry*. Also *Selections from Medieval Philosophers*, edited by Richard McKeon (New York: Charles Scribner’s Sons, 1957).
131. Translated by Tweedale. See *Basic Issues in Medieval Philosophy*, Richard Bosley and Martin Tweedale, editors (Ontario: Broadview Press, 1997).
132. Bosley and Tweedale, p.397.
133. Noone, p.529.
134. Tweedale (1999) p.589. Note that the medieval notion of “objective” is almost the opposite of the modern one: it has this being because it is the object of thought; this will resurface with Peirce.
135. *Quaestiones in librum Metaphysicorum VII*, q.18, Etkorn and Wolter, trans.
136. *Quaestiones in librum Metaphysicorum VII*, q.18, Etkorn and Wolter, trans.
137. By “indeterminate,” he means without particular features; Peirce too uses this term. Since Scotus uses a lot of medieval terms and concepts that are either no longer used or have shifted in meaning, it will be necessary for me to stop every once in a while to go over certain concepts (as I have already done).
138. This translation is Tweedale’s.
139. It must be remembered that “species” here does not have the same meaning as Aristotle’s biological classification.
140. Wolter (1990) p.518. It is easy to see how the word “signification” is associated with “meaning.” It is also easy to see why it was not uncommon for scholastics (like Ockham) to speak of thought as being in signs. Peirce adopted this, I think, from him.
141. It is difficult to say, as we have seen, where Aristotle ends and the rest begin regarding this presumed “isomorphism” of the form in the thing and the species in our mind which carried through to the scholastics. See Wolter (1990) p.44.
142. I use scare quotes because the notion of “real” is something that will be further discussed later.
143. Scotus uses “existence” as being in the mind as well as outside the mind. We will see that for Peirce “existence” has a more limited use.

144. Tweedale, p.498.
145. Angels actually fill a logical space beginning with insensible things (inanimate things) and God: there are sensible things (animals), sensible things with spirit or soul (man), things that are just spirit (angels) and God, who is just spirit, but unlike all the previous things, is uncreated. I will discuss angels a bit more below.
146. Wolter (1999) p.99.
147. For Scotus, of course, “scientific” means having to do with knowledge, or scientia. It does not have the connotation that modern science has today.
148. I have used Wolter’s translation here. (Wolter (1999) p.100)
149. Peirce uses this same example to speak of Firstness.
150. I wonder if the damned acquire this as well, since they will be denied the beatific vision. I suppose they could potentially have intuitive powers, only they could not get close enough to God to experience him.
151. For scholastics, a “pure perfection” was something it would, absolutely speaking, be better to have than not to have, e.g. being, blessed, etc., as opposed to a “mixed perfection” which would be qualified, like “man,” “gold,” and the like. (Wolter (1999) p.202)
152. “Haecceity” is the Anglicized form of “haecceitas.” It is what makes Peter Peter, as opposed to what makes Peter a man (his “whatness” or “quiddity” or “quidditas” or form).
153. *Quaestiones* VII, q.1.
154. Wolter (1995) p.60.
155. Wolter (1995) p.61.
156. Again, it is fascinating to see how so many of the words we use have a technical (philosophical) origin and to see how the meanings have shifted over time.
157. Aristotle spoke of an agent (active) intellect as well as a possible (passive) intellect.
158. Recall that “species” here does not have the same meaning as the biological classification; rather, it means the abstracted form without the particular features. The species itself is a real psychological entity, not just an *esse cognitum*.
159. Tweedale, p. 410.
160. Ockham admitted that we do have one concept in mind that we apply to similar instances, so he might have agreed to this sense of “universal” although he rejected the whole process of abstraction. (Tweedale, p. 427)
161. Recall Aristotle’s claim that Callias’s particular knowledge of grammar is individual.
162. I will have more to say about contraction later.
163. Recall that accidents are those characteristics which are not essential.
164. If it were, only one thing could be it.
165. The scholastics believed that all features of an individual thing are individuals; e.g. the brownness of my hair is an individual, etc.; this has an Aristotelian basis. Recall Callias’s knowledge of grammar.
166. Tweedale, p. 413.
167. Wolter (1946) p.57.
168. Owens, p.192.
169. Recall that I have been using individual, singular, and particular synonymously, and Scotus does so for the most part. The words have different etymologies, however, as I will mention later in the next section.

170. (Boler, p.49.) We will see later that Peirce makes a similar claim regarding Thirdness. Friedman, in *C. S. Peirce's Final Realism*, however, disagrees that this is what Peirce meant. I think she misconstrues Peirce and Scotus.

171. Contraction and haecceity will be discussed in more detail below.

172. I believe this is one of the reasons why he says Scotus is too much of a nominalist, as will be seen in the next chapter.

173. It does not, however, have to be of an actually existent object. Scotus allows us to "abstract" from nonexistent (e.g. a centaur) as well as momentarily absent objects. Peirce Alludes to this when he speaks of "Habitualiter" below.

174. I really have no idea whether a Dodo had any toes, and if so, how many.

175. My knowledge of tigers is almost comparable to that of Dodos, I'm afraid.

176. Actually, Peirce will argue that one cannot have such knowledge of an individual.

177. Wolter (1990) p.44.

178. Ockham, as we know, argued vehemently against it.

179. *Quaest.* VII q.13.

180. The following is a synopsis of the traditional (but perhaps not the current) catholicism: the blessed are those who make it to Heaven and "reside" with God and the angels; the damned are those who, because of their grave sins, are not allowed to be in God's presence and who may suffer other punishments as well. Those in purgatory are there only temporally until they are cleansed enough of their sins to be allowed into Heaven. Those in limbo are not there because of their sins, but because circumstances were such that they were unable (through no fault of their own) to be baptized into Christianity. They will not be allowed into Heaven, but they will not suffer as the damned.

181. King, p.60.

182. As we've said before, the complete universal is the "processed" (by us) version of the nature-in-itself.

183. "Differentia" although Latin in origin, is also used in English, usually in metaphysical contexts. Scotus uses the term "individual differentia" more often than "haecceity;" they are synonymous.

184. Again, it can "exist" in the mind as a universal, but that is not actual existence.

185. I will discuss whether there is such a thing as an immediate intuition according to Peirce, below.

186. For a thorough analysis of the treatment of individuation in the Middle Ages and the notion in general, see Jorge Gracia's *Introduction to the Problem of Individuation in the Early Middle Ages*, and *Individuation in Scholasticism and Individuality*.

187. Park (1988) p.117.

188. Noone equates indivision, or indivisibility, with non-instantiability: "Socrates cannot recur." (pp.532-33)

189. Scotus did not invent the term, although he became associated with its use.

190. See Gracia's "Individuality and the Individuating Entity," p.232.

191. We will see below that this is what Henry of Ghent did when he determines the principle of individuation.

192. Translation by Noone, p.531.

193. It is usually called the common nature, but I think it best to distinguish it this way.

194. This does not necessarily mean that he compromised his philosophy as a result.

195. Wolter (1990), p.72.

196. Wolter (1990) p.72.

197. Wolter (1992) p.xii.

198. Angels were supposed to be sexless (although usually named and pictured as males), so I hesitate to use a personal pronoun.

199. For more on the limits to God's power, see Aquinas's *Summa Theologiae* part 1. A selection can be found in *The Basic Writings of St. Thomas Aquinas*, vol. 1, edited by Anton C. Pegis (New York: Random House, 1945).

200. It would be contradictory for him to be all-powerful and to either create something He could not lift, or not be able to create it. This would mean that at the same time Rome was both founded and unfounded. Obviously, travel back in time (like Einstein's theory of relativity seems to consider), where the future is changed, as is common in many of today's movies, was not an option for them.

201. This does not mean that God is physically present everywhere; God's attributes can only be spoken of analogically. This was the doctrine of analogical predication which was accepted, with varying degrees, by most scholastics.

202. Ross, p.496.

203. Aquinas escaped the consequences of the condemnation by having died three years before. In 1324, a sympathetic Pope John XXII canonized him and the then Bishop of Paris revoked the earlier condemnations of his positions. (Hyman and Walsh, p. 582-84)

204. Among the other condemned theses: "That there is no more excellent state than to study philosophy" (#1), and "That the only wise men in the world are philosophers" (#2). I am sure that the reader agrees that these should have been revoked as well!

205. In the *Lectura*, his first bachelor lectures at Oxford, he treats the topic in distinction 3, questions 1-6, as well as in the *Ordinatio*, his personally revised notes. (Wolter (1992) pp.15-16) In question 7, he discusses whether there can be more than one angel of the same species.

206. Spade translates "distinctione personali in Angelis" as "the personal distinction among angels."

207. Scotus gives seven arguments in support of this position. It is not necessary for my purposes to go over these, nor any of the other questions in detail.

208. Wolter, 1990, p. 86.

209. I should mention that this notion of accidents being distinct from their substances became a pivotal one for the scholastics, for it was used to explain transubstantiation in Aristotelian terms. This is what occurs when the priest consecrates the bread and wine during the Eucharist. The sense-perceptual qualities, or accidents of the bread and wine remain unchanged. The substance of the bread and wine, however, do change into the substance of Christ's body and blood. Since accidents and substance are distinct, they could, in this case, exist apart. "Bilocation" (one thing being in more than one place at one time) and "compenetration" (more than one thing in one place at the same time), since not logically contradictory, were therefore within the range of God's power. Both of these had to take place during transubstantiation since Christ's whole body would be present in every single host. (Wolter (1992) p. xxiv)

210. Translation by Wolter. The brackets are mine.

211. Scotus uses "individual differentia" in the *Lectura*, the *Ordinatio*, and the *Quodlibetal Questions*. Although he is associated with the term "haecceity" he only uses it in

the *Questiones Metaphysicam*. (Tweedale, (1999), pp.420-26)

212. *Quaestiones Metaphysicam*. (Tweedale (1999) pp. 420-26)

213. Two things can be “one” in more than a numerical way: they can be “one” “specifically” if they both belong to the same species. That is a “less-than-” (or “not-quite”) numerical unity.

214. I will elaborate a bit more on our ability to understand haecceity below.

215. Due to time and space constraints, I will not go into much detail about this analogy.

216. There is such a thing as generic unity as well: all animals are “one” in their genus.

217. Commentators disagree as to what extent Aquinas interpreted the formal distinction as Scotus did. And Ockham remarked once that the formal distinction was as much a mystery as the Trinity; he did, however, recognize the latter while rejecting the former, except as it related to the divine attributes. (Wolter, (1990) p.27)

218. Again, this presupposes that there is an isomorphism between thought and reality so that we can speak of the intelligible form or *ratio* or *intentio* as in the thing or in the mind. (Wolter (1992) p.30)

219. Scotus probably meant to compare the formality with the Aristotelian “form,” which is the essence of the thing and also the basis for its being intelligible. (Wolter (1990) p.30); see below. However, a formality is not a full-fledged form (if it were, each individual would be a species in its own right). (King, p.58)

220. The words *realis* and *realitas* predate Scotus, and *realitas* is the noun formed from the adjective *realis*. However, if Scotus did coin the term “formality” (derived from *forma* perhaps?) and it means “little form” in that context, as Wolter seems to claim, and since Scotus does seem to use the already-established *realitas* in this novel way (as synonymous with “formality”), then it is not far-fetched to claim that Scotus might have meant by *realitas*, “little real,” in the sense of “less than real.” (The “ity” or “itas” suffix meaning “little” makes more sense to a speaker of Spanish.)

221. Without giving away too much at this stage of the story, I want to emphasize the importance of this point, for, as will be seen later, it is this notion of a “reality,” I think, that Peirce bases his realism on.

222. Wolter does; *op.cit.*, p.33.

223. I think this would be the case even if God existed in that scenario, for He doesn’t know things through abstraction. It could be argued, though, that the possibility for the formal distinction would still exist in God’s mind.

224. I think this is similar to the discussion on uninstantiated universals above.

225. Boler, p.56.

226. A formality of a thing is really the same but only formally distinct from the thing.

227. Tweedale (1999) p.451.

228. Again, I think this allows room for the claim that there can be uninstantiated U4s.

229. Wolter (1990) p.31.

230. Boler, pp.128-29.

231. *Ord.* II d.3 p.1q.6.

232. Wolter (1990) p.32.

233. King claims that “Scotus accepts non-existent possible individuals.” (p.74)

234. Recall there was a problem in claiming that angels could be “persons.”
235. Lang, p.263.
236. Wolter (1990) p.xxii.
237. I will argue later that Peirce objects to this unknowability about something so basic.
238. If we could, there would be no need to argue for it in this way.
239. Wolter (1990) p. 81.
240. This is, of course, an anticipation of Descartes, but Augustine had already said something similar.
241. Peirce ultimately used the term “pragmaticism” to distinguish it from William James’s more famous version, which Peirce thought was a misrepresentation of his own.
242. The Peirce collection is housed in the Houghton Library in Harvard.
243. The Peirce Edition Project is working on the *Writings*, a chronological version, which, when finished, should take the place of the earlier collection.
244. See endnote #7, above.
245. I mean in the modern sense, not the medieval sense of “unity.”
246. For brevity’s sake, I am only mentioning books on the subject here. Needless to say, there are many scholarly articles as well, a few of which I will mention at the proper time.
247. See Boler, p.6.
248. A version of this section appears in “The Hair: On the Difference between Peirce’s Nominalism and His Realism,” *Transactions of the Charles S. Peirce Society*, Summer 2004, reproduced here by permission of Indiana University Press.
249. Murray G. Murphey, Manley Thompson, James K. Feibleman, Thomas A. Gouge, John Boler, Don K. Roberts, to name a few.
250. Many (including Fisch) place the date for Peirce’s first declaration of realism at 1868, when he wrote the second paper of his cognition series.
251. (W2:317) and (CP 8.208), respectively.
252. (Gouge p.97), (Thompson, p.422), (Murphey, p.140), (Boler, p.151), (Charles McKeon, p.52), (Claudine Tiercelin p.426), (De Waal p.374), (Friedman p.19), respectively.
253. Interestingly enough, though, we are told by Fred Michael that “Don Roberts now accepts Fisch’s view,” but we are not told the basis for this claim.
254. We are told by Philip Weiner in “Evolution and the Founders of Pragmatism” that this list was written on the other side of the paper on which “Of Realism,” dated July 25, 1959, was written. Though itself undated, it makes sense to group this with the 1959 material—the Kantian terminology coincides with Peirce’s fascination with Kant during this period.
255. The scratched-out version reads: “If Realism is not false, it is only the Realists who did not advance in the spirit of the scientific age.”
256. Fisch claims, furthermore, that Peirce had already maintained this view (the frequency theory of probability) in the Lowell Institutes Lectures of 1866 (MS 354), and was to hold it for thirty more years.
257. Fisch, p.185.
258. Nethery, *The Personalist*, vol.43, p.35.
259. Fisch, p.186.
260. I think the same can be said about his idealism and about his pragmatism.

261. Fisch describes how Peirce recalls his early “cognitionism” (the doctrine that what there are are cognitions), which has a definite idealist ring to it: “James, William and I were led to take [the point of view of cognitionism] by the influence of our common friend, Chauncey Wright, who unquestionably derived that . . . from John Stuart Mill.” (p.186) Fisch sees this as evidence of Peirce’s nominalism, probably because Peirce later categorized Mill as a nominalist.

262. Fisch, p. 186.

263. Scotus was not one of the “bad” individualistic, or modern nominalists described below (at least not yet).

264. Harris suggested the title change. (Fisch, p.186)

265. In “On Peirce’s Early Realism,” in an article subsequent to my own in the transactions of the Charles S. Peirce Society, Lane comes to a similar conclusion.

266. He greatly admired Ockham: “William Ockham . . . was beyond question the greatest nominalist that ever lived . . . These two men, Duns Scotus and William Ockham, are decidedly the greatest speculative minds of the middle ages, as well as two of the profoundest metaphysicians that ever lived.” (CP 1.29, 1869)

267. Of course, Peirce uses “nominalist” in this very unconventional sense, to the confusion of those who associate the term with the medievals.

268. This work, at least, is considered apocryphal. But Peirce seemed aware of this: on a margin, Peirce wrote: “This work is wrongly attributed to Scotus.” (Goodwin, p.480)

269. On another occasion, Peirce shuffles the words around, but the sentiment is the same.

270. I will deal with this in more detail below.

271. W2:181, 1868.

272. W2:240, 1868.

273. I will go into why this was so bad in a section below.

274. Having material existence, that is.

275. Peter King, 1992.

276. By “common,” Scotus does not mean universal, but rather refers to the characteristic that the nature has no particular preference for any particular instance.

277. I dare say this is all too common in present times as well.

278. (Fisch, p.191) Abbott’s book, *Scientific Theism*, was reviewed by Peirce, who eventually came to agree with Abbott.

279. See, for example, W2:193.

280. Fisch, p.193.

281. Michael places it at 1883.

282. Fisch, p.192-97.

283. Whether Peirce’s construal of Locke is indeed accurate merits more discussion than what I can provide here.

284. I will discuss this further below.

285. Scotus was adamant about grounding the universal in extramental, i.e. existing things, for without this, he thought, there is no basis for knowledge (scientia). As a scientist, Peirce could not agree more. But he later saw that Scotus’s claim could lead to the undesirable nominalism which he rejected. So Peirce readjusts the definition of real.

286. CP 8.12, 1898.

287. I will continue using “individual,” “singular,” and “particular” synonymously, following contemporary norm.

288. Although singulars for the most part, had material existence, souls, though immaterial, would have to be considered singulars since they had a one-to-one relationship with each person; recall that this idea of immaterial individuals within individuals was Aristotelian.

289. Peirce denies the title of extreme realist to Plato, calling him a nominalist instead because of the latter's insistence on the actual existence (akin, but not the same, to that of material things) of Forms.

290. I think Peirce, too, would admit that his conception of the real does not totally coincide with Scotus', although, as will be seen, it does (in a way) fit the definition which Peirce claims he got from Scotus.

291. CP 6.328, 1909.

292. Both Cornelis de Waal and Lesley Friedman recognize this. See De Waal's *On Peirce* and Friedman's "C. S. Peirce's Transcendental and Immanent Realism."

293. See Michael, 1988, p. 322.

294. I will expand on this below.

295. Recall that for Peirce "nominalist" is a catch-all term of disapproval that includes all mistaken metaphysical theories. For him, it does not apply only (as the term is traditionally used) to just the medieval opponents of the realists.

296. Farber, Ilya. "Peirce on Reality, Truth, and the Convergence of Inquiry in the Limit," *Transactions of the Charles S. Peirce Society*. Summer 2005, Vol. XLI, No. 3.

297. Peirce later claimed that this way of speaking (using the word "will") was too nominalistic, and suggested a subjunctive mood to express this same thought: e.g. what would happen. See the pragmatism section.

298. But this does not necessarily mean that we will arrive at the truth about everything, however, as seen below.

299. Peirce famously describes these in detail in "The Fixation of Belief."

300. Here we can see "seeds" of Peirce's pragmatism already, as early as 1872. Other commentators, e.g. Thayer, signal the year 1905 when Peirce adopts the subjunctive mood as thereby marking the change from pragmatism to pragmatism. Although not inaccurate, it is misleading, for Peirce obviously was shifting towards a pragmatism much earlier. I thank Susan Haack for calling my attention to Thayer's comments regarding this.

301. Farber (2005), p. 550.

302. Actually, Peirce prefers to talk about percepts instead of sensations: "The percepts . . . constitute experience proper, that which I am forced to accept . . . In place of the percept, which, although not the first impression of sense . . . the only thing I carry away with me is the perceptual facts, or the intellect's description of the evidence of the senses . . . These perceptual facts are wholly unlike the percept, at best; and they may be downright untrue to the percept . . . But I have no means whatever of criticizing, correcting or re-comparing them . . . The perceptual facts are a very imperfect report of the percepts; but I cannot go behind that record. As for going back to the first impressions of sense, as some logicians recommend me to do, that would be the most chimerical of undertakings." (CP 2.142, 1902) "What is perceived is an idea, in contradistinction to a raw sensation." (CP 7.408, end.19, 1893)

303. The scholastics did not take their claim to its logical conclusion, like Peirce does, probably because of their religious beliefs.

304. We will see a similar claim regarding "individuals."



305. This can be seen in Scotus's distinction between intuitive and abstractive knowledge.

306. Now I don't think Peirce wants to claim that nominalists are doomed to ignorance while the realists have all the answers. Rather, it is a case, I think he would say, of different perspectives; the realist being, in the end, as will be seen, the more philosophically accurate: "The burden of proof is undoubtedly upon the realists, because the nominalistic hypothesis is the simpler . . . Science ought to try the simplest hypothesis first . . . It appears therefore that in scientific method the nominalists are entirely right . . . Everybody ought to be a nominalist at first, and to continue in that opinion until he is driven out of it by the force majeure of irreconcilable facts." (CP 4.1, 1898) . . . "I do not think the views are absolutely irreconcilable, although they are taken from very wide standpoints. The realistic view emphasizes particularly the permanence and fixity of reality; the nominalistic view emphasizes its externality." (MS 194, 1872)

307. I should say, however, that Peirce contributes to this confusion by sometimes using the term "Real" in his special sense, and at other times with their more common meaning.

308. See *Charles Peirce and Scholastic Realism, On Peirce, and C. S. Peirce's Final Realism: An Analysis of the Post-1885 Writings on Universals*, respectively.

309. Wolter, (1990) p. 30.

310. In addition, I have speculated that perhaps Scotus might have accepted that the formality had a kind of "potential" being on its own.

311. I believe this causes a lot of confusion, especially to interpreters of Peirce who are not acquainted with the medievals. Commentators of Peirce many times have charged him with inconsistencies; I do not think that is the case. Peirce knew so much history of philosophy, that he incorporated many ancient concepts, sometimes amending them with his own contributions (e.g. nominalism). Someone not sensitive to this would naturally be puzzled by what he says.

312. The brackets are mine, but I think it is obvious that this is what he meant to say.

313. This can probably be traced to his study of the idealists at this time. We can see this trait throughout Peirce's career: he incorporates the theories of those he studies into his own, but always gives them his own particular "twiddle."

314. Peirce does allow the possibility of disagreement among communities of inquirers, but in those situations, we would "compare notes," which sounds like the beginning of a new inquiry into the matter, with an eventual fixing of belief for those involved. See MS 409.

315. See CP 1.712.

316. But recall the little-known 1859 note saying that he was an idealist, a realist, etc.

317. Again, this does not mean that we cannot experience things other than thoughts: "But we have direct experience of things in themselves. Nothing can be more completely false than that we can only experience our own ideas . . . Secondness jabs you perpetually in the ribs." (CP 6.95, 1903) But although we can experience singulars this way, we cannot understand them as such: "Our knowledge of things in themselves is entirely relative." (CP 6.95, 1903) Scotus, expressing the same idea, would have said that our knowledge of singulars is "derivative."

318. "It is a real which only exists by virtue of an act of thought knowing it, but that

thought is not an arbitrary or accidental one dependent on my idiosyncracies, but one which will hold in the final opinion." (CP 8.14, 1871)

319. "The gist of all the nominalist's arguments will be found to relate to a *res extra animam*, while the realist defends his position only by assuming that the immediate object of thought in a true judgment is real. The notion that the controversy between realism and nominalism had anything to do with Platonic ideas is a mere product of the imagination, which the slightest examination of the books would suffice to disprove." (CP 8.17, 1871)

320. "Oh," but say the nominalists, "this general rule is nothing but a mere word or couple of words!" I reply, "Nobody ever dreamed of denying that what is general is of the nature of a general sign; but the question is whether future events will conform to it or not. If they will, your adjective 'mere' seems to be ill-placed." (CP 1.26, 1903)

321. Is this not a case of "the pot calling the kettle black?"

322. I thank Haack for helping to point that out.

323. As will be seen below in the discussion of his categories, his insistence on the reality of secondness does not allow him to be classified as a run-of-the mill idealist.

324. Recall that a figment is dependent on what I think about it.

325. Weiner, p.419.

326. In everyday language, what is objective is what is external, material, or impartial.

327. Peirce says, "Accordingly, what is external is necessarily real." (CP 6.191) But again, he does not mean "absolutely" external. There is always a mental component.

328. This is the purpose of pragmatism, as discussed below.

329. CP 4.157, CP 6.455, CP 4.549.

330. See for example CP 1.23-26, 1.280, 1.422-520, 3.422-424, 5.41-76, 6.18-23, 6.32-34, 8.328.

331. CP 1.427, c.1896.

332. CP 1.418, c.1896.

333. CP 1.304, c.1894.

334. CP 1.420, c.1897.

335. CP 1.428, c.1896.

336. Recall that for Peirce an individual is a wide category that includes facts, objects, occurrences, etc.

337. CP 1.458, c.1896.

338. CP 1.434, c.1896.

339. Peirce elsewhere speaks of thoughts as individuals when they are in individual consciences. See CP 6.105.

340. CP 1.428, 1896.

341. CP 5.152, 1903.

342. See, for example, the "Hair" and the "Real" sections above.

343. CP 6.361, 1904.

344. Michael Raposa, in his "Habits and Essences" claims that "[Peirce's] criticism of Scotus fails to acknowledge the fact that the common nature remains formally distinct from (a 'real' and not simply a logical distinction) the individual nature." However, in this quotation, Peirce does seem to be quite aware of Scotus's position.

345. See Goodwin's "Charles Saunders Peirce: A Modern Scotist?" Goudge's *The Thought of C. S. Peirce*, and Moore's "The Influence of Duns Scotus on Peirce," and "The Scholastic Realism of C. S. Peirce."

346. Boler, p.128.
347. Robert Meyers makes a similar claim in his “Peirce’s Cheerful Hope and the Varieties of Realism.”
348. He does not argue, like Alexander of Aphrodisias, for example, that the nature persists as a result of an infinity of instantiations.
349. CP 6.205, 1898.
350. CP 1.528, 1903. See also CP 1.383, 1.365.
351. CP 1.528, 1903.
352. CP 1.366, 1890.
353. CP 1.365, 1890.
354. This is only one example of Thirdness, however. As already mentioned, the following are all associated with this category: laws, habits, thought, cognition, rationality, signs, meaning, predication, relations, continuity, mediation, infinity.
355. Recall that I do not use the term U1 when speaking of Scotus, because the term would be too inaccurate for him: the nature as universal cannot be in the particular. Peirce would object as well, for the reasons below.
356. CP 2.293, 1902.
357. CP 1.536, 1903.
358. CP 1.304, 1894.
359. CP 1.536, 1903.
360. CP 6.86, 1898.
361. CP 6.36, 1892.
362. CP 6.175, 1902.
363. Here again we see Peirce using the word “real” in the non-technical, everyday sense.
364. Rosenthal, 1994, p.117.
365. Peirce speaks of the “relation of time as concerning only ideas.” See CP 8.330.
366. I am not the first to say some version of this: Boler, for example, has expressed some version of this.
367. Peirce claims he himself was guilty of this mistake. More on this in the pragmatism section.
368. See CP 5.93.
369. CP 6.189, 1898.
370. CP 5.213, 1868.
371. *Quodlibetal Questions* VI, q.19.
372. This is not as naïve as it sounds—elsewhere Peirce does make a distinction. “There are two ways in which a thing may be in the mind—habitualiter and actualiter. A notion is in the mind actualiter when it is actually conceived; it is in the mind habitualiter when it can directly produce a conception.” (CP 8.18, 1871) Also see 5.441, 5.504
373. CP 5.263, 1893.
374. Of course, I am referring to Richard Rorty, Paul Churchland, Stephen Stich, among others, as recent examples.
375. CP 1.163, 1897.
376. Peirce claims to have come to this notion of infinity through his work on the logic of relatives—“The illumination of the subject by a strict notation for the logic of relatives had shown me clearly and evidently that the idea of an infinitesimal involves no

contradiction, before I became acquainted with the writings of Dr. Georg Cantor.” (CP 6.113, 1892)

377. CP 1.168, 1897.

378. I am aware that Peirce says “Synchism is not an ultimate and absolute metaphysical doctrine; it is a regulative principle of logic, prescribing what sort of hypothesis is fit to be entertained and examined.” (CP 6.173, 1902) He cannot say that it is “ultimate” or “absolute,” since this runs counter to the fallibilist claim. I will argue though that it is a hypothesis about what things are, which is the concern of metaphysics.

379. Peirce identifies this monism at some point with Schelling’s, and also as possibly having roots in the “monstrous mysticism of the East” tempered by science and mathematics, of course. See CP 6.102.

380. CP 8.12, 1871.

381. CP 6.172, 1902.

382. An early version of this section appears in *Transactions of the Charles S. Peirce Society*, Spring 2005. Reprinted by permission of Indiana University Press.

383. CP 2.693, 1878.

384. CP 5.408, 1893.

385. His Existential graphs are meant to provide a diagram of the mind, and to furnish a test of the truth or falsity of pragmatism. See CP 4.582.

386. CP 5.415, 1905.

387. CP 5.414, 1905.

388. See his 2005 “Peirce on the Medievals: Realism, Power and Form” in *Cognitio*, the annual publication of the “Centro de Estudos do Pragmatismo” in Brazil.

389. Boler does not go into detail, in this short paper, as to why he claims it may be “relatively minor,” although he thinks that it has “a permanent part” in Peirce’s fully developed realism. For the reasons discussed throughout his work, however, I would like to say that the influence is more on the “relatively major” side.

390. In a previous paper, though, he claims that there is not much profit in “worrying over the labels,” as long as one is clear over the details in the relationship between Peirce’s scholastic realism and his extreme realism. See his 2004 “Peirce and Medieval Thought” in *The Cambridge Companion to Peirce*.

391. I thank Susan Haack for helping to point this out.

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